CARE Nicaragua

Mid-Term Evaluation
CHILD SURVIVAL XIV

Matagalpa, Nicaragua

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ATTACHMENTS

ACRONYMS

ARI	Acute Respiratory Infection
BFV	Breast Feeding Volunteer
CDD	Control of Diarrheal Disease
CHW	Community Health Worker
CM	Community Movement
CS	Child Survival
DIP	Detailed Implementation Plan
ENACAL	Environmental Education Project funded by UNICEF
FS	Food Security
IMCI	Integrated Management of Childhood Illnesses
INEC	Nicaraguan National Institute of Statistics
KPC	Knowledge, Practice and Coverage
LAM	Lactational Amenorrhea
MECD	Ministry of Education, Culture and Sports
MINSA	Municipal level Ministry of Health
MOH	Ministry of Health
MTE	Mid-Term Evaluation
NGO	Non-Governmental Organization
PVO	Private Voluntary Organization
TIP	Trials of Improved Practice
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WRA	Women of Reproductive Age

A. Summary

CARE Nicaragua is implementing a USAID/BHR/PVC funded Child Survival (CS) project in the municipality of Matagalpa in north-central Nicaragua. The main partner in this project is the Municipal level Ministry of Health (MINSA). The project has three main goals:

1. To improve the capacity of the Ministry of Health personnel in community outreach, and delivery of quality services, including health education.
2. To empower communities to organize, analyze health and nutrition problems, and seek solutions.
3. To enable families to practice healthy behaviors, identify and resolve health risks, and access quality services.

The project works in the intervention areas of breastfeeding, nutrition/food security, control of diarrheal disease and pneumonia.

The project got off to a late start because Nicaragua was hit by Hurricane Mitch in October of 1998. Project activities did not begin until February 1999 because staff was involved in disaster work (paid for by other CARE funds). The project is on time with implementation according to the Action Plan presented in the DIP, but modifications have been made in terms of introducing innovative approaches, such as Child-to-Child, Hearth Model and Trials of Improved Practices. The project is completing a modified version of each of the originally-proposed activities.

One of the greatest areas of frustration for volunteers, and CARE and MINSA staff is the lack of participation of many community members. There are reasons for this lack of interest in the project, and the biggest challenge during the next two years will be to identify what those barriers are and how to reach people in ways which attract them, especially in the urban area.

Some of the most outstanding aspects of the project are:

- Coordination with MINSA at the local level
- Accreditation of health facilities as Baby Friendly Units by UNICEF
- Improvement in coordination with the communities
- Use of qualitative and quantitative studies for baseline information and to guide project implementation

Some of the areas of greatest weakness which need to be prioritized during the next two years:

- Follow-up and supervision of all aspects of the project
- Improving the Integrated Health Visits by the Municipal team
- More focus on improved methods for changing behavior, not just giving health “talks”
- Information System which should be used at all levels
- Further strengthening of IMCI

One of the most exciting recommendations to come out of the MTE is the planning for differences in activities based on the annual cycle of temporary migration and workload of

project participants. Planning for the work cycle, especially in the urban area, will greatly enhance effectiveness of the interventions, and take a more realistic view of what activities can be accomplished.

Priority Recommendations:

1. The project needs to re-evaluate the number of communities, beyond the original 70, where there will be direct intervention, and prioritize by risk level, population of under fives, and level of interest of the community.
2. Increased technical assistance should be provided in the urban area to motivate the use of existing resources in establishing small patio gardens. An additional food security (FS) Extensionist should be contracted, specifically to work in the urban area.
3. An increased focus on training in IMCI and follow-up on training to insure proper application is needed at all health facilities.
4. Analyze, with communities, the concepts of Community Development Committee and Network of Volunteers to define their roles and potential for sustainability.
5. The project needs to continue to move away from the use of health "talks" to give information towards the use of other more interactive and innovative methods of adult education.
6. Take advantage of the months from July to September for group meetings and training. From October to June, focus on the use of indirect methods such as radio, popular education, printed materials, home visits, and activities with the schools. Take advantage of Sundays when people are at home.
7. Improve the involvement of the community in the planning, implementation and evaluation of MINSA/CARE plans.
8. One or two additional Extensionists should be hired to cover the additional communities not accounted for in the original proposal and the number of communities per Extensionist should be equitably divided.
9. It is recommended that a complete budget analysis be made by the project manager, health coordinator, and accountant, so that a realistic spending plan can be developed for the remaining two years.
10. More training is needed at all levels to understand the use of information in decision making.

B. Assessment of the progress made toward achievement of program objectives

1. Technical Approach

a. Overview

CARE Nicaragua is implementing a USAID/BHR/PVC funded Child Survival (CS) project in the municipality of Matagalpa, in the department of Matagalpa, in north-central Nicaragua. CARE has worked since 1983 in water and sanitation in the department of Matagalpa, and for the last 12 years has also worked in agriculture and natural resource management in the rural area. This is the first project to work in health in the urban area. The main partner in this project is the Municipal level Ministry of Health (MINSA) focusing their efforts in 14 health facilities-7 in the rural area and 7 in the urban area. The project has three main goals:

1.To improve the capacity of the Ministry of Health personnel in community outreach, and delivery of quality services, including health education.

2.To empower communities to organize, analyze health and nutrition problems, and seek solutions.

3.To enable families to practice healthy behaviors, identify and resolve health risks, and access quality services.

The project works in the intervention areas of breastfeeding, nutrition and food security, control of diarrheal disease (CDD) and acute respiratory infections (ARI).
The project planned to begin activities in October of 1998, but because Nicaragua was hit by a devastating Hurricane in October, project activities did not actually begin until February of 1999. Project staff was involved in emergency activities from October to January with funding from European and private donors which included; refugee resettlement, prevention of epidemics, and an inventory of agricultural and infrastructure losses. Actual project activities have been carried out for only 17 months.

The Mid Term Evaluation (MTE) was conducted July 24 to August 4, 2000, utilizing a participatory methodology described in Attachment C. Recommendations for improving the project during the next two years were made by the 18-person evaluation team, which included both project and MINSA staff. All recommendations and results from the Analysis Workshop are included in Attachment F. Key recommendations are included in **bold** throughout this document and summarized in Section E. Attachment E contains the instruments used during the MTE for information collection, as well as the results of community interviews.

The target population for the project was estimated as 24,210 children under 5 and 18,218 Women of Reproductive Age (WRA) in the DIP. This was based on census information from the Nicaraguan National Institute of Statistics (INEC), figures which have since proven to be overestimated. One of the first steps in implementing the project was for volunteers to conduct a census and establish a map of their community. The information from the census varies greatly from the INEC figures, for example in Jucuapa, the project is working in the 2 communities which correspond to this health post. INEC estimates the <5 population as 455 and women WRA as 669. What the volunteers found was 186 <5 and 334 WRA. This difference in figures has greatly effected the project's ability to provide direct services to 24,210 children under 5 and 18,218 WRA participants. During the past year, as it became clear that the target population might be less, the project began to attempt to reach these target numbers and added communities.

The addition of communities solely to satisfy the target numbers has created an unrealistic work situation.
This situation is exacerbated by:

- Most urban areas are already included in the project, except for middle or upper class neighborhoods
- Not all communities are interested or motivated to participate in project activities and should not be forced
- Some communities are so small, the population of <5 is only 2-3 children
- Some communities in the municipality were involved in the previous CARE project, and are deliberately excluded now, further limiting the number of communities where the project can work
- A move into another municipality would dilute project focus and make impact minimal
- Staffing patterns are based on 70 communities, as outlined in the DIP
- Other organizations work in the area and the project should strive to avoid duplication of activities.

One of the main focuses of the project is the strengthening of MINSA, which will result in improved services to a wider population than the numbers specified in the proposal and DIP. The project is now working in 96 communities (instead of the 70 originally planned in the DIP), some of which have not responded well to the project. CARE-MINSA plans to continue working in as many of these communities as possible, but will decrease the number based on health risks, population size and level of interest. **The project needs to re-evaluate the number of communities, beyond the original 70, where there will be direct intervention, prioritizing by risk level, population of under fives, and level of interest of the community.**

b. Interventions:

BREASTFEEDING
During the past year and a half, the project focused on breastfeeding in order to assist MINSA in their quest for Baby and Mother Friendly accreditation. This year, all health posts and centers in the municipality of Matagalpa were accredited by UNICEF as Mother and Baby Friendly. The process included completing 11 steps which were certified during UNICEF visits. This is a major step forward in the promotion of breastfeeding and has had the positive effect of focusing all health staff on a common goal. Throughout the evaluation process, a clear message was heard in support of prolonged and exclusive breastfeeding. The challenge to MINSA will be to maintain the accreditation through continuous follow-up and continuing education for staff.

During 1999, 183 volunteers have been recruited and trained specifically to promote breastfeeding. These BFV (Breast feeding volunteers), were trained in breastfeeding promotion and 52 in Lactational Amenorrhea (LAM). The BFV transmitted breastfeeding information to mothers but when the training was initially held last year the concept of a support group was not clear to the trainers and a traditional use of “health talks” was promoted. After a clarification of what a support group should entail, retraining was carried out and 49 BFVs were re-trained in formation of support groups.. During the MTE, 6/18 BFV reported receiving training in support group concepts with 17/18 reporting training in breastfeeding. According to project records, as of June 2000, 12 support groups had been formed with 22 sessions held during April to June.

The concept of a support group based on an exchange of ideas between peers, versus more traditional ways of channeling messages, is new to community volunteers. **Additional training in formation of support groups, accompanied by follow-up in the field, is needed in all communities.**

NUTRITION-FOOD SECURITY

The project has a dual approach to improving food security in both the urban and rural areas, by increasing the availability of food through production and post-harvest activities, and improving the utilization of food through health education in appropriate feeding practices and a decrease in common illnesses.

A number of strategies are being implemented in the area of agricultural production; small scale nurseries for fruit trees, home vegetable gardens, seed banks for beans, and chicken production. The impact of these intervention has been three-fold 1) improve the nutritional status of the family through direct consumption 2) improve the economic situation of the family through sale of excess production, 3) serve as a motivating factor for participating in other aspects of the project.

The philosophy of cost recovery is being implemented by the project in a number of ways:

- Seed banks, managed by the community committee, recover 120 pounds of seed for each 80 pounds borrowed. The excess is stored in silos and sold when the market price is high.
- Chickens are sold to families through the community committee on a gradual pay back system, the money used again by the committee so that additional families can purchase chickens.
- Farmers are taught to select seeds from vegetable and fruit production, so new seeds are always available for planting
- A new system is being proposed for revolving funds for vegetable gardens. The volunteer garden promoter would receive seeds from the project as capital to begin selling seeds to interested families. The promoter would make a small profit as an incentive for his/her work, and because seeds are purchased in bulk, a lower price can be maintained for individual families.

The goal for this calendar year of having 1931 families participating in at least one food production activity has not yet been reached. As of the MTE, 954 families were involved in food security endeavors. More families will be included by the end of the reporting period in December, as the rains have just started marking the beginning of the agricultural season. The 954 families include 204 families with revolving credit seed banks for beans and fertilizer and post harvest storage in silos, and 373 families with a revolving chicken program in 11 urban neighborhoods and 24 communities. Twenty percent of these families are participating in 3 different food production activities. **Improved monitoring and supervision of food security activities is required to improve the impact of the intervention and to provide additional support to the agronomist and the FS volunteers.**

The CARE-MINSA project has a focus on urban food production projects. With the beginning of revolving funds for vegetable seeds, in urban neighborhoods, the momentum for finding innovative ways to produce fruits and vegetables in a small area should increase. **Increased**

technical assistance should be provided in the urban area to motivate the use of existing resources in establishing small patio gardens. An additional Extensionist should be contracted, specifically to work with food security activities in the urban area.

An aspect of the nutrition component is growth monitoring and promotion. MINSA in the municipality of Matagalpa has adopted a program originally developed in Honduras (AIN), of integrated health care for children based on community level growth monitoring. The CARE-MINSA project has begun training monitors in some communities in this activity. The project reports 10 communities with the AIN system. A strong component of the original Honduran system was counseling for mothers. This has unfortunately been somewhat diluted in the Nicaraguan training module, but still contains elements of dialogue with the mother to identify her needs and possibilities for changing health behaviors. This methodology attempts to reach an agreement with the mother as to some activity she will try to change in the short term.

While the AIN system is a valuable tool for working in an integrated manner at the community level, it is too complicated for use with volunteers with limited reading skills. The system calls for a percentile conversion which is only to report to MINSA and not for local use. There is also a conversion from pounds to kilograms, again only to report as the scales and growth cards can be used in either pounds or kilograms. **A study should be made by the project as to ways the AIN system could be simplified in the mechanics of weighing and reporting weights, so that more energy could be focused on counseling mothers for growth promotion.**

The project works with a local NGO, Community Movement (CM) in five nutrition centers. There was a lack of clarity at the planning stage as to what the objective of the nutrition centers was. The centers serve the important function of day care center for working parents, but do not have a role in nutritional recuperation, making them an inappropriate venue for the introduction of the Hearth Model, as was explained in the first annual report. Training has been held in the five centers in hygiene, food preparation-with a focus on recipes using soy products, growth monitoring (which had not been implemented in the center visited during the MTE), childhood illnesses, and breastfeeding. The DIP calls for monthly supervision of the centers by MINSA/project staff, but little evidence was seen during the MTE of regular supervision.

CONTROL OF DIARREAL DISEASE (CDD)

Activities in CDD form an integral part of the IMCI (Integrated Management of Childhood Illnesses) strategy currently being implemented throughout Nicaragua. The project has been instrumental in improving training for MINSA staff in IMCI concepts, as well as distribution of IMCI tools. There has been less success in insuring the use of this improved approach to improve the quality of care. A QofC study was conducted last year, utilizing a tool developed by BASICS for measuring quality of care in IMCI. Unfortunately, due to the delay caused by Hurricane Mitch, no study was complete before project activities began to serve as a baseline. Preliminary results of this study show a correct response level of 63% in an examination of questions in 14 categories of knowledge of IMCI procedures with 24 people. Twenty-two observations were made on application of IMCI procedures, with a 63% correct rating on 13 points. **An increased focus on training in IMCI and follow-up on training to insure proper application is needed at all health facilities.**

Twenty-two of the 28 CHWs interviewed during the MTE who had received training, reported receiving training on CDD. Thirteen of the 32 CHWs interviewed could identify 2 or more signs of severe diarrhea and 18 could identify 3 or more signs of dehydration. The use of ORS (Oral Rehydration Solution) has been widely promoted with 28 of the 32 of CHWs reporting that they advise mothers to use ORS and 12 of the 16 of the Base Houses visited during the MTE having a supply of ORS.

Several complementary projects are also having an impact on CDD. Approximately 6,700 water filters were provided by USAID in the municipality of Matagalpa as part of the Hurricane Mitch recovery program. The CARE-MINSA project spearheaded the logistics, training and distribution of the filters to improve the quality of water for human consumption within the project area. The project continues with monitoring the use and maintenance of the filters and providing supportive education to CHWs and teachers on the importance of the use of filters. Also MINSA has a chlorine distribution program through the Base Houses, 58 of which have been reactivated or organized since the project began. The combination of the two activities, plus hygiene education, has had the reported effect of lowering the incidence of diarrheal diseases. This was not directly measured in the MTE, but in 39% of interviews with BFV, 56% of mothers groups and 33% of health personnel reported this observation.

ACUTE RESPIRATORY INFECTIONS (ARI)
This intervention also forms part of the IMCI approach but so far has received less emphasis by the project. During the MTE interviews, only 15 of the 32 CHWs reported being trained in ARI (compared to 22 in CDD). During the MTE it was found that 19 of the 32 CHWs could identify 2 or more signs of pneumonia, and 22 know that a child with a severe respiratory infection should be referred to a health facility. CHWs do not provide pneumonia treatment at the community level. One hundred ninety-eight CHWs have been trained in Acute Respiratory Infections during the first two years of the project. The project takes an integrated approach to child health in the IMCI and AIN models, yet continues to train CHWs in separate CDD, ARI and nutrition modules. **An increased focus on training in IMCI at the community level should be incorporated in all re-training during the next 2 years.**

c. New Tools/Approaches

A number of studies have been conducted by the project to provide baseline information as well as to better understand local beliefs and limitations. A standard KPC was conducted in January 1999, which was used to develop the DIP and for focusing project activities. A Food Security Assessment was conducted in coordination with the KPC, which included focus group interviews, household observation and a food security questionnaire. The methodology of Participatory Rapid Appraisal was utilized in February 1999 for information gathering and planning purposes. An anthropometric Survey was carried out in June of 1999, the complete results of which were presented in the First Annual Report.

A Quality of Care study, utilizing a tool developed by BASICS has been completed in 6 health posts. Unfortunately this study was not previously completed as a baseline before project activities began but was used to measure practical application of IMCI concepts after the first

training. The results have shown the need to improve the training curriculum and provide more supervision and follow-up in application.

A qualitative study on breastfeeding attitudes and practices was completed in July 1999 with financial and technical support from LINKAGES to provide information on constraints to breastfeeding in the urban population. The findings were used to develop the behavior change strategy for improving exclusive and prolonged breastfeeding.

OTHER APPROACHES

Work with Schools

In an effort to involve local schools as a method for disseminating health information the project entered into an agreement with the Ministry of Education, Culture and Sports (MECD) to train teachers in health concepts which they would then use to teach children and their parents. The project signed an agreement with MECD to train 105 4^{th}, 5^{th}, and 6^{th} grade teachers. The actual number trained was 120 teachers. The training was implemented in coordination with an environmental education project (ENACAL) funded by UNICEF using post-Mitch funds.

During MTE interviews with teachers, three out of five did not know the objectives of the project and all were unaware of the agreement between the project and MECD. All teachers should receive information about the signed agreement between MINSA and MECD.

This is a good strategy for involving teachers more in community education, four out of five teachers interviewed during the MTE were trained in diarrheal disease and three in respiratory disease. Additional training is scheduled this year in nutrition, hygiene and environmental health. Three out of five of the teachers reported receiving materials during the training. Project staff felt that the materials used, which had been developed by MECD, could be improved. **Assist MECD to improve the quality and quantity of materials given to teachers, especially making them more applicable for children to transmit health messages to other children and parents.**

After completing the agreed upon training, it was felt by the MECD representative interviewed during the MTE that the training of 120 teachers was too ambitious as a first step, and should have been a pilot project, using a community diagnosis to identify priority areas. According to the teachers interviewed, all said they had not received supervision or support in implementing health activities, although three out of five teachers reported that they replicated messages through health talks and two out of five through clean-up campaigns. The current limitation is lack of supervision and following-up on activities, responsibilities MECD agreed to assume. The next training is in nutrition which will make technical assistance and follow-up even more critical. **Identify mechanisms to insure the follow-up and monitoring of health activities in the schools.**

In order to improve the sustainability of this activity, a stronger link needs to be developed between MINSA and MECD, at both the local and municipal levels. **Teachers should be encouraged to meet quarterly with the nearest health post to coordinate activities. An agreement to coordinate activities should be developed between MINSA and MECD at the municipal level.**

Integrated Health Visits

This is one project strategy on which no progress has been made to date. Little impact has been seen so far in improving the visits made to communities by the municipal MINSA team, which currently focus on immunizations, prenatal care, sanitation inspections and general medical consultations. MINSA needs to take a lead in identifying ways to enhance the impact of this activity. The evaluation team developed the following recommendations for improving the visits:

- **CARE Extensionists should periodically accompany the Integrated Visits, with a specific role as team member.**
- **A procedure manual for Integrated Visits should be developed, including definition of roles, monitoring system with specific indicators, and focus on working with the community in planning, implementation and evaluation of activities.**
- **The Municipal Management team should actively monitor and supervise the Integrated Visit teams, including analysis of information from the information system.**
- **Administrative systems of MINSA need to be improved to facilitate the distribution of medicines and payment of per diem for Integrated Visits.**
- **Innovative methods of education should be used by MINSA during the Integrated Visits.**

Credit

A micro-credit program for urban women was planned in the DIP but has not been implemented. During negotiations with local NGOs working in credit, CARE was unable to locate a local partner who offered credit to women without collateral. There are credit programs in the area, but all require a guarantee of property for loans and none utilize a solidarity group approach that allows low-income women access to credit. CARE will soon directly implement a savings and loan group approach, where savings groups are formed and then begin establishing a revolving credit plan once sufficient capital is accumulated. Technical assistance was received on this methodology by Brian Larson, who developed the approach in CARE Niger and has disseminated it other CARE countries and in Ecuador with Peace Corps. **A credit promoter should be hired to spearhead the savings and loan group approach focusing on the urban area.**

2. Cross-cutting approaches

a. Community Mobilization

The CARE-MINSA project has undertaken three main community mobilization activities:

- Formation of community committees
- Formation of health worker networks
- Revitalization of community Base Houses which are used for distribution of ORS, chlorine for disinfecting water, and referral to health facilities.

During the MTE, it was reported by community members that there is an increased interest on the part of most communities in health activities. CHWs have become more active and are taking a renewed interest in health activities, and new volunteers have been trained to more evenly distribute the workload. The project reports that 58 Base Houses are currently functioning, there is more of an interest in utilizing the Base Houses as a center for health

activities, including the Integrated Health Visits of the MINSA team. The improved coordination between health posts and communities have strengthened community empowerment.

One of the goals of the project is: To empower communities to organize, analyze health and nutrition problems, and seek solutions. Of the three goals, this is the most problematic in terms of reaching project objectives and having a sustainable impact. The project lacks a clear vision of what they anticipate as an end product for community organization. A number of models exist for organization and there is no one model that will fulfill the needs of all communities, particularly given the difference in needs between urban neighborhoods and rural communities.

During the MTE, 56% of the committees saw their function as providing health education and only 31% mentioned community organization. 85% of the committees had been trained in breastfeeding, but only 25% of the committees mentioned that they had received training in community organization. In most communities, a "Network" of volunteers has been established which serves an extremely important function of providing mutual support among community volunteers. These networks meet on a regular basis to discuss problems, plan activities and implement activities together. In many instances these Networks also form the community committee. Their focus centers on health activities of the project, not the concept of Community Development Committees with health as an integrated activity within a broader developmental context. **Analyze, with communities, the concepts of Community Development Committee and Network of Volunteers to define their roles and potential for sustainability.**

One of the major constraints to community participation is migration; both temporary and permanent. Another is employment pressures, especially for those working in the coffee industry, where a work day is reportedly as long as 16 hours a day. The major problem identified by volunteers is the lack of participation of community members due mainly to lack of interest in health activities, which are not seen as a priority by many people. There is a strong political bias, especially in the urban area, where some local NGOs pertain to one political party or the other. As local elections will be held soon the political climate will become even more divisive, limiting some people's involvement in health activities, especially those implemented in conjunction with local partners. **More innovative approaches are needed to overcome the constraints to participation, such as migration, employment demands, lack of interest, and political divisions.**

Security in the urban areas is a barrier for project staff to be able to complete their activities. Many families are more available for night meetings, but violence and gang activities limit staff's ability to work in some areas.

b. Communication for Behavior Change

The project is using some methodologies that have a great potential for changing behavior. Use of support groups, dialoguing with mothers to reach an agreement for behavior change and mass media have the potential to make sustainable changes in health behaviors. Most of these activities are just beginning and should be the focus for increased emphasis during the second half of the project. **The project needs to continue to move away from the use of health**

"talks" to give information towards the use of other more interactive and innovative methods of adult education.

All of the messages being promoted by the project are in accordance with official MINSA policy and all essential elements are included. The project works in excellent coordination with ministry staff and uses whenever possible MINSA educational materials.

During the MTE, anecdotal reporting of changes in practices was wide spread. In interviews with volunteers, community members and health personnel all reported that they observed changes in practices, primarily in increased breastfeeding, better hygiene, increased use of ORS and decreased use of baby bottles. A KPC survey was used at baseline to measure essential health behaviors in mothers with children under 2. This KPC was not repeated at mid term, but will be used to measure project impact as part of the final evaluation.

The use of information concerning changing health behaviors has not been formalized in the project. CHWs report using home visits as an informal method for measuring changes at the household level, especially in hygiene and use of water filters. In some communities, CHWs report discussing health issues with the CHW network or committee, but the practice was not widely reported. In about half of the health facilities there are monthly meetings between health personnel and community volunteers for the purpose of sharing experiences.

One of the most exciting recommendations to come out of the MTE is the planning for differences in activities based on the annual cycle of seasonal employment and workload of project participants. Planning for the work cycle, especially in the urban area, will greatly enhance effectiveness of the interventions, and take a more realistic view of what activities can be accomplished.

A large percentage of the rural and urban population migrate temporarily to pick coffee and another segment to work in coffee processing. Work conditions are terrible-with long hours, few breaks, low pay and no benefits. It is unrealistic to expect that project activities will be able to continue at the same intensity during the months when the majority of people are working 15-16 hour days, than when they have less demanding work loads during other months. **Take advantage of the months from July to September for group meetings and training. From October to June, focus on the use of indirect methods such as radio, popular education, printed materials, home visits, and activities with the schools. Take advantage of Sundays when people are at home.**

Another strategy to reach more people is to provide education where the people work, particularly taking advantage of the higher literacy rate of the urban population. There has been some attempt to do this, but there is so much potential that increased effort should be made. **Increased efforts should be made to disseminate health information at work centers including the coffee processing plants** (*beneficios*)**.**

c. Capacity Building Approach

(i) Strengthening the PVO Organization

The majority of CARE Nicaragua staff involved in the CS project has worked in previous CARE health projects and are competent professionals. In order to maintain technical and programmatic expertise, all staff has received a number of training courses , including; IMCI, breastfeeding, community empowerment, community organization, logframe planning, theater and puppets, chicken production, gardens, and LAM. During weekly staff meetings, there is a focus on continued education. Some of the staff has had the opportunity to attend a number of CARE regional and international events to keep up-to-date on technical issues and to share lessons learned with other projects.

A missed opportunity for CARE to enhance the impact and efficacy of the project is through coordination with other NGOs and GOs. There are a number of organizations working in the municipality of Matagalpa, and particularly in the urban area.

Some opportunities for coordination include:

- Coordination with PROSALUD should continue in order to maximize use of the additional USAID Nicaragua resources they are putting into the Department of Matagalpa. PROSALUD works in the more outlying areas of the department and there is strong collaboration with the other CARE health project in those municipalities.
- A suggestion from MECD, was for NGOs in Matagalpa to develop together a plan for working in the schools, so that the ministry doesn't receive numerous requests from organizations wanting to work with teachers.
- In the DIP, a pilot community pharmacy was planned. If the pilot pharmacy is implemented, an organization called Colectivo de Mujeres now has a system of community pharmacies and would be an excellent resource for developing the pilot pharmacy.
- There are other agricultural and health projects working in the same rural communities as the CARE-MINSA project, such as ADDAC. To avoid duplication of effort, closer coordination is needed.

CARE should assume a leadership role in sponsoring (a minimum of) an annual workshop for NGOs, to provide an opportunity for sharing work strategies and annual plans, and for identifying points of coordination.

(ii) Strengthening Local Partner Organizations

The principal partner in this project is the Municipal level Ministry of Health (MINSA). *MINSA's involvement in the project is exemplary, as it has been fully involved in project planning, implementation and evaluation as an equal partner with CARE.* A self-assessment of needs for capacity building was made as part of proposal and DIP development. The activities outlined in the DIP were selected by MINSA, based on this evaluation. During the MTE, the participation of MINSA staff greatly increased the quality of the evaluation, and hopefully, the commitment to put the recommendations into action.

One of the main areas of weakness, based on activities outlined in the DIP, has been the progress so far in improving the quality of Integrated Municipal Visits. This was one area of analysis during the MTE, and several concrete recommendations resulted and were previously discussed. There has been more success in strengthening the visits made by local health facility staff to the communities, often accompanied by CARE Extensionists. The main limitation to further strengthening many aspects of the project is the ability of MINSA and CARE to bring on board other more reluctant MINSA staff to work towards putting the recommendations into action.

Health facility staff reported receiving a number of training courses, 100% in breastfeeding promotion and IMCI, plus others in formation of support groups, community empowerment, LAM, community organization and planning and evaluation. They felt the training had allowed them to better plan their work and to improve health care services for children.

Political will within MINSA will be the greatest challenge during the remainder of the project. While municipal level MINSA is fully motivated and engaged, they have encountered difficulty getting approval from SILAIS leadership to implement improvements and new programs. **CARE needs to assist by using contacts with PROSALUD, USAID Nicaragua, and MINSA Central to influence SILAIS support.**

(iii) Health Facilities Strengthening

The main thrust of the project in strengthening health facilities is to improving technical capacity and organizational expertise. All health post staff have been trained in IMCI and planning and evaluation. The training received on planning has been put into action in all health post with quarterly and annual plans.

One of the problems identified by the MINSA staff was the inadequate link between community and health facility. The project has made a concerted effort in this area. MINSA has modified the structure for training CHWs. Training was previously centralized in Matagalpa, and has now been decentralized to each health post, thus increasing contact between the local MINSA staff and community volunteers. Regular meetings are being held in most posts with volunteers. 83% of the health posts reported meeting monthly with CHWs in the MTE.

A system of referral from the community to the health post has been strengthened and was reported to be functioning in 13 of the 18 communities visited during the MTE. The referral system involves training the CHW to recognize danger signs which justify a referral to the health post. The CHWs in charge of a Base House have been trained and have received copies of the referral slip. The CHW fills out the slip to send with the person to the health post, retains a part of the slip for his/her own records, and a third section is to be filled out by the attending medical personnel and returned with the patient to the CHW for follow-up care. There are still some problems with the system, particularly in collecting information about referrals being made. There are problems with MINSA staff returning the counter-referral slip to the CHWs.

The supervision of MINSA staff was identified as another issue to improve during this project. *A new supervisory system has been introduced and even though it is not functioning 100%, most people expressed concurrence that it has improved.* Supervisors are now using a supervision

form, which focuses on improving performance through an agreed upon plan of action. When health personnel were asked during the MTE how the supervision system could be improved, 50% said by having more frequent supervisory visits.

(iv) Strengthening Health Worker Performance

The project identified CHWs who had been previously trained, to recover this underutilized resource. According to results from the MTE, 11of the 32 CHWs interviewed had been working over 2 years. Nine of the 32 CHWs had been recently selected and trained (worked less than 6 months). By increasing the number of volunteers in each community, the workload has been more adequately divided. Project records show 248 CHWs as actively working, far above the original target number.

An excellent strategy has been the formation of a network of volunteers within each community, which include volunteers with various roles, such as the CHW in charge of the Base House, Breast feeding Volunteer, and Growth Monitoring Volunteer. This network provides a strong support system for volunteers, where new volunteers can learn from more experienced volunteers and responsibilities can be shared. The project has encouraged the formation of sectors within each community, so that each volunteer would be responsible for specific families. This idea has not been adopted in all areas, but many communities have found it to be an effective way to organize.

CHWs are visited on a regular basis by either/or the CARE Extensionist and MINSA health post staff. Eighty-three percent of the CHWs stated that they receive visits at least once a month. The main purpose of these visits was to strengthen knowledge in health and to help in organizing their work. CARE/MINSA staff uses this opportunity to evaluate the competency of the CHWs to identify areas that need further emphasis.

Maps, drawn by the network or committee were observed in most communities visited during the MTE. This has helped develop a sectorization plan but has not been fully exploited. The project planned to teach mapping techniques to communities to facilitate the identification of high-risk cases, population, etc. **Volunteers and committees need to be taught how to use the information from community maps to plan and evaluate actions to improve heath and nutrition status.**

(v) Training

The project uses a cascade approach, were CARE and MINSA municipal staff are trained first, CARE and MINSA then train health post staff, and the health post staff are responsible for training CHWs. CHWs then provide education to families. MINSA staff also provide direct education to the community. The strategy appears to be functioning to reach the maximum number of families with education. **Take advantage of organized groups and community activities as another method for disseminating health information. Experiment with the use of mothers networks (for example; where each woman is responsible for talking with five neighbors) as an alternative approach.** New methodologies need to be strengthened to avoid simply giving messages. (Previously discussed in Section 2b. Communication for Behavior Change)

The original training schedule included the training in CDD, breast feeding, pneumonia, and nutrition within the first two years. This schedule was modified and nutrition has not yet been included as a topic, as it was temporarily substituted for community empowerment. It became evident to the staff that empowerment concepts were not clearly defined and would impede progress in working with the communities, so empowerment was done first, and nutrition will be covered in the next 6 months. **An integrated training plan should be developed for the next 2 years, including activities in Food Security.**

One of the main problems in using the cascade approach is how to maintain quality during replication. This seems to be an important issue in the current project. Training courses in key project interventions were reported to vary from 2 to 12 hours in length and appear to vary in content and methodology. Thirty-one percent of the CHWs interviewed during the MTE stated that the courses they already received should be repeated, demonstrating a feeling of insecurity in the topics they had received. **A consistent plan for what should be included in every training course needs to be developed, including practical experience on how to replicate the information to the next level and an evaluation plan to ensure that each level of participant understood the material.**

d. Sustainability Strategy

The stated sustainability objectives for the project are as follows:

1. 100% of MOH staff trained in skills and concepts for effective Child Survival.
2. 100% of MOH staff using IMCI for assessing and diagnosing all children under five.
3. An effective supervision and self-supervision system in place for MOH staff and CHWs.
4. MOH staff using antibiotics to treat less than 30% of ARI cases.
5. The MOH central outreach team will be visiting each community every two months to provide immunizations, patient follow-up, growth monitoring, home visits, health education, CHW supervision and in-service training, and support to the community development committees.
6. The MOH will have a long-term plan for supervising and training CHWs and BF counselors.
7. The MOH will have adopted quality assurance as an integral part of operation.
8. The MOH will have a long-term plan for assessing their own training needs and for in-service training.
9. A referral-counter referral system will be functioning effectively between all CHWs and the health units.
10. Seventy communities will have action plans and functioning CDCs.
11. Seventy communities will have a functioning base house used by residents.
12. Fifty percent of households will be participating in at least one of the food security activities: gardens, credit, or family budgeting.
13. Seventy breastfeeding counselors will be functioning and breastfeeding support groups will be established in each community or barrio.
14. A minimum of 70 CHWs will be conducting home visits and tracking health status of 30 families each, conducting growth monitoring, providing education and counseling, making referrals and following up on patients counter-referred.
15. 25% of the CDCs will be planning and executing self-help projects related to health.

A good start has been made on meeting sustainability objectives, but much work still needs to be done. The systems for referral, supervision, and planning are beginning to be used. Some impressive changes have taken place within MINSA in terms of decentralizing functions, a greater focus on quality, better coordination with the communities and increased supervision

Several cost recovery plans are currently being implemented through revolving funds in agricultural activities and future plans for cost recovery through pilot pharmacies and savings and loan groups.

In order to insure the sustainability of the efforts made so far, increased emphasis is vital on follow-up and supervision. This continues to be a main weakness in the project, as many activities are implemented, without adequate follow through. No specific exit strategy needs to be developed, because MINSA is involved in the direct implementation of all activities. The main issue in the future will be the lack of transportation to communities, a service CARE is occasionally supplies, and frequent training workshops.

When CHWs and committees were asked during the MTE about sustainability issues, they saw the principal strategy as working more with MINSA in the future. This linkage between the communities and MINSA is a vital one for insuring sustainability of project activities.

One strategy for sustainability which has been overlooked is fomenting ties between the communities and other NGOs and GOs. **The project needs to assist communities in identifying and accessing alternative resources, through the mayor's office, other NGOs, and other governmental agencies.**

C. Program Management

1. Planning

The main players in the initial planning process were CARE local and headquarters staff, and the MINSA municipal team. There was no reported involvement of health post level staff, but they did have a copy of the project objectives and evaluation plan. Focus groups with community members were used to provide community input into the planning process.

There is a good understanding of the project's main objective of decreasing morbidity and mortality in the under 5 population at all levels. During the MTE, it was seen that the majority of CHWs and other community volunteers understood the main objective, and in addition thought the objectives were; increasing breastfeeding, improving nutritional status and food security.

The work plan is being implemented as presented in the DIP, but while the implementation of specific activities is on schedule, the main problem is with supervision and follow-up to those activities.

A good system of ongoing planning exists:

- Within CARE, with weekly meetings every Monday to share ideas, problems, innovations, and advancements.

- Within MINSA, with the development of quarterly and annual plans
- Between MINSA and the community, monthly meetings for planning are held at most health posts but they could **improve the involvement of the community in the planning, implementation and evaluation of MINSA/CARE plans.**
- Between CARE and MINSA, developing a monthly work plan together and meeting weekly or every two weeks. Evaluations are held jointly every quarter and annually. The results of these evaluations are used to improve coordination and implementation of activities.

2. Staff Training

CARE Nicaragua recently implemented a new plan for staff development which includes a self-evaluation to identify needs and interests of each staff member. Individual training plans were developed and adequate funds have been allocated for training. Within the project, CARE staff has had the opportunity to receive training in a number of technical and managerial topics, including Total Quality Management. CARE health sector coordinator, CS project coordinator and supervisor have participated in three international conferences on topics of empowerment, supervision, and sustainability.

The project takes advantage of the regularly scheduled Monday meetings as an opportunity for continuous training of staff, based on identified needs and areas of weakness.

3. Supervision of Program Staff

As has been stated several times in this document, supervision and follow-up is one of the main weaknesses. This applies also to supervision of the project staff. CARE Extensionists infrequently receive supervision, and there is no specific format used during the supervision visits. Part of this problem is the result of a vacancy in the position of CS Supervisor from January to May of this year. **CARE should strengthen the supervision system in order to improve the quality and efficacy of supervision of all CS staff.**

The CARE staff seems to receive good support and indirect supervision through weekly meetings and personal contact with management. There are currently six Extensionists, working in approximately 96 communities. The original work plan called for six Extensionists for 70 communities. **One or two additional Extensionists should be hired to cover the additional communities not accounted for in the original proposal and the number of communities per Extensionist should be equitably divided.**

4. Human Resources and Staff Management

Human resource management is managed in the CARE Managua office. A personnel manual outlining policies is regularly updated and job descriptions are available for each position. An annual evaluation is conducted in December of each year, which provides staff with another opportunity to identify individual needs for training and/or support. A salary survey is currently being completed, to insure that CARE staff salaries are in line with other similar organizations.

Staff turnover has been reasonably low during the 2 years of the project, with the majority of staff being employed since initiation of the project. The original project manager position was to

be divided among three projects (CS, SALUMAI, and MESA, a reproductive health project) and this was later changed to a full time Child Survival position. The original supervisor was then named as full-time manager. The position of supervisor was filled in May 2000 after a vacancy of approximately 5 months, a situation which weakened the project's ability to adequately supervise and provide follow-up on training.

The project is understaffed considering the diversity of activities planned during the next two years. **It is recommended that the project hire an additional person for the savings and loan groups, and an additional person for food security activities in the urban area. It is also recommended that 1-2 additional Extensionists be hired to provide better coverage for the communities and a more adequate work load.**

CARE will provide a transition for project staff to other jobs at the end of the project through two mechanisms;

1. by training of staff for professional development, making them more employable at the end of the project, i.e. training in English, computer, auto repair, etc.
2. CARE tries to absorb as many staff members as possible from a terminating project into any new projects

5. Financial Management

CARE's current accounting system is outmoded and limited in providing adequate information for project management. A new system (SCALA) is being introduced and will be in place by December of this year. The new system will provide a more complete package of information, including sub-categorization, inventory control, planning and a network of management information.

As a stop-gap measure, the project manager and accounting office had a series of meetings to design a reporting system which provides information to the project manager in a more utilizable format. Communications has been good between the project and the accounting office.

It appears that even with this measure the budget information is not in a readably understandable format. According to calculations made by CARE's accountant, the project has only expended 18% of the total four year budget, and 23% of the USAID budget at mid term. Some of this underspending can be accounted for by the late start-up of the project due to Hurricane Mitch, but the rhythm of spending also needs to be analyzed to insure that spending is adequately being monitored. **It is recommended that a complete budget analysis be made by the project manager, health coordinator, and accountant, so that a realistic spending plan can be developed for the remaining two years.**

6. Logistics

Logistics management within the project appears to be adequate, no major problems were identified and no major challenges exist for the remainder of the project.

The only logistics issue which came up during the evaluation had to do with a confusion concerning vehicle insurance. There appears to be some confusion as to when people are

covered by motorcycle insurance, some staff felt that they were unable to coordinate with other NGOs in transportation, because only CARE staff are covered on the motorcycle. This appears to be erroneous and is only based on the policy that helmets must be worn by all. This issue should be clarified to staff, as confusion on this issue may limit coordination.

The other issue was whether the motorcycles would be covered by insurance on weekends, as frequently the Extensionists need to work weekends. This question requires some additional clarification. One suggestion was to change the schedule of Extensionists to a Sunday to Thursday schedule, or some other combination. It should be kept in mind that MINSA staff works Monday to Friday and it would be difficult to maintain close coordination, if work schedules varied. The issue of modifying the work schedule to take advantage of community members' free time on Sunday should be studied by both MINSA and CARE to reach people when it is most convenient for them.

7. Information Management

The information system begins in the community, with a simple registration of activities in a blank notebook by volunteers. The information recorded is not standardized in all communities but usually includes educational activities, number attending, home visits, use of ORS and chlorine, training received, cases referred, meetings held, etc. The information is then collected by CARE and MINSA staff, some information is incorporated into the MINSA monthly report of educational and service activities and some information goes to CARE's computerized reporting system.

The community committee in most cases has developed maps and a census. There has been little follow-through on how to use these valuable tools. The census was summarized in some communities and health posts, but not all. In most cases the individual family sheets were being updated with births and deaths, but not summarized. The maps have been drawn, but the plan for covering them in plastic so that high risk families can be identified has not been done.

CARE's computerized system consists of five Excel files:

- Quarterly report of indicators in health
- Quarterly report of indicators in Food Security
- Monthly monitoring of bank accounts for revolving funds
- Community population (for 63 communities, sporadically updated)
- Monthly budget expenses
- List of participants at Training Courses

And a WORD file of total number of people (by category) trained

The communities and MINSA and CARE staff also have a system of planning, monthly, quarterly and annually which is used for evaluation purposes. CARE also has a weekly planning system.

CARE Extensionists are asked to fill out a number of reports; weekly plan and evaluation of plan, monthly narrative report and quarterly report of indicators. The format for the monthly report has been changed twice and some confusion exists as to what they are required to report on. **The reporting requirements for Extensionists should be reviewed to collect only the**

minimum information necessary to detect problems and advances. Direct supervision should be used more to determine the quality of the work being completed.

The use of information by the community committee was a focus in the DIP, but little has been done to motivate the use of information in decision making. Most committees meet monthly, mainly to discuss health activities and the level of participation in activities. There are a large percentage of volunteers and committees who see the main function of collecting information only to report it to CARE/MINSA. **More training is needed at all levels to understand the use of information in decision making.**

8. Technical and Administrative Support

Technical support includes visits from CARE USA headquarters by Judiann McNulty, Deputy Director of Child Health. Visits have been made at least twice each year during strategic times, including developing the DIP and the MTE. Staff found the visits to be very helpful. Other technical assistance was from Brian Larson, formerly of CARE Niger, to work with staff on developing a strategy for savings and loan groups. Several CARE staff members and a MINSA nurse traveled to Honduras to visit an urban CARE CS project which contains many of the same activities and interventions. The CS project coordinator and health sector coordinator also visited CARE's highly successful, innovative CS XII project in Peru.

Through the CARE headquarters' partnership with the Centers for Disease Control, CARE was able to provide a technical team to train MINSA staff in Total Quality Management, a practical application training through which municipal staff completed an assessment project on client satisfaction.

The CARE staff is satisfied with the level and quality of technical assistance they have received. Plans and future needs include more on savings and loan programs, management of community pharmacies, breastfeeding counseling and support groups, and TIPS.

D. Conclusions and Recommendations

The project got off to a late start because Nicaragua was hit by Hurricane Mitch in October of 1998. Project activities did not begin until February 1999 because staff was involved in disaster work (paid by other CARE funds). This has not affected the project's ability complete all programmed activities, according to the DIP, which was written taking the delay into account.

The project is on time with implementation according to the Action Plan presented in the DIP, but modifications have been made in terms of introducing innovative approaches. For example the DIP outlined the training of teachers using Child-to-Child techniques, this was modified to training teachers in a much more traditional manner. The work with nutrition center was originally to be done introducing the Hearth Model, it was later found that this would not reflect the reality of work being done at the center, and has been dropped, as was explained in the first Annual Report. The Trials of Improved Practices (TIPs) model for motivating behavior change has not yet been introduced as was originally planned. Credit and community pharmacies have not been implemented yet, but will be implemented by the end of the calendar year.

One of the greatest areas of frustration for volunteers, and CARE and MINSA staff is the lack of participation of many community members. There are reasons for this lack of interest in health and nutrition and the biggest challenge during the next two years will be to identify what those barriers are and how to reach people in ways which attract them, especially in the urban area.

Some of the most outstanding aspects of the project are:

- *Coordination with MINSA at the local level*
- *Accreditation of health facilities as Baby Friendly Units by UNICEF*
- *Improvement in MINSA coordination with the communities*
- *Use of qualitative and quantitative studies for baseline information and to guide project implementation*

Some of the areas of weakness which need to be prioritized during the next two years:

- Follow-up and supervision of all aspects of the project
- Improving integrated Health Visits by the Municipal team
- More focus on improved methods for changing behavior, not just giving health "talks"
- Information System which should be used at all levels
- Further strengthening of IMCI

One of the most exciting recommendations to come out of the MTE is the planning for differences in activities based on the annual cycle of seasonal employment and workload of project participants. Planning for the work cycle, especially in the urban area, will greatly enhance effectiveness of the interventions, and take a more realistic view of what activities can be accomplished. The project is planning to use alternative methodologies during the heavy work months, such as theater groups, puppet show, radio and home visits. During less demanding months, training and group activities can be conducted.

Recommendations

1. The project needs to re-evaluate the number of communities, beyond the original 70, where there will be direct intervention, prioritizing by risk level, population of under fives, and level of interest of the community.
2. Additional training in formation of support groups, accompanied by follow-up in the field, is needed in all communities.
3. Improved monitoring and supervision of food security activities is required to improve the impact of the intervention and to provide additional support to the agronomist and agricultural volunteers.
4. Increased technical assistance should be provided in the urban area to motivate the use of existing resources in establishing small patio gardens. An additional FS Extensionist should be contracted, specifically to work in the urban area.
5. A study should be made by MINSA as to ways the AIN system could be simplified in the mechanics of weighing and reporting weights, so that more energy could be focused on counseling mothers for growth promotion.
6. An increased focus on training in IMCI and follow-up on training to insure proper application is needed at all health facilities.

7. An increased focus on training in IMCI at the community level should be incorporated in all re-training during the next 2 years.
8. All teachers should receive information about the signed agreement with MECD. Identify mechanisms to insure the follow-up and monitoring of health activities in the schools.
9. Teachers should be encouraged to meet quarterly with the nearest health post to coordinate activities.
10. An agreement to coordinate activities should be developed between MINSA and MECD at the municipal level.
11. CARE Extensionists should periodically accompany the Integrated Visits, with a specific role as team member.
12. A procedure manual for Integrated Visits should be developed, including definition of roles, monitoring system with specific indicators, and focus on working with the community in planning, implementation and evaluation of activities.
13. The Municipal Management team should actively monitor and supervise the Integrated Visit teams, including analysis of information from the information system.
14. Administrative systems of MINSA need to be improved to facilitate the distribution of medicines and payment of per diem for Integrated Visits.
15. Innovative methods of education should be used during the Integrated Visits.
16. A credit promoter should be hired to spearhead the savings and loan group approach focusing on the urban area.
17. Analyze, with communities, the concepts of Community Development Committee and Network of Volunteers to define their roles and potential for sustainability.
18. More innovative approaches are needed to overcome the constraints to participation, such as migration, employment demands, lack of interest, and political divisions.
19. The project needs to continue to move away from the use of health "talks" to give information towards the use of other more interactive and innovative methods of adult education.
20. Take advantage of the months from July to September for group meetings and training. From October to June, focus on the use of indirect methods such as radio, popular education, printed materials, home visits, and activities with the schools. Take advantage of Sundays when people are at home.
21. Increased efforts should be made to disseminate health information at work centers.
22. CARE should assume a leadership role in sponsoring (a minimum of) an annual workshop for NGOs, to provide an opportunity for sharing work strategies and annual plans, and for identifying points of coordination.
23. Volunteers and committees need to be taught how to use the information from community maps to plan and evaluate actions to improve heath and nutrition status.
24. Take advantage of organized groups and community activities as another method for disseminating health information. Experiment with the use of mothers networks (where each woman is responsible for talking with five neighbors) as an alternative approach.
25. An integrated training plan should be developed for the next 2 years, including activities in Food Security.
26. A consistent plan for what should be included in every training course needs to be developed, including practical experience on how to replicate the information to the next level and an evaluation plan to insure that each participant understood the material.

27. The project needs to assist communities in identifying and accessing alternative resources, through the mayor's office, other NGOs, and other governmental agencies.
28. Improve the involvement of the community in the planning, implementation and evaluation of MINSA/CARE plans.
29. CARE should develop a system for improving the quality and efficacy of supervision of all CS staff.
30. One or two additional Extensionists should be hired to cover the additional communities not accounted for in the original proposal and the number of communities per Extensionist should be equitably divided
31. It is recommended that a complete budget analysis be made by the project manager, health coordinator, and accountant, so that a realistic spending plan can be developed for the remaining two years.
32. The reporting requirements for Extensionists should be reviewed to collect only the minimum information necessary to detect problems and advances. Direct supervision should be used more to determine the quality of the work being completed.
33. More training is needed at all levels to understand the use of information in decision making.

E. The Action Plan

The Action Plan completed by CARE and MINSA staff in August following the mid-term evaluation is presented below. Along with it is an up-date including progress made towards implementing the recommendations as of October.

CARE

Nicaragua

CHILD SURVIVAL PROJECT
ACTION PLAN

ACTIVITY	RESULT	DATE	PERSON IN CHARGE
MANAGEMENT			
Hiring of personnel.	3 new staff hired.	August	Ivette Aráuz
August-December 2000 planning for MINSA-CARE Health Posts. Meeting of Health Post Directors and Extensionists. • Review of current situation and preparation of recommendations. • Joint review of plans, with feedback.	Plan prepared for Health Posts. Plans revised and feedback obtained.	August 14-18 August 21	Harold Rugama Harold Rugama Amelia Reyes
Meeting with Community Leaders. • Review of current situation and preparation of recommendations. Planning with communities. (CDC, Extensionists, Health Posts)	Recommendations prepared. Community plans for Health Posts prepared.	August 28 August 28	Harold Rugama Harold Rugama Yamileth Alegría
Review current forms for supervision.	Four forms revised (AIN, CHWs, BF Counselors, Extensionists).	August 28 to 31	Ivette Aráuz
Review current distribution and number of communities.	Communities distributed equitably among extensionists.	August 9	Ivette Aráuz Yamileth Alegría
Review project's computer information system.	Data gathered and standardized.		Ivette Aráuz Harold Rugama Abundio Jarquin
Training for health personnel and extensionists on computer information system and decision-making.	Personnel trained.		Harold Rugama Ana C. Salinas
Preparation of Municipal MINSA-MECD Agreement.	Agreement prepared.	October	Yamileth Alegría
Review and preparation of budget for next 2 years.	Budget prepared.	August 14 to 18	Elena McEwan Ivette Aráuz

ACTIVITY	RESULT	DATE	PERSON IN CHARGE
NUTRITION			
Monitoring of Growth and Development (AIN): Evaluation of AIN in 10 communities.	 AIN implementation evaluated.	 September 1	 Nidia Espinoza Ivette Aráuz
Implementation in new communities. • Situational assessment and identification of communities. • Training for new Monitors. • Accompaniment at first AIN session.	 Situational assessment in prioritized communities. Monitors trained. AIN Monitors assisted in first session.	 September 1-30 October 1-15 As per Calendar	 Nidia Espinoza Ivette Aráuz
Training for MINSA on Nutrition.	Personnel from 27 sectors trained.	October	Amelia Reyes Ivette Aráuz
Training for volunteers and mother's groups on: Green leaves, Vitamin A, Soya		October-December	Amelia Reyes Harold Rugama
FOOD SECURITY			
Preparation of curriculum, compilation, adaptation of material on: **household money management**.	Materials prepared.	November	Ivette Aráuz
Urban gardens: Preparation of revolving fund strategy. Presentation of proposal in 20 barrios. Selection of participant families. Purchase of seeds and inputs. Training for 40 agricultural promoters in: • Implementation of bio-intensive gardens • Management of diverse crops • Preparation of organic repellents and fertilizers Establishment of gardens and training of women's groups. Technical assistance for gardens.	 Strategy proposal prepared. Revolving fund strategy discussed and feedback offered by 20 barrios. 430 families selected. Seed purchased. 40 agricultural promoters trained. Gardens established in 20 barrios. 20 barrios receive technical assistance	 August 20 - 28 September 1-15 September-October-November September September October November September-November Continual	 Abundio Jarquin Abundio Jarquin Abundio Jarquin Abundio Jarquin Abundio Jarquin

ACTIVITY	RESULT	DATE	PERSON IN CHARGE
FOOD SECURITY (cont.)			
Fuel-efficient stoves:			
Preparación of CARE – Project Cuencas-Movimiento Comunal Agreement.	Agreement prepared.	September	Ivette Aráuz
Selection of participant families.	50 families selected.	September-October	Ivette Aráuz
Implementation of stoves in rural families.	Families start using preparation stoves.	January 2000	Ivette Aráuz
Savings and Credit Groups:			
Promotion of Savings and Credit program.	Women's groups from 10 barrios know about program.	September	Ivette Aráuz
Initiation of savings program activities.	Women's groups initiating program activities.	October-November	Ivette Aráuz
Continuation of program.	Extension of program to other barrios.	As of December	Ivette Aráuz
BREAST-FEEDING			
Clinical course in breast-feeding.	Medical and nursing personnel trained.	October	Nidia Espinoza Ivette Aráuz
Training for MINSA personnel and extensionists in counseling skills.	MINSA Health Post directors and teams trained.	October	Nidia Espinoza Ivette Aráuz Support from Breast-feeding Advisor for Latin America
Recruiting and training of local leaders for breast-feeding.	Local leaders involved in promotion of breast-feeding.	October-November	Nidia Espinoza Ivette Aráuz
Training for counselors on support group methodology.	100% of Counselors trained in leading support groups.	October-November	Harold Rugama
Follow-up to support group sessions.	Counselors accompanied and offered feedback in group sessions.	Continual	Harold Rugama
Elaboration of documentation with plan and criteria for the nomination of communities friends of breast-feeding.	Document prepared.	October	Nidia Espinoza Harold Rugama
DIARRHEA AND PNEUMONIA			
Training for the CHW network on diseases prevalent among children (mainly ARI&DD, danger signs, and management).	CHWs recognizing danger signs for and managing diseases prevalent among children.	Beginning in October 00 / First Quarter of 2001	Harold Rugama Amelia Reyes
Training for all volunteers on referral and counter-referral system.	Volunteers using the referral and counter-referral system.	Beginning in October 00 / First Quarter of 2001	Harold Rugama Amelia Reyes

ACTIVITY	RESULT	DATE	PERSON IN CHARGE
INTEGRATED HEALTH DAYS			
Preparation of guidelines for Integrated Health Days.	Manual/guidelines prepared.	September	Yamileth Alegría
Definition of indicators to be monitored on Integrated Health Days.	Indicators to be monitored have been defined.	September	Ivette Aráuz Yamileth Alegría
Elaboration of monitoring and evaluation for the plan for Integrated Health Days.	Integrated Health Days evaluated.	Beginning in October in monthly technical meetings.	Yamileth Alegría
IEC			
Preparation, revision and feedback on project's IEC strategy.	Strategy prepared and revised.	October	Harold Rugama Amelia Reyes Lourdes Haslam
Planning of IEC activities.	Plan prepared.	Last week of October	Harold Rugama Amelia Reyes Lourdes Haslam
Implementation of plan.	Clear and consistent messages reaching population.	Permanent	Harold Rugama Amelia Reyes Lourdes Haslam
SUPERVISION			
Improve supervision of CARE field staff.	New supervision form developed. Plan implemented for regular supervision visits.	By October	Harold Rugama Ivette Arauz
Additional supervision of IMCI in health units.	MINSA has performance-based tool and implements supervision plan.	By November	MINSA staff
Supervision plan implemented for CHWs and CDCs.	Tools developed and plan implemented.	By December	Harold, Ivette, Amelia, Lourdes
COMMUNITY PHARMACIES			
Meeting of CARE and Colectivo de Mujeres and other NGOs. Meeting of CARE and MINSA. Focus group with community leaders. Implementation of plan.	Collaboration determined. Implementation plan prepared. Activity Implemented.	September-November September-November January-February 2000	Ivette Aráuz Ivette Aráuz Ivette Aráuz

Action to Date on MTE Recommendations - October 21, 2000

Since the Action Plan was prepared in mid-August following the mid-term evaluation, and progress has been made during the intervening two months, CARE is also presenting this summary of action to date. Progress is presented for each recommendation ***in italics***. Related recommendations have been grouped.

Management

The project needs to re-evaluate the number of communities, beyond the original 70, where there will be direct intervention, prioritizing by risk level, population of under fives, and level of interest of the community. ***After meetings with MINSA and the communities, it was decided to continue in all of the present communities.***

The number of communities per Extensionist should be equitably divided. ***Immediately after the MTE, the community assignments were evenly distributed among the Extensionists.***

One or two additional Extensionists should be hired to cover the additional communities not accounted for in the original proposal. An additional FS Extensionist should be contracted, specifically to work in the urban area. A credit promoter should be hired to spearhead the savings and loan group approach focusing on the urban area. ***Another extensionist, a food security specialist for the urban area and a credit specialist were all hired in August.***

Follow-up and supervision of all aspects of the project:

- CARE should develop a system for improving the quality and efficacy of supervision of all CS staff. ***A supervision form for CARE personnel has been developed and is now in use with regular supervision visits.***
- Supervision plan with MINSA for IMCI ***The supervision plan has been developed with MINSA and is being implemented in every health facility.***
- Assist MECD to develop a plan, and form for supervising teachers and monitor implementation. ***Discussions are underway with MECD to develop a feasible monitoring and supervision system. A meeting is to be held Nov. 3-4 with all the teachers to evaluate where they are with the health education program.***
- With MINSA, implement supervision of CM day care centers. ***This is in the planning stage.***
- Develop and implement a plan for supervising committees and volunteers**.** ***All reporting forms are being revised. MINSA has not yet had time to develop a plan.***

The reporting requirements for Extensionists should be reviewed to collect only the minimum information necessary to detect problems and advances. Direct supervision should be used more to determine the quality of the work being completed. ***Reporting forms have been revised by the staff themselves in two work sessions. A regular supervision plan is in effect.***

Information System should be used at all levels. More training is needed at all levels to understand the use of information in decision making ***Data to be gathered has been***

standardized. Training for MINSA/CARE staff (to replicate in the communities) was held October 16-23.

Improve the involvement of the community in the planning, implementation and evaluation of MINSA/CARE plans. ***A 3-month plan has been made with the health post staff and the communities, is being implemented and will be evaluated in December***

It is recommended that a complete budget analysis be made by the project manager, health coordinator, and accountant, so that a realistic spending plan can be developed for the remaining two years. ***The health sector coordinator and the project coordinator made a complete budget analysis and spending plan for the next two years.***

Training

1. An integrated training plan should be developed for the next 2 years, including activities in Food Security. ***This plan has been developed..***

2. A consistent plan for what should be included in every training course needs to be developed, including practical experience on how to replicate the information to the next level and an evaluation plan to insure that each participant understood the material. ***Training plans are being standardized with MINSA.***

Food Security

1. Improved monitoring and supervision of food security activities is required to improve the impact of the intervention and to provide additional support to the agronomist and agricultural volunteers. ***The food security staff are receiving the same increased level of supervision as all other CARE staff.***

2. Increased technical assistance should be provided in the urban area to motivate the use of existing resources in establishing small patio gardens. ***An additional food security specialist has been hired to focus on the urban area and has started training more volunteers after have met with women of 20 barrios who are interested in gardens. Another food security intervention, the savings groups, has been initiated. Women's groups have been formed in two barrios. In the rural areas, the plan of fuel efficient stoves described in the DIP has been implemented with 50 stoves build in 5 communities. 250 more are planned.***

Breastfeeding, Nutrition, Diarrhea, Pneumonia

1. Additional training in formation of support groups, accompanied by follow-up in the field, is needed in all communities. ***Fifty more BF volunteers are receiving the support group training during October and Noviembre. CARE's Latin American RTA for Breastfeeding and Nutrition will be in Nicaragua during Noviembre to assess the quality of work in BF and support groups and will return there in December to train CARE and MINSA staff.***

2. A study should be made by MINSA as to ways the AIN system could be simplified in the mechanics of weighing and reporting weights, so that more energy could be focused on

counseling mothers for growth promotion. ***The twenty volunteers who were originally trained have been 4 more days of training focued on counseling and on negotiating changes with the mother or care-giver. A second group of 30 is being trained the last week of October and the beginning of Noviembre with the expanded curriculum which includes counseling. The AID manual has been revised according to these recommendations and is being re-printed. In addition, CARE is preparing implementation guides for each community based on the PAHO community IMCI materials.***

3. An increased focus on training in IMCI and follow-up on training to insure proper application is needed at all health facilities. ***As mentioned above, a new supervision system is being put into place to monitor application of IMCI in the health facilities. Based on results, more traininig may be given.***

4. An increased focus on training in IMCI at the community level should be incorporated in all re-training during the next 2 years. **(Note from CARE: Neither MINSA Central nor the SILAIS have approved community-level IMCI, therefore CARE cannot follow this recommendation in the near future, but will continue to advocate for acceptance.)**

Health Promotion through Schools

1. All teachers should receive information about the signed agreement with MECD. Identify mechanisms to insure the follow-up and monitoring of health activities in the schools. ***Teachers already trained have been informed. CARE and MECD are disucssing a monitoring plan. CARE is supplying improved teaching materials.***

2. Teachers should be encouraged to meet quarterly with the nearest health post to coordinate activities. ***No action has been taken pending the start of the new school year in February.***

3. An agreement to coordinate activities should be developed between MINSA and MECD at the municipal level. ***MINSA is taking the lead on this, as is appropriate.***

Integrated Health Visits of MINSA

1. CARE Extensionists should periodically accompany the Integrated Visits, with a specific role as team member. ***There is resistance from MINSA to this recommendation.***

2. A procedure manual for Integrated Visits should be developed, including definition of roles, monitoring system with specific indicators, and focus on working with the community in planning, implementation and evaluation of activities. ***This is being prepared with MINSA and will be presented on October 30.***

3. The Municipal Management team should actively monitor and supervise the Integrated Visit teams, including analysis of information from the information system. ***Part of the plan.***

4. Administrative systems of MINSA need to be improved to facilitate the distribution of medicines and payment of per diem for Integrated Visits. ***Part of the plan mentioned above.***

5. Innovative methods of education should be used during the Integrated Visits. ***This will be addressed through an overall training on participatory adult education.***

Community Organization and Education

1. Analyze, with communities, the concepts of Community Development Committee and Network of Volunteers to define their roles and potential for sustainability. ***Meetings were held in August with the community leaders to do an internal evaluation and discuss these concepts. Follow-up to their recommendations is in process from both sides.***

2. Volunteers and committees need to be taught how to use the information from community maps to plan and evaluate actions to improve heath and nutrition status. ***Staff will now be providing this orientation following the recent staff training on the subject.***

3. More innovative approaches are needed to overcome the constraints to participation, such as migration, employment demands, lack of interest, and political divisions.

4. The project needs to continue to move away from the use of health "talks" to give information towards the use of other more interactive and innovative methods of adult education.

5. Take advantage of the months from July to September for group meetings and training. From October to June, focus on the use of indirect methods such as radio, popular education, printed materials, home visits, and activities with the schools. Take advantage of Sundays when people are at home.

6. Increased efforts should be made to disseminate health information at work centers.

7. Take advantage of organized groups and community activities as another method for disseminating health information. Experiment with the use of mothers networks (where each woman is responsible for talking with five neighbors) as an alternative approach.

8. The project needs to assist communities in identifying and accessing alternative resources, through the mayor's office, other NGOs, and other governmental agencies.

In regards to the community education recommendations above, a new IEC plan was developed with input from the health posts. Materials are now being developed, including radio, murals, placards, video and brochures. CARE/MINSA staff will have a training in adult participatory education early in 2001 which will be replicated with the volunteers. PLA exercises will be used during the community evaluations in Noviembre and December.

Inter-institutional Coordination

1. CARE should assume a leadership role in sponsoring (a minimum of) an annual workshop for NGOs, to provide an opportunity for sharing work strategies and annual plans, and for identifying points of coordination. ***CARE is investigating with the NGOS whether or not they are interested in such a meeting.***

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2. CARE could coordinate with the Colectivo de la Mujer to learn about their experience with community pharmacies. ***CARE has not only met with Colectivo de la Mujer to learn about their pharmacy experience, but has found another NGO with useful relevant experience. This NGO has offered to provide training, supplies and supervision. CARE will provide the initial capital. One volunteer will be selected at each of the targeting 5 health posts and training will be conducted in January.***

F. Results Highlight

Accreditation as Baby and Mother Friendly Municipality

In March of 1999 the Municipal Management Team (MMT) of the Ministry of Health in Matagalpa, Nicaragua accepted the challenge to become a Baby and Mother Friendly Municipality. A Child Survival project was just beginning with funding from USAID and CARE International, which included working towards accreditation as a project priority. The first step was to form a Breastfeeding Committee of the MMT and CARE which developed a work plan.

Training at all levels

- 160 MOH health staff received an 18 hour breastfeeding course.
- Two 8 hours workshops were held for administrative, support and dental staff.
- 138 Breastfeeding counselors were trained representing 14 Health Centers.
- 151 Community Health Workers were trained in 39 workshops by MOH and CARE staff.
- 22 educators working in 5 day care centers were trained in breastfeeding.
- Health center staff were trained in forming support groups and counseling on LAM.

Putting Training into Action

After receiving the training the 138 counselors of the municipality began to:

- Present education activities during home visits and in schools,
- Encourage the formation of support groups in urban and rural communities
- Participate in educational activities in health centers and informational murals

Special events

- LINKAGES and CARE completed a qualitative study on breastfeeding practices.
- Breastfeeding Week was celebrated with the following activities:
  - Women's meetings in every health center, with the distribution of materials
  - Mural competition at the municipal headquarters
  - Role Model Assembly with health workers
- In October a 3 month long local radio campaign began promoting breastfeeding
- In November the first interagency meeting was held to encourage the promotion of successful exclusive and prolonged lactation by all local NGOs. Health workers from the organizations received an 8 hour course on breastfeeding and LAM.
- In February of 2000 a stand at the NICAMER community fair promoted breastfeeding with murals, videos, and the distribution of materials.

Official Recognition

In September UNICEF evaluated the 11 required steps for promoting exclusive and prolonged lactation and named the municipality of Matagalpa as Baby and Mother Friendly. The official accreditation ceremony was held in April 2000 attended by the Vice-Minister of Health and the UNICEF Representative in Nicaragua. The goal of increasing from 10% to 30% the percentage of women who breastfeed exclusively and from 14% to 50% those who practice prolonged breastfeeding will be reached through the daily effort of all health workers, Extensionists of CARE, and personnel from other organizations working together with community health volunteers, support group leaders, midwives, and the general public, to support breastfeeding women in their effort to have healthier babies.

ATTACHMENT A

Information from the DIP

ATTACHMENT A

Baseline information from the DIP

There have been no significant changes in any of the following since the writing of the DIP.

1. Field Program Summary

PVO/Country: CARE Nicaragua Program duration (dates): 9/30/98 [1] – 9/30/2002

1. ESTIMATED PROGRAM EFFORT AND USAID FUNDING BY INTERVENTION

Intervention	% of Total Effort (a)	AID Funds in $ (b)
Nutrition and Micronutrients	35%	$296,986.00
Breastfeeding Promotion	25%	$212,133.00
Control of Diarrheal Disease	20%	$169,706.00
Pneumonia Case Management	20%	$169,706.00
Total	100%	$848,53.00

2. Program Site Population: Children and Women (c)

Population Age Group	Number in Age Group
Infants (0-11 months)	4.328
12-23 Month Old Children	4.212
24-59 Month Old Children	15.670
Total 0-59 Month Olds	24.210
Women (15-49 years) (d)	18.218

- Estimated annual number of live births in the site: 4742
- Sources of the population estimates above: Nicaraguan National Institute of Statistics

[1] Actual Project Start-up was delayed until 1/15/99 due to Hurricane Mitch.

2. Program Goals and Objectives:

Project Goals:

1. To improve the capacity of the MOH health personnel in community outreach, and delivery of quality services, including health education.
2. To empower communities to organize, analyze health and nutrition problems, and seek solutions.
3. To enable families to practice healthy behaviors, identify and resolve health risks, and access quality services.

Indicators: (All refer to children under two whose mothers are interviewed except where <5 is stated.)	**Baseline measurement**	**Final measurement**
1. Increase from 10% to 30% the number of mothers who exclusively breastfeed for the first 6 months.	KPC survey	KPC survey
2. Increase from 14.5% to 50% the number of mothers who continue breastfeeding their child between 12 and 24 months.	KPC survey	KPC survey
3. Reduce from 36% to 20% the mothers who discontinue breastfeeding before 3 months of age.	KPC survey	KPC survey
4. Increase from 60% to 80% the number of children weighed in the previous 4 months.	KPC survey	KPC survey
5. Increase from 24% to 50% the number of children who receive more liquids during diarreal episode 2 wks. prior to survey.	KPC survey	KPC survey
6. Decrease from 39% to 15% the number of mothers who give less food or withhold food during diarrheal episode.	KPC survey	KPC survey
7. Increase from 2.1% to 40% the mothers who can list 3 signs of dehydration and 2 of severe diarrhea.	KPC survey	KPC survey
8. Increase from 69% to 80% those who seek medical care for a child with rapid or difficult breathing.	KPC survey	KPC survey
9. Increase from 2.4% to 50% the mothers who can describe 2 signs of pneumonia.	KPC survey	KPC survey
10. Increase from 3.5% to 20% the children between 1 and 5 years who are offered food 5 times a day.	Food security Ass.	Food security Ass.
11. Increase 20% over baseline the number of children under 5 diagnosed with pneumonia who receive their antibiotic from MINSA	Q of C Assessment.	Q of C Assessment.
12. Increase from 10% to 30% the childdren under 5 who are offered Vitamin A-rich food 3 times a week.	Food security Ass.	Food security Ass.
13. 30% of families with children under 5 eating new foods (fruits, vegetables, proteins).	Food security Ass	Food security Ass
14. Increase from 33% to 50% the families with children under 5 who produce some food in their yard.	KPC survey	KPC survey .
16. Decrease from 56% to 46% the number of families with children under 5 cooking over a wood fire.	Household observ.	Household observ.
17 Decrease from 8% to 0% the number of families with children < 5 who have no food in the house around noon on Sat. in Feb.	Household observ.	Household observ.

3. Program Location:

The project is located in north-central Nicaragua in the Department of Matagalpa within the municipality of the city of Matagalpa. The target area, which is under the jurisdiction of the Municipal Health District of the SILAIS of Matagalpa takes in thirty-eight barrios within the city of Matagalpa and thirty-two communities in the adjoining rural areas (see Appendix B). A complete list of the *barrios* and communities in the target area with their respective populations is included in Appendix A. The total beneficiary population includes 24,610 children under five and 17,716 women of reproductive age. In spite of relatively good access to MOH health facilities (10 minutes to 4 hours walking), morbidity and mortality rates are higher for the municipality than for other municipalities in the Department.

Matagalpa is a large mountainous Department (province), inhabited by subsistence farmers who plant corn and beans, and raise some livestock. There is some commercial cultivation of coffee, rice, and vegetables, which provides seasonal employment in harvesting and processing. Nearly a quarter of the population of the department lives in the city of Matagalpa.

The population is ethnically homogenous, Spanish-speaking, with both Catholics and Evangelical Protestants. Despite machismo, women often participate in family and community decision-making. Literacy campaigns were extensive in the 1980's, but only 66% of the population over age ten is literate to any degree (UNICEF, 1997). During the baseline KPC survey conducted for this project, 78% of the women in the target area interviewed said they are literate, while the PRA revealed that only 57% of the women and 63% of the adult men actually know how to read.

Matagalpa, the capital of the Department, is the fourth largest city in Nicaragua and is growing rapidly with the influx of migrants fleeing the desperate poverty of the countryside. The World Bank estimates that 60% of the rural population lives in extreme poverty with annual family incomes less than US$202.64 (World Bank, 1995). Successive years of drought, and then floods, have spurred rural-to-urban migration. The baseline survey of this project found that 30.9% of the population had lived in the *barrio* for two years or less. The recent immigrants live in shacks constructed from plastic sheeting, cardboard, old boards, and rusty sheet metal, perched precariously on the steep hills around Matagalpa. These *asentamientos* or *barrios* have virtually no access to water or sanitation at the household level.

Men, women and children seek whatever work they can find in the city streets or as seasonal laborers in commercial agriculture. According to the baseline research, only 37% of the target population have permanent, salaried work; the others are unemployed, seasonally employed, or work in the informal sector. The project baseline survey found that women head 56% of households, and in 48% of all households, the woman is the main wage earner. Of the population surveyed 31% of mothers with children under two work outside the home. It is possible a higher percentage of all mothers with children under five work outside the home because those with very small children are the most likely to stay home due to lack of

childcare. (Sixty-nine percent of the children selected for the survey were under 12 months of age.)

Of those mothers staying home, 16% engage in some kind of income generating activity. The women surveyed indicated that when they are away from home, 18% take the child, 22% leave the child with older siblings, and 48% leave their small child with relatives, usually a grandmother, but 6% with the father. The project believes that the children of the working mothers are at higher risk. Analysis of the baseline survey results showed a significant relationship between the mother working away from home and the point prevalence of diarrhea and with reduced duration of breastfeeding.

Even in the center of the city inhabited by middle class families there is no consistent access to piped water. The aging water system is inadequate for the size of the population and houses have water for a couple of hours three times per week at most. Due to the lack of clean water, Matagalpa has suffered repeated cholera outbreaks in the past three years. The municipal government has just received funding from an external donor to improve the water system, but it is not clear whether the proposed improvements will provide water to all the hillside *barrios*. According to the National Institute for Water and Sanitation (INAA), approximately thirty percent of the homes in the rural area have access to water, usually at hand-dug public wells.

Because of the high level of poverty and the population's lack of access to basic services, the Department of Matagalpa has been designated a priority area by USAID, the government of Nicaragua, and CARE. CARE has been working in the rural areas of Matagalpa since 1983 with projects in water and sanitation, sustainable agriculture, natural resource management and most recently, with a small USAID mission-funded child survival and food security project in selected rural municipalities. Through these projects, CARE has earned a high degree of credibility with the population, the MOH, and the local government.

Major causes of under-five mortality

For the Department of Matagalpa, the infant mortality rate during 1996 was 89 per 1,000, according to both the MOH and the National Census Bureau. No data for under-five mortality is available at the Department level, but the MOH estimates that it is higher than the national rate of 69/1000. The major cause of mortality in children under five who survive the neonatal period is pneumonia, followed closely by diarrhea. In the target municipal health district, according to MOH figures for 1998, 35% of <5 mortality was due to ARI, (probably pneumonia, but HIS does not distinguish) and 23% to diarrheal disease, with all of these deaths occurring among the urban population.

Due to the economic crisis and repeated crop failures, both acute and chronic malnutrition are widespread. A nutrition survey commissioned by USAID with Title II funding was conducted in the region in 1997. The report showed that over 35% of

children under 5 showed stunting (>-2 z.) The National Micronutrient Survey in 1994 found that 37% were severely anemic and 8% had serum retinol levels <10 indicating severe Vitamin A deficiency. Local and regional data on micronutrient status are not available.

Existing health services and child survival programs

The Ministry of Health provides nearly all health care services to the municipality of Matagalpa. The MOH operates a 250-bed hospital, which is staffed by 78 part-time physicians, 32 nurses and 92 auxiliary nurses. The hospital is equipped with a blood bank, oxygen services, neonatal incubators, and a basic laboratory. Seventy-eight of the beds are reserved for pediatric care, including recuperation of severely malnourished children.

Ambulatory care is provided through one health center and eight health posts (four peri-urban and four rural). The health center serves part of the urban area and is staffed by twelve part-time physicians, four graduate nurses, and nineteen auxiliary nurses. The health center has a basic laboratory and offers free family planning services. The rural health posts are staffed by auxiliary nurses (one at each post) who have minimal training. The four peri-urban health posts have part-time physicians (final year medical students) and an auxiliary nurse. CARE's experience with the MOH in the Department has shown that the staff have difficulty following norms for standard case management, and frequently lack necessary medicines, more often due to lack of planning and management than to lack of resources.

The auxiliary nurses at the health posts have traditionally been responsible for community outreach but found it difficult because of lack of transportation, lack of clarity about what they were to do in the community, and no one to cover the health post while they were out. To overcome these problems, the local MOH is piloting a new system of having a rotating team from the health center do the community outreach. The team's efforts consist almost entirely of immunizing because they lack orientation in how to work with community committees, supervise CHWs or make home visits and provide education to families.

Health care workers are paid very low salaries and hence are not highly motivated. Physicians earn the equivalent of US$350 a month, while nurses and auxiliary nurses earn $190 and $120 respectively. Their work is hindered by lack of supervision and inadequate supplies, particularly antibiotics.

There is high staff turnover at the management level since the positions for SILAIS (regional MOH administrative unit) directors and many health center directors are political appointments. This leads to lack of long-range programming and inconsistency in policies. In contrast, the lower-level staff tend to stay in the system indefinitely even though they are rotated between the health posts and the health center.

The MOH commonly does community work through volunteers known as *brigadistas*. There are currently 292 of these CHWs in the municipality, but they have received only limited training and have virtually no supervision due to lack of planning and prioritizing on the part of the MOH. The MOH would like them to distribute ORS, do health education, advise the community of immunization campaigns, and make referrals.

An initiative of the MOH and the local community development committees (CDCs) has been the formation of "Base Houses" which are focal points in the communities for health activities. Sometimes it is the CHW's house or another existing house. In some communities, residents have constructed a simple shelter. The Matagalpa MOH reports that there are 54 Base Houses in rural communities in the proposed project area and 8 in the urban area, but they have no way of knowing whether or not the population knows the location of the Base Houses or that they serve as distribution centers for ORS and chlorine and as meeting points for health team visits.

At the national level, the MOH currently is receiving USAID-funded technical assistance through the second phase of a contract to Management Sciences for Health. The first-phase project, called Decentralized Health Services Project (PSSD), focused on strengthening management at the SILAIS level by providing assistance in the implementation of information, administrative, financial and monitoring systems. The PSSD also collaborated with the MOH and PAHO in implementing programs in Integrated Women's Health, Integrated Management of Childhood Illness (IMCI) and a training program in the Rational Use of Antibiotics which has successfully minimized over-prescription of antibiotics, leading to more stable supplies and considerably reduced costs in the regions where it has been piloted. This project has now been extended through 2002 in a new contract to MSH from USAID called PROSALUD and will be based in Matagalpa.

PROFAMILIA, the Nicaraguan IPPF affiliate, provides family planning services in Matagalpa as does a local NGO called IXCHEN. Both charge fees for these services. PROFAMILIA has also set up 117 community-based distribution centers throughout the Department.

Two other international PVOs have health projects in the Department of Matagalpa. Catholic Relief Services is implementing a BHR/PVC-funded Child Survival project in the remote eastern half of the Department. Oxfam-Belgium is doing some primary health care work in a small municipality in the south of the Department.

Concurrent to this CS project, CARE was awarded a grant from USAID Nicaragua to implement a 3-year institutional strengthening project within the SILAIS of Matagalpa. The project, called SALUMAI for *Salud Materno-Infantíl*, focuses on improving the capacity of MINSA at both district and local levels in quality of care, monitoring, supervision, financial and logistics management, and mid-to-long range planning as well as enhancing MINSA-community interaction.

Because this CS project is in an urban area, the population has access to numerous pharmacies (unlicensed) and to many private professional practitioners. The baseline survey shows that 12% of mothers went to private medical professionals for a child with diarrhea and 5% sought private care for a child with rapid breathing. Only two mothers reported seeking help at a pharmacy. Only two mothers sought help from traditional birth attendants and no one went to traditional healers.

4. Program Design:

Strategy:
The overall project strategy is to implement activities in conjunction with MINSA staff, a collaboration which started with joint planning at the proposal stage and has continued through the baseline assessments and the preparation of this DIP. CARE and the MOH will jointly design and conduct assessments of the quality of care provided by the health center and health posts for diarrhea, pneumonia and nutrition, and then develop plans which will include training or reinforcing training of MOH physicians, nurses and auxiliary nurses in IMCI, Rational Use of Antibiotics, and supervision. Together CARE and the MOH will implement plans for training and supervision of CHWs, referral and reporting systems. The MOH staff will also be trained in IEC and in the collection and use of qualitative and epidemiological data for program planning and decision-making.

The MSH project and PAHO are working with the MOH to implement IMCI as the national protocol. Matagalpa Department has been chosen as one of two pilot sites for the initiation of IMCI. Only 4 selected MINSA health care staff in the Matagalpa municipal health district have been trained in IMCI at this time, but plans are underway for the training of the others. This project along with PROSALUD and SALUMAI will help fund this training. The CARE project supervisor will also be trained in IMCI and will receive technical support from CARE HQ, PROSALUD and PAHO in how to facilitate local planning and appropriate supervision, including Q of C assessments, to reinforce adoption of IMCI.

A significant effort of the project will be to enhance the MINSA community outreach. In most of Nicaragua, the auxiliary nurses who staff the health posts are supposed to visit the communities, but in Matagalpa the municipal MINSA has implemented a team approach to covering communities. Different members of the relatively large health center staff take turns participating on the team to visit each major community (i.e., those that pertain to the health center as well as all those that correspond to health posts) every two or three months. This involves mobilizing only one vehicle, which is assigned permanently to this function.

So far, the main purpose of these team visits has been to immunize children, distribute micronutrient supplements, conduct pre-natal exams, and sometimes weigh children. Because the team lacks organization and skills for working with the community, these visits are not used as opportunities for health promotion activities, patient follow-up, or supervision of CHWs. A CARE staff person will be assigned to

accompany the teams to help them learn to plan for optimal visits, maximize use of their time and resources in the communities and evaluate the outcomes of these visits.

This strategy of using a central team to do community work has great potential to be replicated in all other regions of Nicaragua. The lack of transportation and the problem of leaving the health posts unattended are major barriers to community outreach throughout the country. As a result, health workers rarely venture out into the communities. If the CS project is successful in improving the quality of this central team approach to outreach by including home visits, health education, patient follow-up, growth monitoring, supervision of CHWs, and coordination with CDCs, it could serve as a model for the MOH to replicate.

MINSA currently lists 292 volunteer CHWs called *brigadistas* in the municipality, but many are not active. They lack supervision, and training has been didactic without providing them the necessary skills for community education or mobilization. CARE has assisted MINSA in defining the responsibilities of the CHWs, and will help in conducting a training needs assessment, and implementing adequate training and supervision programs with the intent of creating a cadre of 70 well-trained, active volunteers. All of this is being coordinated with Community Movement, which claims most of the same supposedly existing volunteers and has provided training in reproductive health and hygiene. CARE would like to see the volunteers consider themselves responsible to their community or *barrio,* rather than to MINSA or Community Movement.

According to the focus groups conducted during the baseline and the KPC, there is little recognition of the location or function of the Base Houses by the urban population. Only one *barrio* described satisfaction with the Base House. In the rural areas, they are well-known and the mothers report going there for ORS and chlorine. MINSA staff say the only form of supervision is the contact with the CHW when he/she comes to the health center or post for re-supply. Both CHWs and MINSA staff report that the supplies are consistent and sufficient. CARE will help MINSA and the volunteers develop appropriate promotion of the Base Houses and will assess and improve the quality of services as described under the Diarrhea section of this document.

MINSA has asked CARE specifically to assist them in achieving Baby-Friendly Health Unit status, a take-off program from UNICEF's Baby-Friendly Hospital Initiative, which certifies health units which meet criteria for promotion of exclusive breast-feeding. This will involve training MINSA staff, recruiting and training breast-feeding counselors, and starting mother-to-mother support groups in the *barrios* and communities, and in advocating for policy changes within the health units.

CARE and MINSA staff will also train at least one primary school teacher in each community, who will train other teachers in simple health and nutrition messages for children. The action-oriented messages will focus on healthy behaviors that children can practice at home with younger siblings or demonstrate to parents.

CARE and MINSA will work with Community Movement and the Ministry of Social Action to integrate health into the community organizations (CDCs) they have formed and will continue to form in all communities. The CS project will teach these committees how to collect and analyze data on local health problems and assist them in making plans to solve these problems. The community development committees will be encouraged to implement health promotion activities at the community level, using the "Base Houses" as a focal point for activities. The director of Community Movement participated in the development of this DIP and their local committees were involved in facilitating access to the communities for the baseline survey and qualitative research.

The project strategy has been designed to complement and strengthen the MINSA strategy. MINSA objectives include improving quality of care, implementation of IMCI, rational drug use, expanded coverage of growth monitoring, and establishing training programs for health care personnel and community volunteers in order to improve the detection of and attention given to high risk groups, particularly at the community level.

5. Partnerships:

CARE's principal partner in this proposed CS project is the Ministry of Health, specifically the Matagalpa Municipal Health District (MINSA). One of the principal goals of the project is to develop the capacity of MINSA to deliver quality services and outreach, particularly in the areas of nutrition, breastfeeding promotion, diarrheal disease, and pneumonia. By undertaking project activities as partners, MINSA has been actively involved in identifying areas that need to be strengthened and learning all the steps necessary for improving. The municipal MOH staff have already been involved in the design of this project starting with decisions of target communities, interventions and roles and continuing with the plans for strategies and activities. A formal partnership agreement is included in Annex II.

In coordination with the project the MINSA will be responsible for continued curative and preventive services for the target population; organization of the outreach team for bi-monthly visits to each community; provision of immunizations, micronutrient supplements, patient follow-up and health education during community visits; training and supervision of CHWs, teachers and breastfeeding counselors; participation in Q of C assessments and designing training plans; supervision of MOH staff; supplying the pilot community pharmacy; and motivation and support of the CDCs. In addition, they will participate in additional qualitative research, IEC development, and the mid-term and final surveys. (They already participated in the baseline research and KPC and the development of this DIP.) Since all of these activities enhance their ability to achieve national goals for coverage and improvements in quality of services, MINSA staff have a vested interest in assuming and sustaining all the proposed activities. MOH and CARE management staff will continue to meet monthly to plan and evaluate project activities, assess the partnership and coordination, and seek solutions to difficulties.

The plans for improving MOH managerial and technical skills have been described in the sections on project design and training. Due to decentralization, the local MOH appears to have adequate financial resources to carry on the essential activities described in this proposal, but needs to learn to plan, prioritize, and improve management and supervision systems. They are hampered by high staff turn-over and some frozen vacant positions, but through modeling and exercises in planning and time management, CARE will try to assist them to maximize use of the time of the existing personnel.

A secondary partner is a national NGO called Community Movement (CM), which is promoting community organizations (CDCs) in both rural communities and *barrrios.* CARE will assist the CDCs to identify and understand health issues and to make plans to addresss health related problems. CARE will also work closely with CM to improve the efficacy of the five child feeding centers as described in the Nutrition intervention section of this DIP.

As a companion project, CARE will also partner with a local NGO who operates a successful micro-credit programs in Matagalpa. This arrangement is in the process of being formalized and CARE does not feel it can divulge names of the organizations until the agreements are signed due to the involvement of funds. The NGOs will be responsible for the disbursing loan capital and the administrative management of the credit programs, while CARE Child Survival staff will be responsible for promoting the credit and organizing the women in the communities to learn about the proffered credit. The credit programs have built-in sustainability in that the women learn the administration as an integral part of the process, and the interest they pay is re-invested in new loans, thus creating a sustainable mini-bank in three to five years.

6. Health Information System:

As a basis for program monitoring, CARE and MINSA will conduct a comprehensive census of the municipality, by *barrio* and community. This is an essential first step because MINSA currently uses population estimates from the 1993 census as the denominator for their rates and coverage. Since immigration has accelerated, this gives a distorted view, for example, that they have achieved more than 100% coverage on immunizations. Once, the census is completed, CHWs will maintain the accuracy by reporting births, deaths, and migration on a monthly basis to the corresponding health unit. The census will be tabulated by age and sex. The census data will be shared with municipal authorities, community and *barrio* leaders, and other organizations working in the area.

In addition, CHWs of the rural communities and more stable barrios will be encouraged to prepare schematic maps locating families by name. These maps will

be duplicated to give MINSA a reduced-size copy while the community retains the orginal, which will be coated in plastic to allow for writing on changing information such a pregnant women, high risk children, etc.

The maps and accompanying information such as socio-economic and morbidity data from the baseline studies, population figures, numbers of pregnant women, malnourished children, etc. will be shared with community members during initial organizational meetings. Community members will be assisted through PLA exercises in interpreting the data and understanding how to draw conclusions and make decisions based on such information.

MINSA needs reports from the CHWs on number of ORS packets and chlorine tablets distributed. The current reporting form will be evaluated and space added for the CHW to up-date census data and to report efforts such as home visits and educational activities. These are turned in to MINSA once a month and will be used by MINSA, CARE and the community to monitor level of CHW effort and to identify training and support needs. MINSA will also track the number of referrals made by CHWs through the referral stubs retained at the health units. Contact will be made with CHWs who do not report to determine why and what assitance they need to become more active. MINSA will maintain a 3-ring binder in which to keep these forms, sorted by CHW. The activity levels will be tabulated quarterly and incentives, such as certificates, given to high performance CHWs.

To effectively manage data collection and utilization, CARE will use a minimum of forms to collect only the data necessary to monitor the inputs, outputs, and outcome indicators listed below and to assess staff and CHW performance. At the end of each training session, the staff responsible will record who was trained in what. With MINSA, a chart will be developed to track this information on an on-going basis. CARE will also record this information in a computer data base to allow for rapid up-dates and print-outs to be used in planning. In addition, the CARE-MINSA training team will keep the pre and post-test results to use for supervision and possible re-training.

CARE, MINSA, and CM are establishing a paper data base to monitor community organization and empowerment. This will consist of one form per community or barrio which lists basic infomation on each community (leaders, infrastructure, population, existing groups) and has spaces to note when each CDC has accomplished a step towards empowerment or has successfully executed a community activity or project related to health. These forms will be reviewed on a monthly basis by the coordination committee of CARE, MINSA, and CM. From these reports, decisions can be made about which community committees need more training, reinforcement, or other attention. Accomplishments will be registered by CARE in their Management Information System (computerized) to monitor progress towards community empowerment and sustainability.

A. Process Monitoring

The following chart lists the indicators and data collection necessary to monitor project progress in capacity building, institutional strengthening, and sustainability. The draft summary report form to be used by the project is shown in Annex II.

Number of communities/barrios	Data sources:
1, with up-dated census and map	CDC reports and extensionist reports
2.. organized with functioning CDC	monthly CDC and " "
3. PLA diagnosis completed	monthly extensionist reports
4. Equiped and functioning base house	CDC and MINSA reports
5. with 6-month operating plan made	CDC and extensionist reports
6. implementing 6-month operating plan	CDC and extensionist reports
7. with functioning referral system	MINSA records of referrals
No. of community committees trained in:	
1. FODA	extensionist monthly reports
2. Community organization	" " "
3. planning and evaluation	" " "
No. of community volunteers trained in:	MINSA-CARE training reports
1. referral system	
2. participatory adult education	
3. breast feeding promotion (TBAs, CHWs)	
4. nutrition	
5. food security interventions	
a. family food production (gardens,fruit, poulty)	
b. family financial management	
1. IMCI	
2. Diarrhea case management	
3. base house operation	
4. pneumonia recognition and follow-up	
5. reporting and community census	
6. as breastfeeding counselors	
No. of MINSA staff trained in:	CARE training reports
1. referral counter-referral system	
2. supervision	
3. leadership and teamwork	
4. planning and evaluation	
5. PLA methods	
6. nutrition and food security	
7. community mobilization and organization	
8. IMCI	
9. quality assurance	
10. Total Quality Management	
11. IEC design	
12. counseling	
13. formation of BF support groups	
Quality of services - No of health units	Data sources:
1. with Q of C assessment	CARE project MIS
2. implementing IMCI	MINSA records, CARE supervisor report
3. with referral system functioning	MINSA records

4. with functioning supervision system	CARE supervisor report
5. using TQM for problem resolution	CARE supervisor report
6. implementing Baby Friendly inititative	MINSA report
7. certified “Baby Friendly” by UNICEF	UNICEF records
8. number of BF support groups formed	MINSA and CARE records
Community activities:	CHW reports
Number of home visits made	
Number of referrals made, counter referrals received	
Number of follow-ups to counter referrals	
Number and type of educational activities conducted	
Number of children weighed in GM communities	
Number of cases of DD treated in Base House	
Number of families growing food for consumption	
Number of families with improved stoves	
Number of families enrolled in credit project	

B. Outcome Indicators

The project outcome indicators and how they will be measured are listed in the table at the beginning of the Project Design Section.

C. Performance Monitoring

Each CARE extensionist will complete a monthly report of activities which he/she will review personally with the CARE supervisor, who will also accompany staff on a regular basis to provide supportive supervision in the their assigned work. As a first step to performance-based supervision, the extensionists participated in the development of their own job description. A corresponding supervision form is being developed for use by the supervisor based on PHC MAP models. The supervisor will maintain a supervision log to monitor performance and remind her of needed follow-up. The CARE extenisionists will maintain an informal daily log in a notebook for their own use in tracking activities, problems, follow-up, etc.

A dual system will be implemented to assess health worker performance and monitor improvements. First, the project will conduct a quality of care assessment using an adaptation of existing IMCI quality of care assessment tools validated by BASICS, which will be repeated at mid-term and again at the end of the project.
The very comprehensive tool assesses health worker ability and the availability of essential drugs, materials, and equipment. The results will be used to plan and reinforce training and supervision. In addition, CARE will assist MINSA to implement supervision check lists adapted from the PHC MAP series to monitor staff and CHW performance on a regular schedule and provide constructive feedback.

ATTACHMENT B

Evaluation Team Members

ATTACHMENT B
Evaluation Team Members and their Titles

Team 1

Harold Rugama López*, CARE Supervisor
Dalia V. Pérez Alániz, CARE Extensionist
Nidia Espinoza, AIN Coordinator, MINSA
Maritza Manzanarez, CARE Extensionist
María Lourdes Haslam, Brigadista Coordinator, MINSA
Renee Charleston, Consultant, Overall Team Leader

Team 2

Ivette Aráuz C.*, CARE Project Manger
Ronald Uriarte, CARE Extensionist
Amelia T. Reyes, Head of Municipal Training Unit, MINSA
Urania Umanzor, CARE Extensionist
Judiann McNulty, CARE USA Representative

Team 3

Abundio Jarquin R.*, CARE Agricultural Extensionist
Wilfredo Vargas, CARE Extensionist
Guadalupe Paz, Head of Health Post Palcila, MINSA
Socorro Palacios, Health Center Nurse, MINSA
Elizabeth Rodríguez, CARE Extensionist
Elena M. McEwan, CARE Health Coordinator

Additional Resource People:

Erlinda Cuadra, Head of Nursing, MINSA
Maria Ausuncion Meza, SALUMAI Project Manager, CARE

*Team Coordinador

The overall team leader was responsible for coordinating all evaluation activities, supervision of the team, meeting all specified objectives, collaborating with CARE, MINSA and USAID, and submitting a draft and a final report according to the defined timeline. Each field team had a coordinator during the field data collection whose role included overall coordination, planning and logistical support of the team.

ATTACHMENT C

Evaluation Methodology

ATTACHMENT C
Evaluation Methodology

PARTICIPATORY EVALUATION PROCESS

I. OBJECTIVES OF THE EVALUATION

The purpose of the Midterm Evaluation was to identify what is working well, identify problems, and recommend useful actions for improvement during the last half of the Project. The objectives of the evaluation were:

1. Review progress made towards the goals and objectives of the Child Survival project, as outlined in the Detailed Implementation Plan.

2. Evaluate the implementation process of the project, identify what has worked well as well as problems and limitation to implementation.

3. Make recommendations as to modifications or adjustments required to improve the project's potential for obtaining sustainable impact.

III. METHODOLOGY

Using both a participatory approach and participatory methodologies, a multi-disciplinary term of key project stakeholders examined the process of implementation using a variety of quantitative and qualitative methodologies. The team was comprised of representatives from CARE and the Ministry of Health. Field visits allowed project participants and community volunteers to provide their inputs and suggestions to the evaluation process. The evaluation focused on the quality of activities including; planning, community participation, linkage with other organization, and sustainability. The methodologies used to obtain information for the evaluation included:

Document Review
Key Informant Interviews
Group Interviews
Observations

IV. EVALUATION PLAN

The evaluation was divided into four phases:

Phase I Planning

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

Phase II Data Collection

- Field Work visits
- Other interviews
- Document review

Phase III Data Analysis

- Summarize data
- Analysis of data by team and resource persons

Phase IV Presentation

- Written report
- Formal presentation August 3 in Matagalpa, Nicaragua

The evaluation team was divided into 3 small groups to collect information from the field. Each team consisted of 5- 6 people. The teams were in the field for 3 days to visit 18 communities previously selected for visits. The communities were selected using the following criteria:

-Remove all communities that take longer than 1 hour on foot, or due to the rains, would be difficult to reach
-Remove all communities where the project has been working less than 6 months
-Randomly select communities (6 from the urban area and 8 from rural communities).
-From the list of programmed activities, purposively select 2 urban and 2 rural communities with selected project activities.
-Identify two health center to be visited by each team

A two-day Results Workshop was held for all team members plus resource people to review the results of the field work and other information collected during the evaluation, and to formulate recommendations for improving the quality of project implementation.

V. EVALUATION SCHEDULE

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					July 22 Review of Documents	23 Travel to Nicaragua
24 Evaluation Planning	25 Workshop for Evaluation Team	26 Workshop for Evaluation Team	27 Preparation of evaluation tools	28 Community Visits	29 Community Visits	30 Community Visits
31 Analysis of information Interviews	August 1 Analysis of information	2 Evaluation Workshop	3 Evaluation Workshop	4 Travel to Managua Interviews	5 Travel to US	6

August 11th-Present Draft Document
18th –Present Final Document after review by CARE

TALLER DE PLANIFICACION

25 de Julio		
9:00-9:30	Bienvenida e Introducion de participantes	Ivette
9:30-10:30	Evaluacion Participativa	Renee
10:30-11:00	Refrigerio	
11:00-1:30	Presentacion de resultados del proyecto	Ivette/Harold/Abundio
1:30-2:30	Almuerzo	
2:30-3:00	Como Evaluamos	Renee
3:00-5:00	Trabajo de Grupos-Situacion Ideal	
26 de Julio		
8:30-10:00	Plenaria	
10:00-10:30	Contenido de la evaluacion	Renee
10:30-1:00	Trabajo de Grupos: Formulacion de Preguntas	
1:00-2:00	Almuerzo	
2:00-3:00	Como Hacer Entrevistas	Elena
3:00-4:30	Formacion de equipos	Coordinadores
4:30-5:00	Proximos Pasos	Renee

TALLER DE ANALISIS

2 de Agosto		
9:00-10:00	Experiencias en el campo Cinco Estrellas Revision de informacion colectada	
10:00-1:00	Trabajo de Grupos-Situacion Actual	
1:00-2:00	Almuerzo	
2:00-3:30	Plenaria	
1:30-3:30	Trabajo de Grupos-Recomendaciones	
3:30-5:00	Plenaria	
3 de Agosto		
9:30-11:30	Trabajo de Grupos- Estrategias Especificas	
11:30-1:30	Plenaria	
1:30-2:30	Almuerzo	
2:30-4:00	Revision y Priorizacion de las Recomendaciones	
4:00-4:30	Recomendaciones Adicionales	
4:30-5:00	Evaluacion del Proceso y Clasura	

An evaluation of the MTE process was completed by all team members at the end of the Evaluation Workshop. The results from 15 questionnaires were:

- 93% of participants felt that the process used was very effective
- The main thing lack from the process was the involvement of community members in the evaluation process
- What people liked most about the evaluation was the team involvement in all steps of the evaluation process, the involvement of MINSA, listening to all members of the team and respecting their ideas and the opportunity to learn new participatory methodologies, particularly the selection of communities randomly and the comparison between "Ideal Situation" and "Actual Situation"
- What people liked least was that the questions were too repetitive for people having more than one role in the community
- 67% felt that the process used was very applicable in their work and 33% felt it was applicable, Examples included; the methodology was a good way to have a better understanding of where the project is currently at, and to organize where the project needs to go.
- Suggestions for improving the process in the future were: observe more actual activities and visit communities not in the project as a control.

ANALYSIS AND RECOMMENDATIONS FROM THE WORKSHOP

Entrega de Servicios de Salud

Situacion Ideal	Situacion Actual	Recomendaciones
- Familias apropriadas de sus problemas y gestionando en conjunto con la red comunitaria - Familias que continuan alimentando los <5a durante los episodios de diarrea - Familias dando liquidos (SRO) a todo menor de 5años durante la diarrea - Familias idenificando al menos 2 signos de peligro de EDA-IRA y haciendo uso de Casa Bases - Casa Bases funcionando con personal capacitado y reconocidas por las familias. - Familias asistiendo a los pesajes de <5a en su comunidad, por lo menos 6 veces al ano. - Integracion de las familias al menos de una actividad de salud en su comunidad. - Familias organizadas en actividades de abatizacion, clorando agua, e higiene comunitaria - Falias poniendo en practica en el hogar consejería recibido por el Brigadista - Integración de la familia en grupos de apoyo, intercambiando experiencia de acuerdo al intereses del grupo - Madres con <6m dando lactancia materna exclusiva - Madres lactando (trabajadoras) poniendo en practica técnicas de extracción manual y conservación de leche	- Algunas familias reconocen sus problemas de salud y están gestionando a nivel local la solución de problemas; pero la mayoría de ellas no conocen los canales donde pueden gestionar o consideran que necesitan de agentes externos que les resuelvan sus problemas. - La mayoría de las madres conocen a los brigadistas y utilizan la casa base de sus comunidades para retirar las sales de rehidratación y cloro, realizar las sesiones de AIN, reuniones para recibir mensajes de salud de lactancia materna, EDA, IRA. Sin embargo la mayoría de los grupos les gustaría que los servicios de la casa base se ampliaran y que fueran de forma permanente. - Los mensajes de salud han sido impartidos por las consejeras de lactancia materna y las monitoras de AIN; las cuales ya han sido capacitadas en los temas antes descritos, además han recibido materiales para realizar las actividades de IEC. - Las consejeras y monitoras refieren como problemas: que no todas las madres participan en las actividades de salud; las causas más mencionadas son: timidez, desinterés, falta de tiempo de las madres. Como soluciones a los problemas mencionaron visitar a los padres, pedir que miembros de CARE-MINSA les acompañen en las visitas domiciliares. - El cambio de prácticas en las madres, referidas por las consejeras y monitoras de AIN son; que las madres dan mas lactancia materna, han mejorado sus practicas de higiene personal y ambiental, utilizan los filtros caseros, cloran el agua de consumo humano. - Al preguntárseles por la importancia de la tarjeta, la mayoría contesto que sirve para llevar el control e las vacunas para poder ser atendidas en las u/s. - La mayoría de los grupos reportaron que la mayoría de las madres acuden directamente a las unidades de salud para la atención integral de sus niños. Esta practica se corresponde con el hecho que	- Selección de comunidades en base: Enfoque de riesgo, mayor número menores de 5 años. Demuestran intereses en las actividades de desarrollo. - Distribuir comunidades por número manejable por extensionista. - Que el trabajo coordinado de MINSA-CARE, sea involucrado todo el equipo de cada unidad de salud. Red comunitaria - Integrar mayor cantidad de miembros en la red. - Reorientar el trabajo de manera integral en el comité. - Sectorizar la comunidad para facilitar el trabajo del brigadista. - Analizar el concepto y el que hacer de la red y comité (buscar la horizontalidad) - Mejorar la metodología de transmisión de mensajes y de capacitación como facilitadores - Elaborar plan de supervisión y acompañamiento (extensionista y personal de salud), con resultados que puedan monitorear lo que está cambiando. - MINSA implemente en cada Puesto de Salud, mural de información y comunicación con la Red comunitaria. - Revisar contenido de mensajes radiales para estimular la participación de la red comunitaria y familias en la comunidad y reconocer las buenas prácticas de la familia. - Mantener formatos de recolección de forma

Situacion Ideal	Situacion Actual	Recomendaciones
- Familias no automedicándose en el hogar (antibióticos/antidiarréicos - Toma de responsibilida de la madre en el cumplimiento de la Referencia y CR - Familias asistiendo con sus hijos al VPCD en su P/S - -Madres y Padres de familia conociendo la importancia del registro y componentes de la tarjeta de AIN	el AIN comunitario esta en proceso de organización en las comunidades y que el sistema de referencia no es conocido por las madres. - Al preguntarles si conocían al BS todos los grupos reportaron que si, relacionándolo con dar consejería (11/16) y hacer visitas domiciliares (6/16). Al preguntar si acudían a pedir referencia cuando sus niños se enfermaban, las madres contestaron que la mayoría acuden a las u/s directamente y un 37% habían solicitado una referencia para acudir a las u/s. - La mitad de las consejeras encuestadas refirieron que esta organizando los grupos de apoyo. Estos están en diferentes estados de desarrollo que van desde grupos de madres reunidas para recibir charla has grupos que se reúnen para compartir experiencias (10/18 entrevistadas). Para lograr lo anterior las consejeras refirieron haber sido capacitadas en consejería, lactancia materna, grupos de apoyo. Ellas refirieron como beneficios en mejorar su trabajo el hecho que les ha ayudado a como dar consejería (12/18) a grupos de mujeres que van desde 5 madres por grupo hasta 15 madres por grupo. La mayoría de las consejeras refirieron que solo se han reunido unas dos veces. Y que no solo han abordado el tema de LM, sino que además han hablado de EDA e IRA (7 y 5 de nueve grupos respectivamente) - Los logros de los temas abordados en los grupos de apoyo, según las consejeras son: que las madres dan mas pecho, usan cada día menos las pachas.	sencilla y manejable por la comunidad.

VISITAS DEL PERSONAL MINSA A LAS COMUNIDADES

ASPECTO POSITIVOS	ASPECTOS A MEJORAR	RECOMENDACIONES
◆ El hecho de que las visitas se estén realizando. ◆ Disponibilidad del personal comunitario. ◆ Permite planificar con la comunidad. ◆ Actualmente se genera más involucramiento de la población confianza en referir, confianza en visitar la Unidad de Salud, sienten más fortalecida su autoridad. ◆ Mejoría de la relación MINSA-Líderes. El MINSA está conociendo más la realidad de la gente. ◆ Se fortalece la autoridad local del brigadista. ◆ Hay mayor seguimiento a las actividades de la comunidad. ◆ Se ha mejorado la percepción del papel del comunitario, no se utiliza actualmente solamente como correo, se involucra tomado en cuenta. *Ejemplo: No sólo se usa para avisar de la vacuna.* ◆ Tiene un enfoque de mayor integralidad, involucra la red. ◆ Se ha mejorado el flujo de información de la Red al MINSA.	◆ Definir objetivo concretos, uso de la información existente, definir instrumentos y material a utilizar en la visita. ◆ El seguimiento a las actividades planificadas con la comunidad en conjunto con el MINSA. ◆ Debe mejorar la coordinación de la visita Red-MINSA. ◆ El enfoque de la visita a mejorar la capacidad de la gente (autonomía). ◆ Uso de las herramientas de supervisión. ◆ La retroalimentación a la Red. ◆ Los planes futuros en base a la retroalimentación. ◆ La recolección y el uso de la información. ◆ La autoevaluación de la visita. ◆ La transmisión de experiencia positiva y negativa dentro del equipo. ◆ La discusión con las Unidades de Salud-Red acerca de la situación higiénica sanitaria de la comunidad.	◆ Retroalimentación a la red sobre la situación encontrada en la visita, análisis en conjunto de la información. ◆ Planificación de las visitas estableciendo objetivos en base ala información existente ◆ Programación conjunta MINSA-CARE-Red comunitaria ◆ Educación continua al equipo en temas de supervisión y empoderamiento comunitario.

EDUCACIÓN URBANA

ASPECTO POSITIVOS	ASPECTOS A MEJORAR	RECOMENDACIONES
• Radio (mensajes) • Red de Promotores por barrio. • Interés de la gente • Mejor contacto MINSA-Comunidad • Existe Casa Base en algunos barrios. • Coordinación MINSA-Movimiento Comunal-ONG's-otros. • Existencia de actividades socio-educativas.	• Tomar en cuenta el ciclo de trabajo • Tomar en cuenta uso de RR.HH. disponibles en la comunidad. Ejemplo: *jóvenes, niñ@s, amas de casa, abuelas y líderes.* • Aprovechar la concentración de la gente. Ejemplo: *Centro de trabajo, paradas de buses, actividades deportivas, actividades religiosas, escuelas, etc.* • Aprovechar alto índice de alfabetismo.	• Identificar otras alternativas para llegar a la gente. • Aprovechar los meses de Julio a Septiembre para:*Visitas a domicilio, Reuniones, Capacitaciones.* • Aprovechar los días domingos • De octubre a Junio enfocar en medios indirectos: *Radios ,Afiches, Folletos, Actividades con las escuelas,Títeres, teatro.* • Difundir información en los centros de trabajo. • Aprovechar grupos organizados y concentraciones de gentes, para difundir mensajes; Promover educación en cadena • Expandir red con madres, jóvenes, abuelas, grupos existentes y alumnos. • Utilizar radio para estimular la red.

EMPODERAMIENTO COMUNITARIO

ASPECTO POSITIVOS	ASPECTOS A MEJORAR	RECOMENDACIONES
◦ Comité gestiona proyecto para su comunidad o barrio. ◦ Comité se organiza según necesidades propias de comunidad y barrio.	◦ Contar con un inventario de recursos de comunidad y barrio. ◦ Crecer en número y cargos que sean funcionales. ◦ Reconocimiento y participación de la comunidad. ◦ Comunicación con comunitarios ◦ Planificación estratégica a mediano y largo plazo, basado en necesidades. ◦ Plan de respuesta a emergencias (agrícolas, naturales, traslados). ◦ Claridad en función/rol de sus miembros (redistribución de cargos). ◦ Que todos los integrantes dominen conocimientos para que apoyen a sus compañeros y/o asuman su cargo.	◦ Capacitar en todos los temas de salud a los miembros ◦ Facilitar la conformación o crecimiento en número de miembros de acuerdo a la realidad de la comunidad o barrio. ◦ Ver la manera de involucrar a la red comunitaria en la planificación, ejecución y monitoreo y evaluación de los planes.

SALIDAS INTEGRALES

ASPECTO POSITIVOS	ASPECTOS A MEJORAR	RECOMENDACIONES
◦ Hay una programación de salidas para seis meses ◦ Existe un formato de recolección de productividad ◦ Es una forma que el MINSA hace presencia en la comunidad. ◦ Se logra buena cobertura de inmunización. ◦ Hay logros en alta cobertura a embarazadas.	◦ Organización y disciplina ◦ Registro y análisis de la información. ◦ Supervisión y monitoreo. ◦ Integralidad en la atención -AIEPI: Vitamina A, Hierro, consejería. -Educación en salud a la población. ◦ Trabajo con la red comunitaria ◦ Enfocar la programación a las comunidades no solo puestos de salud. ◦ Definición de los objetivos de las salidas. ◦ Definición de funciones de cada miembro. ◦ Incentivos al personal. -Capacitación -Reconocimiento -Viáticos.	◦ Que el equipo CARE integrarse a las salidas integrales. ◦ Realización de un Manual de salidas integrales. ◦ Sistema de información - Integrar nuevos indicadores - Análisis periódico ◦ Definición de funciones de cada miembro por el equipo de dirección. ◦ Realización de monitoreo y supervisión por el equipo de dirección. ◦ Realización de actividades con red: *planificación, ejecución de actividades* ◦ Mejorar el abastecimiento del medicamento. ◦ Mejorar entrega de viáticos. ◦ Coordinación con organismos para el vehículo ◦ Actividades novedosas de educación en salud

ATTACHMENT D

Persons Interviewed and Contacted

Documents Reviewed

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Persons Interviewed and Contacted

During field visits the following people were interviewed:

129 mothers in 16 project communities
32 Brigadistas (CHW)
18 BFV (support group leaders)
7 GMV (AIN volunteers) in 5 communities
11 Rural Agricultural Promoters
4 Urban Agricultural Promoters
16 Community Committees
6 Health Facilities Staff
5 Teachers

Observation: 16 Base Houses
Agricultural activities
5 Growth Monitoring Demonstrations
Community Maps

Other interviews conducted as part of the MTE were:

MOH staff
Dr.Ana Cecilia Salinas, Asistant Director, MINSA Matagalpa

CARE Staff
6 Extensionists
Clarisa Molinares, MIS
Harold Rugama, CS Supervisor
Ivette Aráuz, CS Coordinator
Abundio Jarquin, Food Security Extensionist
Roberto Rámirez, Accountant
Elena McEwan, Health Sector Coordinator
M.J. Conway, Country Director

OTHER Organizations
Auxiliadora Torrez Ramero, Movimiento Comunal
Norma Altamiranda Castro , Ministry of Education
Carla Picada, Nutrition Center Cristobal Vanegas

USAID Nicaragua
Alonzo Wind, Health Officer
Kathy McDonald, Head of Social Investments

DOCUMENTS REVIEWED DURING THE MTE

Lopez, Margarita, *Baseline Child Survival Project XIV*, CARE International in Nicaragua, 1/99.

Rosenberg, J.E. and M.J. Moya de Suarez, Un Manual para Capacitadores y Supervisores Sobre Tecnicas de Consejeria, Facilitacion de Grupos de Apoyo, y Educacion Popular, 8/96.

Manual de Personal Nacional, CARE International in Nicaragua, 4/98.

Atencion al Usuario, Municipio de Matagalpa, MINSA,Matagalpa, Nicaragua, 9/99

Annual Report, Child Survival XIV, CARE International in Nicaragua, 9/99.

Manual del Monitor y Monitora de Atencion Integral al Nino, CARE, Ministerio de Salud, USAID, Managua, Nicaragua, 9/99.

Manual para Monitoras y Promotoras de Grupos de Apoyo en Lactancia Materna, Centro Mujer y Familia, Managua, Nicaragua.

McEwan, E. & J. McNulty, *Project Proposal Child Survival XIV*, CARE Nicaragua & CARE USA, 12/97.

McNulty, J. & E. MeEwan, *Detailed Implmentation Plan, Child Survival XIV*, Matagalpa, Nicaragua, 1999.

Manual Para la Promocion y Desarrollo de las Casas Base, MINSA, Managua, 1995.

Resultados Antropometricos, CARE International in Nicaragua-MINSA-USAID, 6/99.

Enge, K. & M.J. Largaespada, *Estudio Cualitativo Sobre Practicas de Lactancia Materna en el Municipio de Matagalpa, Nicaragua*, Linkages, CARE, 7/99.

Informe del Diagnostico Rapido Participativo, CARE International in Nicaragua, 2/99.

Perfiles de Puesto de Trabajo, CARE International in Nicaragua, 6/98.

Programa de Ahorro y Credito, Peace Corps, Ecuador, 2000.