



ENVIRONMENTAL HEALTH PROJECT

ACTIVITY REPORT

No. 103

Forum for
Knowledge Sharing and Lessons Learned
Programa Rural de Agua Potable, Saneamiento y
Salud Ambiental,
Managua, Nicaragua

by
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- 4. EHP-NICARAGUA TECHNICAL GUIDELINES FOR IMPLEMENTATION**
- 5. EHP-NICARAGUA WEB-SITE HOME PAGE**

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ACRONYMS

ACH	<i>Acción Contra el Hambre</i> (Action Against Hunger)
ADRA	Adventist Development and Relief Agency
ALISTAR	Nicaraguan NGO
AMC	<i>Ayuda Médica Cristiana</i> (Christian Medical Aid)
ARC	<i>Cruz Roja Americana</i> (American Red Cross)
CAPS	<i>Comité de Agua Potable y Saneamiento</i> (Water and Sanitation Committee)
CARE	Cooperative for Assistance and Relief Everywhere
EHP	Environmental Health Project
ENACAL	<i>Empresa Nicaragüense de Acueductos y Alcantarillados</i> (Nicaraguan Water and Sewage Company)
GAR	<i>Gerencia de Acueductos Rurales</i> (Directorate of Rural Water Supply)
GoN	Government of Nicaragua
INAA	<i>Instituto Nicaragüense de Acueductos y Alcantarillado</i> (Nicaraguan Water Supply and Sewage Institute)
JHU	Johns Hopkins University
MARENA	<i>Ministerio de Recurso Naturales</i> (Ministry of Natural Resources)
MECD	<i>Ministerio de Educacion, Cultura y Deportes</i> (Ministry of Education, Culture, and Sports)
MINSA	<i>Ministerio de Salud</i> (Ministry of Health)
NGO	Nongovernmental Organization
O&M	Operation and Maintenance
OPS/PAHO	<i>Organización Panamericana para la Salud</i> (Pan-American Health Organization)
Plan	Plan International
PVO	Private Voluntary Organization
RAAN	<i>Región Autónoma Atlántico Norte</i> (North Atlantic Autonomous Region)
RNAS	<i>Red Nacional de Agua y Saneamiento / Nicaragua</i> (National Water Supply and Sanitation Network)
RWSS	Rural Water Supply and Sanitation
Save	Save the Children Fund (USA)
SILAIS	<i>Sistema Local de Asistencia Integrada en Salud</i> (Local System for Integrated Health Care)
SINAS	<i>Sistema de Información Nacional de Agua y Saneamiento</i> (National Water and Sanitation Information System)
TA	Technical Assistance
UNOM	<i>Unidad de Operación y Mantenimiento</i> (Operation and Maintenance Unit)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VIP	Ventilated Improved Pit [Latrine]
WASH	Water and Sanitation for Health Project [EHP Predecessor]
WATOTO	Water for Today and Tomorrow
WSS	Water Supply and Sanitation

1 INTRODUCTION

This document provides a summary of the forum for exchange of experiences and lessons learned held 13–15 November in Managua, Nicaragua. Attendees included staff from the six main implementing private voluntary organizations (PVOs) of the EHP-Nicaragua rural water supply, sanitation, and health project, as well as from a number of other agencies and institutions: the national office and regional offices of the Nicaraguan Water and Sewage Company-Directorate of Rural Water Supply (ENACALGAR), Ministry of Health (MINSa), U.S. Agency for International Development (USAID), Johns Hopkins University (JHU), Peace Corps, CARE, and Proyecto Base. (See Annex 1 for a full list of participants and contact information.)

The structure of this document follows the program of activities and sequence of topics as they took place in the event itself, with a separate chapter for each main theme of the forum. The chapters have a similar format:

- *Description of the activities* as they were developed during the session
- *Summary and analysis* of the main points of interest raised in the presentations or working groups and the plenary sessions
- *Conclusions* or agreements reached at the close of each session

The final chapter includes a description of the needs assessment and planning exercise carried out at the end of the forum, together with some of the overall conclusions and an evaluation of the event itself. The text of this report has been deliberately kept to a minimum, with extensive reference to the annexes; these include all the presentation materials developed during the forum as well as other relevant documentation. The names of PVOs noted in the text appear in *italics* for ease of reference.

1.1 Design and Preparation of Forum

The idea for this knowledge-sharing forum was developed by EHP-Nicaragua management in conjunction with Environmental Health Project (EHP) head-office staff in Arlington, Virginia, who are monitoring the Nicaragua project's progress. The forum's purpose was to share experiences, both positive and negative, and to generate learning and discussion through mutual exchange.

By scheduling the forum at the approximate mid-point of program implementation, the staff of EHP-Nicaragua were able to select agenda topics based upon some actual experience. Moreover, some of the lessons learned can be applied through August 2001, when program implementation ends. A team of consultants (one international, one national) laid out the detailed design of the forum, prioritizing the contents and defining methodologies to be used during the event.

The program (see Annex 2) was developed on the basis of the following inputs:

- Ideas and observations from the EHP-Nicaragua staff and national director
- Ideas and observations from the EHP Arlington-based activity manager, who has made regular visits to the program
- Discussions and suggestions from the PVO field staff (five out of six were consulted in their respective zones of operation)

- Direct observations of the projects and discussions with beneficiary families and water committee members (five out of six project sites were visited)
- Observations about the EHP-Nicaragua program and suggestions from ENACAL-GAR and MINSA representatives
- Observations and suggestions from the USAID officer responsible for oversight of the EHP-Nicaragua program
- Observations and suggestions from the JHU team, which is working on a regular basis in coordination with the EHP-Nicaragua program
- Observations and ideas of the international consultant, who has been intimately involved with the EHP-Nicaragua program since design and inception

The forum was designed as an event in which people working at the blunt-end of project implementation could participate and share their invaluable experiences. As such, EHP-Nicaragua deliberately selected field-level staff, including social promoters, technicians, field engineers, and work supervisors, rather than Managua-based management staff and PVO national directors.

1.2 Objectives and Expected Results

Based upon the process of consultation and design, a main objective and details of the forum's expected results were defined:

- Overall Objective

To improve the implementation, impact, and sustainability of water supply, sanitation, and health projects executed by the implementing PVO partners of the EHP-Nicaragua program.

- Expected Results

Exchange of lessons learned, successes, failures, and suggestions between the PVO partners and state institutions based upon the experiences of the first year of program implementation.

Improvement in the *coherence* between implementation approaches adopted by program partners, taking into account differing work environments (social, cultural, geographic, and physical).

Promotion of contacts and *bilateral collaboration* among PVOs in the program, without relying upon the direct intervention of EHP-Nicaragua.

Clarification of any outstanding doubts or points of confusion with respect to technical aspects, implementation methodology, documentation, monitoring, or reporting.

Identification of key *problem areas or needs* of the PVO partners for further technical assistance from EHP-Nicaragua or others in the second year of implementation, and development of a follow-up plan.

2 COMMUNITY PARTICIPATION

2.1 Description of Activities

Kicking off the working session on community participation, two PVOs — *Save the Children USA* and *Plan International* — outlined their respective strategies for involving communities in the organization, implementation, and management of their own water and sanitation projects. Their presentations addressed the following themes:

- Project promotion in the community
- Methodology and practice of implementation
- Design and planning for community training and organization
- Gender issues in community participation
- Integration of technical and social aspects of the project

Following these two presentations participants broke into four groups, each with a working guide. The groups were asked (a) to address important lessons learned around the theme of community organization and participation, (b) to identify the most important difficulties in this process, and (c) to suggest practical ways of overcoming these difficulties within the context of their own projects. After completing the working guides, each group presented its results in plenary, and the session ended with a moderated discussion in which general conclusions were reached through consensus.

2.2 Summary and Analysis of Activities

The presentations highlighted several important issues, particularly with respect to the practical difficulties projects face in involving communities in rural water supply and sanitation (RWSS) projects. These issues are noted in the boxes that follow.

SAVE THE CHILDREN USA

- One of the most important limiting factors has been the imbalance between the speed of technical implementation (construction of physical works) and social and organizational components of the work.
- One way Save responds is by orienting and training its technical staff (engineers, work supervisors, and masons) to help them improve their understanding of the need to organize and involve the community.
- Because Save has a strong gender focus in its approach to community organization, women are well represented in the water committees (61 percent of all members), an important factor in encouraging greater participation among individual households.

PLAN INTERNATIONAL

- Much of *Plan's* approach to community organization has been based upon experience from its other programs in the Central American region, as well as upon related rural development projects in the same geographic area of the country (Chinandega).
- *Plan* has an extremely well-established program portfolio in the area, which it uses to promote RWSS projects not only with individual communities but also with local government and municipal health authorities.
- *Plan* has a well-defined set of focal groups through which it carries out community mobilization: women's groups, children's and adolescent groups, families, and the water committees themselves.

2.3 Conclusions

Themes brought out in the working groups generated considerable discussion in plenary, resulting in some general conclusions or agreements among participants. Perhaps the most important of these was the reconfirmation of community organization and active participation as the fundamental building blocks for project success. PVOs, ENACAL-GAR, and MINSA alike recognized this factor to be critical in all project phases, from initial decision making, to construction, and to ensuring sustained health benefits for communities and individual families. This issue was later reinforced in discussions around project sustainability (see Chapter 7). Further, more-specific conclusions emerged relative to the implementation of the EHP-Nicaragua program:

Time Constraints and Program Duration

Every participating PVO considered the juxtaposition of these two factors to be the single greatest obstacle to effective and sustainable community involvement. In practice most of the PVOs had neither received funding nor become operational until April 2000. Thus, because they must stop field operations by about July 2001 in order to meet the exit deadline of 31 August 2001, their operational program will have lasted only 15 months. Because of this intense time pressure, construction targets have taken priority over social aspects of project implementation. Participants recognize that an imbalance between physical outputs and the attention given to "software" components is common to many development RWSS projects; the general consensus here, however, was that this factor is particularly critical in the EHP-Nicaragua program because of the emergency nature of the *funding*. The inherent contradiction between a short funding cycle and the demands of a more-integrated program design has been a significant obstacle and one difficult to reconcile in practice.

Integration of Technical and Social Components:

Participants generally agreed upon the need to improve integration between technical activities (construction of water systems and latrines) and activities of a project's social component (including community organization, training, and hygiene education/promotion of behavior change). In practice this would mean either hiring more promoters or slowing the pace of physical implementation. However, an improved coordination between the two elements could also be achieved by following the practice of *Save* in training project technical staff. Interestingly, *ALISTAR* reported that all of its promoters are multi-functional; however, this is partly out of necessity as their program faces other, more-extreme, physical and logistical constraints not experienced by any other PVO.

Importance of Understanding the Sociocultural Context

This was a particularly important issue for those agencies working in the Atlantic region (*ALISTAR* and the *American Red Cross*, or *ARC* — the latter having experience of implementing projects with its own funding sources in the area), where traditional social structures are much more in evidence and where communities are more likely to be influenced by a smaller number of key individuals. The group concluded that it is very important to recognize a community's existing social and cultural framework and to work within that framework in designing specific project activities and interventions. There have been some negative experiences and project resistance when these factors were not taken into account.

Improvement of Coordination Mechanisms

Participants recognized that existing mechanisms for coordination are not yet as effective as they might be, especially with respect to follow-up support and longer-term back-up to newly formed community structures (i.e., water committees). For example, the almost total absence of the ENACAL-GAR's Operation and Maintenance Unit (UNOM) personnel in both the Atlantic region and most parts of Chinandega was noted, a situation with serious implications for sustainability of community organizations. The group agreed that one critical response to this is for local government authorities (*Alcaldías*) to increase support to communities in their respective municipalities.

3 SANITATION: LATRINES

3.1 Description of Activities

Given that most latrine designs are a variation on a limited number of types, this session was to serve as a “warm up” to the topic and also as a way to expose the group to a wide range of materials and construction methods. Each PVO made a very short presentation, providing a snapshot image of the latrine design adopted by its projects and a brief explanation of the reasons for adopting that design and also of the problems encountered. After the first five presentations, *ADRA* provided a more in-depth look at its own latrine program, one selected for a number of reasons including the use of an innovative construction material, a successful promotion campaign, and the inclusion of a specific environmental focus.

Following the presentations participants separated into four groups, each with its own working guide. Two groups were asked to identify factors and difficulties relating to social and environmental issues around the promotion and acceptance of latrines in community-based projects. The other two groups looked into design and technical factors, which have proven to be significant for the adoption and proper use and maintenance of latrines. After completing the working guides, each group presented its results in plenary, and the session ended with a moderated discussion in which general conclusions were agreed upon.

3.2 Summary and Analysis of Activities

Judging from the first five presentation, the various programs face similar problems based upon the social environment in which they operate. These can be summarized as follows:

ALL PVOs

- All programs are implementing improved ventilated pit (VIP) latrines as well as a partially raised model that allows for soil and/or groundwater table conditions; some PVOs are implementing fully raised pit latrines, and in at least one case (*Save*) a limited number of composting latrines have been built at the specific request of householders. *Save* is also planning to build a limited number of septic tanks where demand is high.
- Materials for constructing the latrine slab range from locally available wood (*ALISTAR*) to the more-traditional concrete to the newly introduced fiberglass (*ADRA* and *ARC*).
- Resistance to latrine adoption is reported to be a significant problem in some areas, despite the existence of an almost 100 percent subsidy.

The more-detailed presentation by *ADRA*, operating in the central northern part of Nicaragua, highlighted some interesting issues and innovative solutions, presented in the following table.

ADRA

- The approach to social promotion includes an initial presentation to all stakeholders at municipal level and subsequent community meetings to stress the benefits and highlights of the latrine program; both the MINSAs and local *Alcaldías* are involved in this process.
- Motivation for adopting the latrine focuses on the new fiberglass slab design, which is promoted as easy to clean, hygienic, reusable, and “a modern innovation.”
- Latrine-construction activities are organized around groups of three families, one of which acts as the learning agent for the next group of three; this technique is designed to promote auto-construction.
- The latrine program has faced acceptance difficulties based both upon the imposition of an external design and material and upon people’s fears over the load-bearing capacity of the fiberglass slab.
- The environmental focus of the latrine program includes three main components: siting and relative location of the latrine with a view to minimizing potential contamination; environmental hygiene (solid waste, soak-pits, vector control); and training.

3.3 Conclusions

Themes highlighted in the working groups generated a great deal of discussion in plenary, resulting in some general conclusions or agreements among participants. Participants discussed three main topics and resolved one issue related to a specific hygiene-education message.

Importance of Social and Cultural Factors

Participants generally agreed upon two factors critical to successful promotion and adoption of a latrine program: an understanding of the local culture and sanitary habits and involvement of the community from the very initial stages of the program. While considerations such as groundwater levels and soil type are, of course, vital for determining the latrine’s technical design, the technology finally selected must also be appropriate to the different target populations — neither too rudimentary for a more-sophisticated population nor too complex for a very traditional rural one.

Sustainability of Latrine Programs

During plenary discussions the group identified three key issues for longer-term sustainability of latrine programs:

- Education for changing behaviors in the proper use and maintenance of latrines.
- A focus on environmental issues to mitigate potential impacts.

- Use of local materials in construction wherever possible, which is one way of reducing costs, as well as helping to ensure that new latrines are subsequently constructed when the project latrines fill up. (ALISTAR is currently the only PVO to adopt this approach.)

Cost-Benefit and Coverage

The plenary session provoked an extended discussion concerning the issue of cost per beneficiary family. This issue was summarized as the balance between building “quality” latrines, which stood a better chance of being fully adopted, and constructing many more units at a lower cost. Views differed, and no clear conclusion emerged. It was generally agreed that under the EHP-Nicaragua program latrine unit costs are high and, as such, the program is not fully in line with the stated national policy of increasing coverage.

It was also agreed, however, that (limiting) cost should not be the only — nor most important — factor in determining the type of latrine offered. Indeed, many participants believed better-quality products to be more acceptable to the end users and more widely adopted, and also that they generate a more positive image of latrines — all of which make them more cost effective in the long run. In traditional cost-benefit calculations, these factors are difficult to appraise. It was generally recognized that, due to the “emergency” nature of the funding, little attempt has been made at recovering a percentage of the latrine costs under this program. Such a course would almost certainly not be the case for a regular program of this nature.

Correct Message for Latrine Use

A specific request was made to the plenary for clarification of correct hygiene messages for disposal of used toilet papers, as there was confusion over whether to recommend direct disposal in the vault or storage in a carton and subsequent burning. Both *ACH* and *ADRA* offered strong arguments for disposal in the vault, as long as the anal cleaning material was of an organic nature and paper-like (i.e., not corn-cobs or other bulky material).

4 HYGIENE AND ENVIRONMENTAL EDUCATION

4.1 Description of Activities

The session on hygiene and environmental education was conducted by a panel comprising various participants with particular experience in the field, and moderated by an outside expert. Staff of EHP-Nicaragua and JHU made the first two presentations, both designed to clarify the conceptual and strategic framework for hygiene education and communication and information within which the PVO partners have been operating. Four PVOs — *ALISTAR*, *Save, Plan, and ACH* — made the next set of presentations, describing practical experiences in the application of this strategy. The presentations, which covered schools' education programs and community education programs, focused on the three principal behavior-change elements of EHP-Nicaragua's hygiene campaign:

- Handwashing at critical moments
- Proper use and maintenance of household latrines
- Handling, storage, and treatment of water at the household level

Following these presentations the moderator articulated the linkages between the overall framework, as envisioned under this program, and the practical examples presented by the PVOs. The debate was then opened up to the floor and guided by the moderator to focus upon specific areas such as program constraints and weaknesses and possible solutions and actors. At session end a group of children and adolescents from the *Plan International* program area presented a 15-minute sociodrama, which is being used regularly as part of *Plan's* motivational and promotional work in Chinandega communities.

4.2 Summary and Analysis of Activities

The EHP-Nicaragua presentation focused on a description of the program's overall conceptual framework and the role and function of hygiene education within this framework, as it relates to improving health conditions. These are the three main components of this strategy:

- Physical infrastructure (water systems, latrines, and other works such as drainage)
- Hygiene, environmental education, and behavior change
- Information and communication

The respective roles and activities of both the EHP-Nicaragua program and the JHU *Estrella Azul* program within this framework were also clarified. The three principal behavior-change elements of the EHP-Nicaragua hygiene campaign were stressed as well as an explanation of the modalities of operation, the implementation process and methodologies, and a brief description of the type of materials available.

JHU staff also presented their activities, highlighting the respective roles and complementary nature of the two programs and explaining that the *Estrella Azul* campaign shares the three focal

behaviors of the EHP-Nicaragua program. The campaign's interventions take place at the national and regional level through mass media activities and social marketing, and at the local level through coordination with PVOs and other projects and through the "Blue Bus" campaign. The four PVO presentations provided some interesting examples of putting theory into practice; some of the more important points are highlighted in the box:

ALISTAR, SAVE, PLAN, ACH

- In reality it is proving far easier to motivate behavior-change practices around handwashing than the adequate use and up-keep of latrines.
- In the Atlantic region traditional leaders, nurses, and teachers are strategic individuals to use as an entry point for promoting change.
- Focal groups — which include children's groups, adolescents, mothers, and family groups (including men) — have been very important for promoting improved practices.
- Programs seem to have had greater impact where there has been both a household and a schools component and where a linkage exists to reinforce messages in each target group.
- Coordination and agreement of the education program with MECD has been an important factor.

4.3 Conclusions

It became clear that most of the PVOs are working with similar methodological approaches and have adopted similar techniques and practices; this was generally viewed as a positive trend. During the moderated discussion, the group raised two concerns relative to the immediate future:

Strategic Relationship Between EHP and JHU

As the two programs are complementary in nature, the group believed they could provide a great deal of synergy in the impact of PVOs' work in the field. However, there was concern that JHU's activities need to be preplanned to coincide with the local PVO program activities, both in ensuring complementary messages (content) and in general timing, to be in step with the progress of projects on the ground. This suggestion was well received by JHU.

Schools' Hygiene-Education Curriculum

There was a general call for unifying existing school-based hygiene education programs under one standardized approach. A number of participants voiced concern over efforts already expended upon design/redesign of approaches. It was clarified that a tripartite agreement has been developed and is about to be signed by the Ministry of Education, Culture, and Sports (MECD), ENACAL-GAR, and MINSA, an agreement designed to formally include hygiene education in the regular school curriculum. It is hoped the program will be put into practice in the year 2001. Support to this initiative will be provided by the various donor agencies, including EHP, UNICEF, and the Pan-American Health Organization (OPS). It was also agreed that the National Water Supply and Sanitation Network (RNAS) would logically play an important role in the coordination and dissemination of such an initiative.

5 TRAINING MATERIALS FOR HYGIENE EDUCATION

5.1 Summary of Activities

Training, an integral part of hygiene and environmental education, was highlighted in the next working session. Unlike sessions on the forum's other topics, this one was meant not to lead to working groups but rather to present a range of pre-selected training materials. A team comprising specialists from EHP-Nicaragua, ENACAL-GAR, and JHU had carried out this pre-selection process, grouping materials according to target population (children or general household members).

Representatives from each PVO implementing the relevant educational material gave brief summaries on target population, history of related materials development, main features, techniques for use, and any problems/difficulties associated with the material. Presenters also gave details of where the particular material could be located and how to reproduce copies. After each presentation, time was allotted for questions and answers. At the close of the presentations a brief plenary took place to identify any conclusions or agreements. Materials presented to the group (see Annex 3.4) are summarized as follows:

Schools Program

- “Coloreando en Salud” and “Aprendamos Salud Coloreando”: ENACAL-COSUDE, *CARE International de Nicaragua*, and *Save the Children USA*
- “Juanita y La Gotita”: Grupo Colaborativo de Agua y Saneamiento de Honduras, ENACAL-COSUDE

Community/Household Program

- “Saneamiento Ambiental”: *CARE International de Nicaragua*, WATOTO (Water for Today and Tomorrow)
- “Proteyamos Nuestra Salud: Constuyamos una Letrina”: *Save the Children USA* (adapted from PALESA-CARE Leon)
- “Rotofolio de Educación Sanitaria”: *Plan International*

5.2 Conclusions

The discussions in plenary identified a number of important and practical conclusions and recommendations:

1. EHP-Nicaragua was encouraged to maintain a documentation center of all the materials presented at the forum to enable (color) copies to be made by visiting staff members of the PVOs.
2. The group recommended more-efficient usage of *existing materials* rather than development of new material, with the associated costs and effort.

3. Participants suggested that projects consider introducing incentives as a way of encouraging teachers from MECD to integrate hygiene education in their school program.
4. JHU is working on an inventory of all hygiene education materials developed over the last ten years in Nicaragua and will distribute this to all the PVOs when it is completed.

6 MONITORING

6.1 Description of Activities

The session on monitoring began with a presentation by *Save* explaining its recent experiences with applying the EHP-Nicaragua level II monitoring system in practice. Subsequently, EHP-Nicaragua gave a brief presentation of the monitoring system adopted by the program, its structure, and some of the consolidated results from both the baseline survey monitoring and the second round of monitoring recently carried out in October. Finally, EHP-Nicaragua provided a refresher orientation concerning the use and application of the Environmental Matrix monitoring format. After these presentations time was allotted for questions and a final wrap-up session moderated by the facilitator.

6.2 Summary and Analysis of Activities

Save's presentation about its monitoring experiences during the baseline survey data collection highlighted some common problems voiced by other PVOs. *Save* also presented a very innovative approach to auto-monitoring at the community level, presented in next box:

SAVE THE CHILDREN USA

- One of the biggest problems encountered in baseline surveys is receiving answers from householders that obviously do not reflect the reality of their situation: i.e., receiving responses the householders believe the interviewer wants to hear.
- To overcome this problem, *Save* has focused efforts on the further training of promoters who will carry out the next round of household surveys. For example, whilst investigating handwashing practices, promoters will judge by direct observation and open-ended questions — “When do you wash your hands during the day?” — instead of closed questions — “Do you wash your hands before eating/after using the latrine?”
- *Save* has introduced an interesting pilot initiative, run by the water committee as a type of competition among householders: this involves householder auto-evaluations to judge the cleanliness of their own homes. Called *Dinamica de la Escoba*, it awards households a different color ribbon (black, brown, or white) according to the state of their houses. This has already proven effective, as householders want to graduate from each ribbon and thereby be recognized as being more cleanly.

The EHP-Nicaragua staff presented a summary of the monitoring system, which included an outline of the following:

- Structure of the three monitoring levels within the overall program
- Three critical monitoring points within the project cycle in level II monitoring

- Analysis and use of monitoring outputs by EHP-Nicaragua at global program level

A brief presentation showed some of the results of the level II monitoring at program level, comparing the baseline survey with the latest data provided by three PVOs in October. The baseline survey was made on the basis of 1,521 households collected from all potential project communities; the second round of survey data was based on 553 households. It was stressed that, due to the short time between these two sets of data, no significant conclusions could be drawn at this stage. Nonetheless, in all but one case (use of latrines by children under five), the indicators show a positive trend toward improved practices and a reduction in the level of diarrhea reported in the previous two-week period in children under four. Again, because of the short time-span, this data does not account for very important seasonal fluctuations in the incidence of diarrheal disease and should therefore not be seen as significant at this stage. Interestingly, there has been a very marked improvement in the proper use and care of latrines (up from only 9 percent at the baseline survey to over 33 percent in October), which is consistent with the fact that project personnel are present in these communities and actively promoting this theme. (The full set of results is presented in Annex 3.5.2.)

6.3 Conclusions

On the basis of the presentations on monitoring and subsequent plenary discussions, the group arrived at conclusions for a number of issues:

Feedback and Use of Monitoring Data

In general participants felt that so far there had been no particularly effective feedback and use of monitoring data, or “closing the monitoring loop,” at all levels within the EHP-Nicaragua program. They would like to see this situation improve and to see concrete results of the monitoring system, including informed decision making by management. It was suggested that improvements could be made at all levels: community/project, project/program, program/national level (inputs of EHP results into the National Water and Sanitation Information System, or SINAS, system of ENACAL-GAR).

Community Participation

Linked to the first conclusion is the need to incorporate the community and individual households in a system of participatory monitoring, that is, one in which corrective actions are undertaken directly at the local level with or without the involvement of external agents (project staff). It was agreed that this is the only way of ensuring sustained project impacts.

Timing of Monitoring Activities

Several PVOs indicated they would like to see an improvement in the timing of monitoring events in order to “harmonize” the demands of the EHP-Nicaragua program with their own in-house monitoring systems. This improvement would reduce the overall workload and allow for a

complementary approach to monitoring of similar and related indicators. There was a request that EHP-Nicaragua make a more-explicit monitoring plan, outlining when it expects data to be collected and received from PVO partners.

Interest of ENACAL-GAR

The ENACAL-GAR management indicated their interest in learning about both the results of the EHP-Nicaragua monitoring and the design and methodologies used, in order to see whether any features of this system could be incorporated into the existing SINAS.

Credibility of Monitoring Results

Several participants called into question the credibility and reliability of the monitoring results, expressing concern that the margin of error and objectivity relies to a great extent upon project promoters, many of whom were not adequately trained in this field. This was agreed to be a point of concern.

Environmental Matrix

It was agreed that this is not an optional activity for the PVOs, as it forms an integral part of the USAID final audit of all projects. It was agreed that the monitoring and environmental studies are transversal in nature, implying inputs by individuals at all levels (community, social and technical promoters, project directors).

Refining the Indicators

It was suggested that the indicator for access to potable water be refined to include a sub-indicator measuring distance from household to water source.

7 PROJECT SUSTAINABILITY

7.1 Description of Activities

EHP opened the session on sustainability with a general presentation on the concept of sustainability and the philosophy behind the overall program design. This was followed by a series of five presentations by various PVOs and EHP, each focusing upon a particular element of sustainability at the project level:

- Monitoring and controlling water quality (*ACH*)
- Designing and implementing tariff system (*ARC*)
- Protecting water sources (*ALISTAR*)
- Mitigating vulnerability of physical works (*ACH*)
- Legalizing and registering property (EHP)

A further two presentations focused on legal and institutional issues affecting sustainability of RWSS projects and programs in Nicaragua:

- Legalizing water committees (CARE)
- Involving local governments, or Alcaldías, with post-project operation and maintenance (O&M) service provision (ENACAL-GAR, Region VI)

As part of the general discussion, ENACAL-GAR's national director was invited to make a further presentation on the current changes within the institution to clarify the new law of citizen participation and other issues relating to long-term sustainability. (See box under 7.2.) After continued discussions in plenary, the session closed with some general agreements and understandings.

7.2 Summary and Analysis of Activities

The theme of project sustainability was of great interest to participants who, despite the broad range of topics, showed a great deal of interest in sharing practical experiences and in learning about changes underway in the rural sub-sector that will affect the work of the PVO partners. EHP's opening presentation focused on the concept of sustainability and explained the philosophy behind EHP-Nicaragua, which is reflected in the Technical Guidelines for Implementation document (see Annex 4). The short PVO presentations raised some important considerations, highlighted briefly in the upcoming box.

WATER QUALITY MONITORING - ACH

- Involvement and training of water committee members in sampling and chlorine-testing techniques has been an important element in raising awareness of the importance of maintaining water quality.
- ACH is making great efforts to ensure that monitoring results are fed back to the community in a timely fashion and that corrective action is taken on the basis of these results.

TARIFF SYSTEM - ARC

- The design of the tariff system should be adapted to community capacity to understand and manage the system.
- The system developed by ARC was for a planned life-span of 20 years with a factor of 30 percent applied to cover system expansion and/or major repairs.

WATER SOURCE PROTECTION - ALISTAR

- Any effort to protect water sources should be based upon a complete and integrated work plan defining norms and technical standards of all relevant institutions (i.e., the Ministry of Natural Resources, or MARENA, and ENACAL)
- There must be a strong community training and motivation element.
- Work activities must include components of soil stabilization and damage mitigation.

VULNERABILITY OF PHYSICAL WORKS - ACH

- ACH stressed three critical elements for mitigating damage to water systems: siting (including an understanding of historical events), design, and construction quality
- Minimizing cost should not be the overriding concern in project design, as this often leads to increased vulnerability; of the 23 ACH-constructed works directly in the path of Hurricane Mitch, only 2 suffered extensive damage.

The impromptu presentation by the national director of ENACAL-GAR was very important in clarifying some key issues currently facing the RWSS sub-sector; also helpful were the experiences and information shared about the agency's experience with decentralization of the UNOM and its work with the *Alcaldías* in the Matagalpa-Jinotega region. (See next box.)

7.3 Conclusions

Participants consider sustainability an important subject for any future EHP-Nicaragua event, especially bearing in mind that the PVOs must already start thinking about the closure of their individual programs and hand-over of follow-up support to communities with recently constructed systems.

ENACAL-GAR

- ***Ley de Participación Ciudadano.*** This law, currently under review by the national legislature, is potentially very important because it will greatly expedite the process of obtaining legal representation (Personería Jurídica) for water committees at the local, municipal level representing 50 or more persons (articles 46 and 54 of the new law). The new law also includes an ombudsman system, or defensoria, to guarantee and promote citizen participation.
- ***UNOM.*** In line with recent institutional reforms, there will be no additional funding or further expansion of the regional UNOMs within ENACAL-GAR, and central government will look increasingly to municipal authorities to provide these type of services as envisioned in the reform to the municipal laws of 1998.
- ***Separation of Rural Water Supply Management from ENACAL.*** Under pressure from international financial institutions, the recently semi-privatized ENACAL can no longer contemplate a subsidy to the rural sector (currently on the order of C\$18 million per year). Therefore, the current GAR structure will be separated from ENACAL and a new and completely independent agency established sometime in 2001, probably to be named Acueductos Rurales de Nicaragua. This new agency will be autonomous from ENACAL, receiving funding directly from the finance ministry. In order to complete the unloading of the rural sector from the now-privatized ENACAL, one of the first actions will be to legally transfer all title to rural systems ENACAL now holds to the newly created rural agency. Once in legal ownership of the titles to all the rural water supply infrastructure projects constructed through ENACAL-GAR (and previously INAA-DAR), the new agency will grant concessions to recognized rural water committees to manage and administer their systems. As with the Costa Rican model, the agency will reserve the right to retake control over the systems if these are being poorly managed and maintained.
- ***Regulation of the Rural Sector.*** In accordance with recent restructuring of the old Nicaraguan Water Supply and Sewage Institute (INAA), the new INAA will be the ultimate regulatory authority for WSS in Nicaragua. Indeed, INAA will be responsible for regulating and overseeing the formation and operation of the new Acueductos Rurales de Nicaragua. It is still not explicitly defined whether this new agency will assume the role of regulator for the rural sector, although in practice this is highly likely as there is limited capacity and interest on the part of INAA to perform this function.

8 SPECIAL THEME: “BACINILLAS”

8.1 Description of Activities

The morning of the final day was set aside to cover the topic of *bacinillas*, which are planned to be incorporated as a new component of the EHP-Nicaragua program in conjunction with JHU. In its introduction JHU explained the background to this initiative and the process by which the concept will be investigated and pilot-tested before being fully launched. This introduction was followed by an exercise in which the participants worked with a set of questions designed to generate ideas and suggestions around the theme of *bacinillas*; the participants then divided into four groups to synthesize these ideas and present them in plenary.

After the presentations, JHU shared the relevant results of its own baseline survey, which included an analysis of the beliefs and behaviors around handling and disposal of children’s feces. Finally, the participants separated into four groups once again and compared the results of the earlier group work (public perception) with the results of the scientific baseline survey. The participants worked on generating ideas about the strategy for introducing *bacinillas*, the likely focal groups of such a campaign, promotion, and possible messages.

8.2 Summary and Analysis of Activities

In general, PVO staff indicated that the introduction of *bacinillas* into their programs would be a positive initiative, mainly in the effort to change the existing tendency toward open-air defecation prevalent in many younger children. The PVOs saw this as a direct intervention toward the reduction of disease-transmission rates in rural communities and as a positive factor in changing long-term behaviors relating to excreta disposal. However, the groups did identify several significant reservations:

- Any positive contribution of a *bacinilla* campaign is highly conditional upon a strong education and motivation campaign for adequate use and maintenance.
- Poor handling and use will result in new (and potentially more-dangerous) focal points of contamination in the household environment.
- There is a real danger of creating dependency on the *bacinilla* among younger children and longer-term rejection of latrine use.

The most salient points of the JHU baseline survey carried out in over a thousand households appear in the next box.

PRESENTATION BY JHU

- 58 percent of urban homes and 65 percent of rural homes rely upon traditional unimproved latrines without ventilation; over 24 percent of all rural households have no mechanism for excreta disposal whatsoever.
- Just under 20 percent of all adults interviewed in rural areas defecate in the open. Over 30 percent of children under three and almost 45 percent of children between three and five in rural households regularly defecate in the open, suggesting that this behavior is due not to a physical absence of latrines but rather to a socially accepted habit.
- Use of bacinillas is reported in about 10 percent of both age brackets in urban areas (under three and three to five years), whereas in rural areas it is mostly below 3 percent in both age groups
- When asked about commonly held views and beliefs related to children's excreta and its disposal, it was found that—
 - i. An overwhelming majority of both rural and urban people (93 percent and almost 95 percent, respectively), fear that children will fall into the latrine opening and so discourage children from using them.
 - ii. Almost 40 percent of adults interviewed in rural households feel that it is acceptable for children to defecate in the open.
 - iii. Almost 30 percent of adults interviewed in rural households believe that children's feces are not a danger to health.

At the conclusion of the event, the JHU team explained the process of developing the bacinilla campaign in conjunction with EHP-Nicaragua. They will finalize a review of both international and national experience with bacinillas and conduct a literature search. They will then combine the results of these working groups in the forum together with direct results of public perceptions from selected rural communities. These inputs will be used in the analysis of the type of strategy, focal groups, messages, and promotion as a part of the “Estrella Azul.” On the basis of this process, JHU will come up with an initial proposal for a bacinilla campaign to be distributed to the PVOs for further comment and feedback. Once this has been finalized, EHP-Nicaragua will make the bacinillas available to interested PVO partners for inclusion in their individual programs

9 EHP HOUSEKEEPING

As the final activity of the forum event, EHP-Nicaragua took advantage of the presence of all PVO implementing partners to present a number of brief house-keeping issues, which were designed mainly to remind the PVOs of a number of program and reporting requirements.

9.1 Description of Activities

SINAS

ENACAL-GAR made the first presentation as a reminder of the SINAS system, its main function, components, and reporting requirements. A brief review was made of all six pages of the SINAS reporting format. The need for good coordination with the regional GAR offices and flow of information as inputs into the SINAS was stressed. Procedures for follow-up to information coming through the Managua office of EHP-Nicaragua were established. It was stressed that reporting to ENACAL-GAR for the SINAS is not an optional activity, but rather a requirement of the program. (The SINAS presentation appears in Annex 3.8.4.)

Coordination with ENACAL-GAR and MINSA

The director of EHP-Nicaragua stressed the need to maintain a regular and open form of communication and coordination with the main government agencies at both regional and local levels

Norms and Guidelines of ENACAL-GAR

The forum was reminded of the importance of adhering to established technical norms and guidelines of ENACAL-GAR; each PVO received a number of copies of the complete guideline document.

Accreditation of EHP-Nicaragua and USAID

PVOs were reminded to give appropriate accreditation to the EHP-Nicaragua program and USAID funding on any sign-boards announcing projects, and to place these in a visible location.

Revision of Nonstandard Technical Designs

Further, the group was reminded to submit any nonstandard designs to EHP-Nicaragua for review and confirmation; it was also stated that turn-around time would be as rapid as possible, but never more than 15 days. In case of atypical designs for projects already finalized or under construction, the plans should be submitted as soon as possible.

Monthly Reports

EHP staff reviewed the revised formats for monthly reporting for both the technical and social/training activities, and the system for submitting these reports (hard copy and digital). The process for finalizing projects was also reviewed, along with requirements to involve the regional GAR offices, MINSA, MECD (where appropriate), and the local *Alcaldía* in the formal hand-over process to the community, represented by the water committees.

Verification of Property (U.S. Citizens)

The USAID representative explained the policy with regard to verifying whether or not there is any outstanding claim against property involving a U.S. citizen. This was explained as a formal requirement of USAID-funded projects.

10 CONCLUSIONS

10.1 Needs Assessment and Next Steps

Toward the end of the forum each PVO was asked to identify three priority themes of interest or problem areas within their own programs, and to also provide three suggestions as to possible solutions or actions that would address those themes. After the facilitators reviewed the suggestions and grouped them in a logical order, the entire group addressed these ideas by means of a participatory exercise, with agreements reached as to the follow-up needed and the organizations involved. The results of this activity follow:

Hygiene Education and Behavior Change

For many of the PVOs a principal concern was to unify the educational material and to define a nationally accepted strategy for implementing hygiene education within the context of RWSS projects. There were also individual PVOs interested in adopting specific materials presented during the forum. *ALISTAR*, for example, which works with indigenous populations, lacks materials in the appropriate context and languages (Miskito and Suma).

Next Steps and Actors:

- It was unanimously agreed that the Government of Nicaragua (GoN) agencies, namely ENACAL-GAR, MECD, and MINSA, should be encouraged to take the lead in adopting a single education strategy (particularly for school programs), with support from agencies such as UNICEF, EHP, and JHU. It was explained that a tripartite agreement is in the process of being signed. The National Water Supply and Sanitation Network (RNAS) was also seen as playing a critical role in this process, especially in facilitating access for interested PVOs.
- Bilateral contacts are to be established between various PVOs to facilitate the sharing of hygiene education material (*ADRA*, *CARE*, *ARC*, and *ACH*). It is the responsibility of each PVO to follow through with these contacts as agreed in the forum.
- In the case of *ALISTAR* and the search for appropriate materials, *ARC* offered some assistance from its program in the same region and also suggested contacting *Acción Médica Cristiana*, who are reported to have a lot of material in both Miskito and Suma.

Training

Among the PVOs two main concerns were noted, both relating to the capacity of project staff: first, the need for further training in project implementation (both social and technical content); second, a general weakness in communication techniques on the part of the PVO promoters. It was agreed that further work is needed to improve the skills and knowledge of PVO field staff in key areas.

Next Steps and Actors:

- EHP-Nicaragua will continue with its current technical assistance (TA) activity in the diagnosis of training needs (already completed in five PVOs), which will lead to the structuring and agreement of a training plan for each individual PVO; this is to be carried out before the end of this year.
- Each individual PVO will then be responsible for taking forward and implementing the agreed-upon training plan, drawing upon either in-house resources or externally contracted consultants.
- JHU announced that it will continue with its existing training plan in the field of communication and information; the next event is scheduled for 04 – 06 December 2000.

Monitoring

Participants expressed universal concern over the current status of the monitoring system and the need to quickly improve the mechanisms and flow of information across the whole system, including the flow of data from EHP back to the PVOs and from the PVOs to the community, in order to effect corrective action and resolve outstanding problems.

Next Steps and Actors:

Each organization agreed to focus upon improving the feedback of information and to be more explicit about when information is required. The PVOs also agreed to review the data-collection process and staff training in order to improve the reliability of survey results. The specific flows of information identified for improvement include the following:

- EHP-Nicaragua → PVOs
- PVOs → Community/Water Committee
- PVOs → ENACAL-GAR, MINSA and MECD

Inter-Institutional Coordination

It was agreed that coordination between institutions working in the rural sector must be improved, especially if projects currently under construction in the EHP-Nicaragua program are to be successfully supported in the longer term. It was proposed that existing coordination mechanisms be strengthened and broadened at the local and departmental level, mainly through better planning and information exchange.

Next Steps and Actors:

It was suggested that EHP-Nicaragua be responsible for up-dating program progress on the web site as frequently as possible. (A copy of the web site home page appears in Annex 5.) The actors involved in these activities are PVOs, the Local System for

Integrated Health Care, or SILAIS (departmental), ENACAL-GAR (regional), and *Alcaldías* and MECD (municipal).

Exchange of Experience

Many of the PVOs were very interested in seeing more meetings of this type to facilitate the exchange of experiences and learning between PVO staff, meetings that would include those from similar zones of operation and those from distinct regions of the country as well. There was also demand for exchanges between members of water committees from different PVO programs who could benefit from exposure to new ideas and ways of working. Several specific themes were proposed for such events including latrine design, norms and technical criteria for household-level water supply projects, and sustainability issues for long-term operation and maintenance after the PVO programs have been phased out.

Next Steps and Actors:

It was agreed that the PVOs, both individually and collectively, would arrange for follow-up meetings between project staff and water committee members. EHP-Nicaragua announced its intent to organize at least one, and possibly two, further lesson-learning and knowledge-sharing events in the new year, focusing on themes (but fewer) of general interest to the PVOs.

10.2 Overall Conclusions and Evaluation

In order to evaluate the forum, both EHP-Nicaragua's stated objectives and participant expectations were reviewed in plenary. (At the start of the event, each participant had written one expectation.) Overall, the group concluded that the process of exchange and sharing had been a successful and transparent one and that the original goals set by EHP had been largely met. The participants were very positive about the way in which the event had been designed to maximize the opportunity for them to present their own experiences from practical project implementation. This approach to exchanging lessons learned was especially useful for those PVOs working in more-isolated areas of the country.

The group concluded that several other important goals had been achieved during the course of the forum:

New Contacts Established

The fact that many participants had begun work on their respective programs after the initial start-up phase meant that a great deal of networking was taking place, both between PVO staff and with other agencies, including the USAID representative. It was encouraging to see a constant mixing of PVO participants who all had the opportunity to make bilateral contacts between programs. There seemed to be two particular trends in this regard:

- Direct contacts and discussions took place between PVOs working in the same geographic zones; i.e., *ACH*, *ARC*, and *ADRA* in the Segovias, and *Plan* and *Save* in the Chinandega area.
- Staff from *ALISTAR*, who are working in one of the most isolated areas in the country, were able to share ideas and get exposure from other programs. *ALISTAR* was also able to benefit from talking with the staff from *ARC*, who are running RWSS projects (not funded by EHP/USAID) in the same region.

Trend Toward Harmonization of Approaches

Despite many of the programs' differing operating environments, they seemed to be moving toward greater coherence among approaches and methodologies. The forum presented an opportunity for different programs not only to share what they have been doing, but also to think about modifying their existing approaches and taking into account positive lessons from other partner PVOs. There were several concrete examples of this, including the session on hygiene-education strategies and materials, as well as the message about toilet paper disposal.

Improved Understanding and Coordination with GoN Agencies

The active and prolonged participation of representatives from both ENACAL-GAR and MINSA was extremely beneficial both in improving the image of these agencies and in fostering understanding of the GoN position amongst the PVOs. There was a great deal of interaction between these two groups, which resulted in a build-up of mutual trust between the two sides and an appreciation for the work of government agencies (especially ENACAL-GAR). The presentation of the SINAS system was particularly impressive and showed the PVO partners that the work they are doing will be integrated into a permanent management information system at central level.

Identification of Weaknesses

The environment within the forum was such that most participants felt comfortable in identifying their own weaknesses and felt needs in a constructive manner, which enriched the entire learning process. This was true of both the PVO program and EHP-Nicaragua itself and led to some concrete agreed-upon actions to address these problem areas.

Clarification of Functions and Roles Between EHP and JHU

The forum process also facilitated clarification of the different roles and characters of the two USAID Mitch-related programs of EHP and JHU, a topic that had led to some confusion and misunderstanding in the past. It was made clear that these two programs are in fact complementary, with both having a strategic and an operational function within the rural sector generally and in the RWSS specifically.

10.3 Final Impressions

The most frequently heard criticism of the forum was that the activities covered a wide range of topics and took place under constant time pressure. Indeed, any one of the seven major themes could constitute an independent three-day event. Inevitably, the combination of breadth and haste led to some frustration at being unable to go into more detail during working sessions and plenary. However, as the stated objective and emphasis of the event was an exchange — a sharing of information and learning — it was not considered necessary to resolve all these issues during the forum, but rather to generate discussion and awareness of problems and possible solutions. With this given aim, the participants agreed that the balance between the range of topics and time constraints was acceptable.

Relative to this last point, participants identified three themes they would like to see as main topics for any further, and more-focused, EHP-Nicaragua program-wide events:

- Latrine design, including raised pits
- Technical guidelines, norms, and procedures for household-level water supply projects
- Sustainability issues and transition from direct implementation to longer term O&M

Viewing the forum as a whole, the extremely positive and active input from participants is noteworthy, despite long days and full agendas. In part this may have been due to the group's being almost entirely field-level staff (social promoters, technicians, field engineers, and work supervisors), together with program managers, all of whom were highly interested in the event. This particular composition was widely appreciated, and the sense within the group was that a sharing and learning process was going on among people working at the same operational levels.

Annex 1: List of Participants

Lista de Participantes FORO
 "Intercambio de Experiencias y Lecciones Aprendidas"
 Nov 13-15 2000

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Lista de Participantes FORO
"Intercambio de Experiencias y Lecciones Aprendidas"
Nov 13-15 2000

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Lista de Participantes FORO

"Intercambio de Experiencias y Lecciones Aprendidas"
Nov 13-15 2000

ORGANIZACION	NOMBRE	CARGO	TEL.	FAX	DIRECCION	E-Mail
ENACAL	Lic. Oscar Tablada	Dir. ENACAL - GAR	265-1258	265-1258	Km 5 Carre. Sur Contiguo a Hosp Aldo Chavarria, Managua	enacal@tmx.com.ni
ENACAL	Francisco Baltodano	Director	0612-2984		Escuela Guanaca 2c. Sur 1/2 O Matagalpa	gnagar@tmx.com.ni
ENACAL	Mra. Lourdes Velasquez	Secr. Red Nac. Agua y Sane	266-7915	265-1258	Km 5 Carre. Sur Contiguo a Hosp Aldo Chavarria, Managua	gnagar@tmx.com.ni
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JHU	Jenny Saenz	Resp. Movilizac. Comunit.	278-7755	278-7650	Monte Olivos 4c al Sur	hopkins@ibw.com.ni
MINSA	Marilyn Obando	Dir. Salud Ambiental	289-4514	289-4514	Complejo Nac. Salud	
PLAN INTERNACIONAL	Arellys Bellorini	Gre. Prog. Reconstrucción	276-0729		De embajada Rep. Dominicana 1/2c Surwest	drp@ibw.com.ni
PLAN INTERNACIONAL	Rafael Salgado	Supervisor de Campo	088-16452		Tonalé-Chinandega	

Lista de Participantes FORO

"Intercambio de Experiencias y Lecciones Aprendidas"

Nov 13-15 2000

ORGANIZACION	NOMBRE	CARGO	TEL.	FAX	DIRECCION	E-Mail
PLAN INTERNACIONAL	Xiomara Arguello	Ing. Técnico	276-0729	276-1585	De embajada Rep. Dominicana 1/2c Suroeste	
PLAN INTERNACIONAL	Dra. Janet Meza	Jefa de Proy. Salud	276-0729	276-1585	De embajada Rep. Dominicana 1/2c Suroeste	
PLAN INTERNACIONAL	David Tijerino	Espec. Agua y Saneam.	276-0730		De embajada Rep. Dominicana 1/2c Suroeste	planifica@com.ni
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SAVE THE CHILDREN	Guadalupe Navarrete	Organiza. - Capacitacion	088-52109	268-3751	Chimandega - El Viejo	gor@ibw.com.ni
SAVE THE CHILDREN	Brenda López Pérez	Ing. Supervisor	088-52109		Los Pipitos 1c abajo 1c sur 1/2 abajo	
SAVE THE CHILDREN	Betsabai Mendoza	Promotori Social	088-52109		Chimandega - El Viejo	
SAVE THE CHILDREN	Oscar Mercado	Muestro de Obras	088-52109		Teatro Gonzalez 4 1/2 c. Sur	
USAID	Richard Adams	Ing. Agua y Saneamiento	267-0525		USAID-Managua	radams@USAID.org

Lista de Participantes FORO

Annex 2: Forum Program
Foro de Intercambio de Experiencias y Lecciones
Aprendidas 13 - 15 Noviembre 2000

LUNES 13.11.00

1. SESION INAUGURAL (Duración total 8:00 - 10:30)

08:00 - 9:45

- Bienvenida (USAID, EHP, ENACAL, MINSA)
- Introducción: resumen global y objetivos
- Normas y reglas de juego
- Autopresentaciones por los participantes y expectativas

09:45 - 10:30

- Autopresentación por los PVOS; resumen global del programa de cada PVO (5 minutos cada uno)

10:30 - 10:50 *Refrigerio*

2. PARTICIPACION COMUNITARIA (Duración total 10:50 -12:30)

10:50 - 11:30

Tema: "Estrategias de participación comunitaria":

- Promoción del proyecto en la comunidad
- Metodología y prácticas para la implementación
- Diseño y planificación del programa de capacitación y organización comunitaria
- Aspectos de género
- Integración de los componentes técnicos y sociales

Modalidad: Presentación de experiencias de socios

Tiempo- 40 minutos (20 minutos cada uno)

Expositores: Save the Children USA y Plan International

11:30 - 12:30

Modalidad: Grupos de Trabajo: guías metodológicas

Tiempo: 30 minutos

Modalidad: Plenario: socialización y conclusiones enfocado hacia las lecciones aprendidas

Tiempo: 30 minutos

12:30 - 2:00 Almuerzo

3. SANEAMIENTO: LETRINAS

(Duración total 2:00 - 5:00)

2:00 - 2:45

Tema: "Tecnologías y diseños de letrinas"
Modalidad: Presentaciones cortas de experiencia de socios
Tiempo: 30 minutos (5 minutos cada uno)
Expositores: Todos los socios de programa EHP

Tema: "Promoción del programa y el enfoque ambiental"

- Promoción y motivación (satisfacción de los clientes)
- Enfoque ambiental
- Diseño: fosas elevadas; vida útil y cálculos de volumen
- Género y aspectos culturales

Modalidad: Presentación de experiencia particular

Tiempo: 15 minutos

Expositores: ADRA

2:45 - 3:30

Modalidad: Grupos de Trabajo: guías metodológicas

Tiempo: 45 minutos

3:30- 3:45 *Refrigerio* 3:45 - 5:00

Modalidad: Plenario: socialización y conclusiones enfocado hacia las lecciones aprendidas

Tiempo: 1 hora

MARTES 14.1 1.00

4. EDUCACION SANITARIA Y AMBIENTAL; CAMBIOS DE CONDUCTA

(Duración total 08:00 -12:30)

08:00 - 9:20

Tema: "Estrategías de Educación Sanitaria y Técnicas de Información y Comunicación"

- Estrategia y metodología de implementación de componentes de educación sanitaria.
- Técnicas de información y comunicación para los cambios de conductas.

Modalidad: Panel

Tiempo: 40 minutos

Expositores: Proyecto de Salud Ambiental (EHP) y Universidad John Hopkins (JHU)

Tema: "Aplicación de Educación Sanitaria: Escolar y Comunitaria"

- Lavado de manos
- Uso adecuado y mantenimiento de letrinas
- Manipulación y almacenamiento de agua para consumo domestico

Tiempo: 40 minutos (10 minutos cada uno)

Expositores: Save the Children USA y Acción Contra el Hambre (escolar); Plan Internacional y Alistar (comunitaria)

09:20 - 10:20

Modalidad: Discusion en plenario con moderador/a

Tiempo: 1 hora

10:20 - 10:45 *Refrigerio 10:45 - 12:30*

Tema: "Materiales Didácticos pre-seleccionados"

Modalidad: Presentaciones y discusión abierta

Tiempo: 1 hora 45 minutos

Expositores: EHP, JHU y ENACAL-GAR

12:30 - 2:00 Almuerzo

5. MONITOREO

(Duración total 2:00 - 3:15)

2:00 - 3:15

Tema: "Experiencias con el Sistema de Monitoreo"

- Implementación del sistema y proceso
- Resultados, análisis y lecciones puntuales
- Monitoreo ambiental

Modalidad: Presentación de experiencias de socios

Tiempo: 15 minutos

Expositor: Save the Children USA

Tema: "Sistema de Monitoreo de EHP y su Aplicación"

- Proceso de monitoreo y registro de información
- Indicadores
- Aplicación de la matriz ambiental

Modalidad: Presentación EHP; exposición dialogada

Tiempo: 45 minutos

Expositor: EHP

3:00 - 3:15

Modalidad: Plenario: socialización y conclusiones enfocado hacia las lecciones aprendidas

Tiempo: 15 minutos

Refrigerio trabajado

6. SOSTENIBILIDAD DE LOS PROYECTOS

(Duración total 3:30 - 5:30)

3:15 - 4:30

Tema: "Filosofía y Concepto de la Sostenibilidad"

Modalidad: Exposición EHP

Tiempo: 15 minutos

Expositores: EHP

Tema: "Elementos de Sostenibilidad en el Ciclo de Un Proyecto"

- Control y calidad de agua
- Tarifas
- Protección de cuencas
- Vulnerabilidad de las obras físicas
- Legalización y propiedad

Modalidad: Presentaciones cortas de experiencias de socios

Tiempo: 1 hora (12 minutos cada uno)

Expositores: Acción Contra el Hambre, La Cruz Roja Americana, Alistar, EHP

4:30 - 5:00

Tema: "Marco Jurídico e Institucional de la Sostenibilidad"

- Legalización de los CAPS
- Roles de ENACAL y las Alcaldías

Modalidad: Presentación de CARE y ENACAL-GAR

Tiempo: 30 minutos

Expositores: CARE y ENACAL-GAR

5:00 - 5:30

Modalidad: Plenario, socialización y conclusiones enfocado hacia las lecciones aprendidas

Tiempo: 30 minutos

MIERCOLES 15.11.00

7. TEMA ESPECIAL: "BACINILLAS" (Duración total 8:00 - 10:00)

Tema: "Bacinillas: Un Componente Nuevo del Programa EHP"

- Presentación oficial de la campaña
- Análisis y concepto del componentes
- Estrategia de implementación
- Mensajes y materiales didácticos

Modalidad: Presentación y discusión abierta

Tiempo: 2 horas

Expositores: Proyecto de Salud Ambiental (EHP) y Universidad John Hopkins (JHU)

10:00 - 10:30 *Refrigerio*

8. ASUNTOS INTERNOS DE EHP (Duración total: 10:30 - 11:30)

Tema: "Administración y Asuntos Internos, EHP"

- Aprobación de diseños técnicos
- Preparación de Enfoques Comunitarios
- Créditos EHP y USAID
- Verificación de propiedad de ciudadano norteamericano
- Informes mensuales
- Coordinación con ENACAL-GAR y MINSA
- Seguimiento de pautas de ENACAL
- Sistema de Información Nacional de Agua y Saneamiento (SINAS)

Modalidad: Presentaciones informativas

Tiempo: 1 hora

Expositores: EHP, USAID y ENACAL

9. CONCLUSIONES Y CLAUSURA DEL FORO (Duración total: 11:30 - 1:00)

Tema- "Conclusiones y Seguimiento"

- Identificación de necesidades y propuestas
- Plan de seguimiento
- Conclusiones globales

Modalidad: Discusión en plenario

Tiempo: 1 hora

Facilitación: EHP

Tema: Evaluación y Clausura

Tiempo: 30 minutes

Facilitación: EHP

1:00 *Almuerzo*