



FINAL REPORT
for the Coalition for the Active Clean-up
Activities in Mexico, El Salvador and Panama

(Period of Implementation: Sept. 2000 – Dec. 2003)

Under
Cooperative Agreement No. LAG-A-00-00-00023-00 with USAID

The Coalition for the Active Clean-up of Water Resources (CLARA)

Cooperative Agreement No. LAG-A-00-00-00023-00 with USAID

Final Report

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CLARA FINAL REPORT

Period of implementation:

Sept. 2000 – Dec. 2003

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This three year Cooperative Agreement aims to empower youth in water related issues by engaging and mobilizing them, as well as teachers and NGOs to take a leadership role in promoting water quality improvements in their communities, and by increasing real-time information dissemination and exchange about water topics among youth and field practitioners. <http://clara.ciceana.org.mx>.

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I. INTRODUCTION

A. Background

The limited supply of safe, reliable, and accessible water resources is one of the most significant environmental challenges in Central America. This problem is often compounded by the lack of formal and informal mechanisms to engage communities in solving their environmental problems. These combined challenges are best illustrated by the impact of Hurricane Mitch in November of 1998. The devastation wrought by Hurricane Mitch in Central America was, perhaps, the most severe of any natural disaster to effect the region in this century. 180 mph winds and unceasing rains created torrents of water and mudslides that swept away and buried houses, hospitals, warehouses, factories, bridges, roads, and people in the region. Ironically, while 300-400mm of rain fell, *clean* water became scarce at a time when it was most needed. The widespread devastation of the region's already limited water supply forced individuals and institutions to engage collectively in steps to safeguard local and regional access to safe and plentiful water resources. Inhabitants of Mitch-affected regions of Honduras, Nicaragua, El Salvador, Guatemala, and limited areas of southern Mexico became acutely aware that national governments would be challenged to assist them in the rehabilitation of devastated local infrastructure, especially water systems.

Moving forward required the creativity, initiative, and willpower of many individuals, organizations, agencies, and institutions. While many "quick-fix" projects materialized immediately following Hurricane Mitch, a more strategic and sustainable approach was initiated by the Academy for Educational Development (AED), Earth Force, the North American Environmental Information and Communication Center (CICEANA), and a coalition of grassroots organizations in Mexico, El Salvador, and Panama. Together they formed the *Coalition for the Active Clean-Up of Water Resources* (CLARA) whose goal was to restore and improve the water resources of hurricane stricken communities and guarantee that an educated and engaged public would be available to address long-term solutions and ensure the long-term availability of clean water. CLARA received funding under a Cooperative Agreement with the US Agency for International Development (USAID), No. LAG-A-00-00-00023-00. The USAID EGAT Bureau, Mexico and Panama USAID Missions, and USAID's Water Team, all provided funding to implement CLARA.

CLARA's Objectives

- ◆ *Develop the capacity and skill of youth, NGOs, and community organizations to monitor water quality and carry out actions to protect and improve it.*
- ◆ *Stimulate student involvement and participation in a leadership role in managing water quality improvement.*
- ◆ *Stimulate the dissemination of information and sharing of knowledge and experience on the topic of water through an electronic network.*

Thus, CLARA was developed from a strategic partnership formed with the three institutions mentioned above to develop the capacity of young people to serve as protagonists in environmental efforts, and in finding ways to improve water quality.

The CLARA model includes the following core components which were adapted for each country:

- Develop and maintain a regional water-quality monitoring coalition that can be easily replicated.
- Provide training and technical support to NGOs to leverage the existing interest in water-quality and promote youth-led environmental improvement projects.
- Organize groups of young people to gather information, assess strategies for environmental improvement, and implement community improvement projects.
- Disseminate information during various stages of the process to other community members and organizations.

CLARA is a model which has now been successfully replicated in 4 Central and South American countries, and shows great potential for adaptation to communities in other regions of the world. CLARA's methodology was piloted first in El Salvador and Panama, and was successful in generating in youth the necessary confidence and tools to understand and identify the causes of unclean water, develop the skills to engage their community, and the abilities to develop a water quality improvement project. Over its three years of implementation, CLARA was expanded to other countries, and trained capable youth also in Mexico and Venezuela. In each of the countries where it was implemented, students have received training on the CLARA methodology; monitored different water sources; interpreted data; and defined an action-oriented project designed to help alleviate water quality problems and/or raise awareness about water problems in their community.

The organizations with whom CLARA partnered were: Fundación para el Desarrollo de los Municipios de El Salvador (FUNDAMUNI), Parque Natural Metropolitano (PNM) in Panama, Cuerpos de Conservación de Guanajuato, Mexico (CCG), Cuerpos de Conservación Mexicanos in Mérida, Mexico (CCM), Centro de Estudios Ecológicos (CESE) in Pátzcuaro, Mexico, Colegio de Biólogos y Ecólogos (COBIOTEC) in Mexico, Parque Nacional Barranca del Cupatitzio in Michoacán, Mexico, and Red de Monitoreo de Calidad de Agua (CEDINCO) in Río Boconó, Venezuela.

B. Purpose of this report

This report presents the methodology and accomplishments of this project during its implementation from September 2000 to December, 2003. The combined investment in this project was US\$1.2 million over three years. The project was able to almost double the targeted amount in counterpart funding for a total of US\$113,072.

This final report summarizes the experience of CLARA in El Salvador, Mexico and Panama. While CLARA was also implemented in Venezuela, there were no funds available to fully engage the participating NGOs, and capture all their stories. This report is an end-of-project report that includes a description of project activities, and several of the lessons learned and success stories which are also captured in a separate document titled "Lessons Learned Document".

C. Report organization

This final report has five sections:

Section I provides some background information on the events that motivated the formation of CLARA, and a general description of the organizations involved.

Section II provides a description of the three components that encompass the CLARA methodology, and a summary of key activities developed under each component. This section includes a description of how weather became part of the CLARA methodology, and explains some of the activities developed. It is important to note that implementation of CLARA activities that included a weather component did not happen until the beginning of 2003, which was only eight months away from the close-out of the project.

Section III focuses specifically on presenting the key accomplishments of CLARA. It provides illustrative examples of success stories, describes the impact CLARA made on the NGOs, schools, youth and the community, and concludes by providing some tables consolidating the outputs generated in CLARA.

Section IV describes some of the efforts made by the different implementing organizations to formalize partnerships, since this was a key element in building sustainability of the project. In addition, this section describes some examples of sustainability achieved in CLARA.

Section V offers general conclusions on the success and main challenges for implementing CLARA.

The main body of the report is followed by a section of attachments, which provides more detail on six areas of CLARA activity referred to in the Table of Contents.

II. THE CLARA PROJECT

This section provides an overview of the different components that integrate the CLARA methodology, and also explains the activities developed under CLARA during the three years of implementation.

A. The Clara Methodology And Organization

CLARA carried out its interventions in rural and urban schools and communities through a variety of actions in its three strategic and synergic components.

Component 1

Strengthening NGO capacity. The project developed the capacities of the NGOs involved in CLARA implementation, particularly in the areas of program planning and management, social mobilization, communications, and resource mobilization. In addition, the NGOs received technical assistance to foster the development of leadership skills in youth and engage community involvement. The Academy for Educational Development was responsible for the technical assistance in this component.

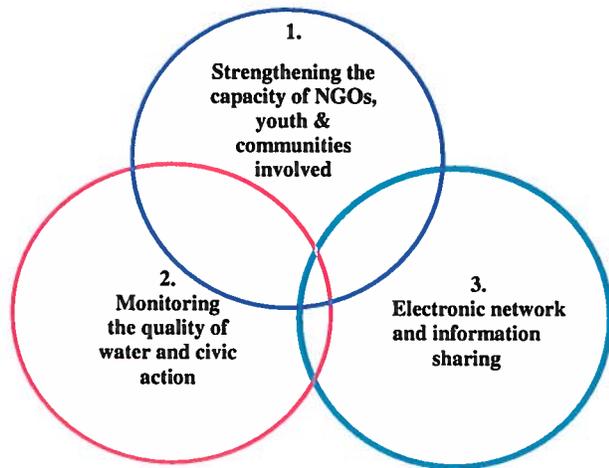


Diagram 1: CLARA's Strategic Components

Component 2

Monitoring water quality and civic action. This component of the CLARA methodology (based on the GREEN methodology implemented in the US) provided young people with the skills to perform basic water monitoring following a structured process. Earth Force provided technical assistance for this component.

Component 3

Electronic network and information sharing. The project strengthened NGOs skills to establish diverse ways to communicate and share information through electronic means. In addition, it brought youth and teachers closer to developing new skills in the use of these electronic communication technologies. The North American Environmental Information and Communication Center (CICEANA) was the technical assistance provider for this component.

1. What made CLARA so special?

- ◆ In CLARA, youth were trained to be the leaders/protagonists in improving water quality. Their activities were supported by NGOs, educational authorities, their parents, and the community.

- ◆ CLARA activities instilled values of citizenship responsibility and environmental leadership in the youth in particular.
- ◆ The youth carried out projects that were within their capabilities. Their actions did not put them at risk.
- ◆ CLARA facilitated the development of skills in collecting information, raising questions, carrying out effective research, and making decisions and initiating actions involving the communities in a participatory manner.
- ◆ It promoted working relationships between NGOs, the school community, and public and private entities involved in environmental protection, health, and in potable water supply, as well as with businesses located in the watersheds where they all worked.
- ◆ The youth were heard by the local authorities, which supported their projects.
- ◆ CLARA activities and materials were designed by youth and children nine years of age and older.
- ◆ Knowledge, attitudes, and practice analysis were carried out before and after CLARA interventions, which made it possible to compare the changes in the thinking of youth, leaders, and teachers.
- ◆ CLARA connected voices and projects through an electronic network, which facilitated communications among NGOs, teachers, and youth.

2. Who participated in CLARA?

Youth from fifth grade to high school and university-level; youth who were chosen by the teachers because of their good behavior, academic performance, and sense of responsibility in school.

Teachers who were interested in facilitating environmental activities aimed at improving water quality. Some had environmental education knowledge or experience in dealing with the environment, or were involved with students in student social service programs.

Educational institutions from elementary through high school and located within the area of the selected watersheds, chosen for their potential to become leader schools.

NGOs with experience in environmental education, interested in the topic of water, and committed to engaging young people and communities into developing leadership skills and becoming active on water related issues.

Organized **communities** interested in protecting the quality of their consumption water and managing in a sustainable way the watershed in which they live.

Governmental organizations, universities, and private enterprises that were involved or interested in water, watersheds, and youth.



Diagram 2: CLARA's Participants and Beneficiaries

3. What roles did the NGOs, teachers, and youth play in CLARA?

The NGOs in CLARA were the key implementing organizations in each of the participating countries. They were responsible for program management, as well as, providing technical assistance to the chosen CLARA schools. They also worked to build partnerships for ensuring the sustainability of the project.

These key organizations, which received direct funding from CLARA where:

Table 1: Key NGO's Participating in CLARA

Country ¹	Organization	Brief description
El Salvador	Fundación para el Desarrollo de los Municipios de El Salvador, FUNDAMUNI	<p>The Foundation for the Development of Municipalities of El Salvador, FUNDAMUNI, CLARA – El Salvador, carried out its activities in the center part of the Bay of Jiquilisco's watershed, located in the Eastern zone of the country.</p> <p>The Watershed of the Bay of Jiquilisco is a high-priority area of intervention on the part of the USAID Mission in El Salvador, as by its farming potential, as the levels of existing poverty in most of the municipalities that integrate it. On the other hand this Watershed, has been severely hit by the Mitch hurricane and by both earthquakes that happened in the first months of the year 2001.</p> <p>It is in that context that CLARA is carrying out its activities, to contribute to the improvement of the quality of the water sources, fomenting more effective citizen actions to solve problems of the quality of water of the watershed communities.</p>
Panama	Parque Natural Metropolitano, PNM	<p>The Metropolitan Natural Park, MNP, is the organization partner who is implementing CLARA-Panama, carries out its activities in the Panama Canal watershed, located in the heart of country. <i>The Metropolitan Natural Park</i> comprises the wooded cord that extends throughout the creek of the Panama Canal. Law established it in 1985 with intentions to preserve a natural area of the city of Panama that contributes to maintain the balance between the natural habitat and the urban one. and to protect the water of the Curundú River. The NMP is directed by a patronage, integrated by 3 governmental institutions and 5 NGO, co-administering the Park.</p> <p>The channel's hydrographic watershed represents for the Republic of Panama one of the greater natural wealth; in the watershed, important natural forests are concentrated that contains impressive biodiversity resources, regulate the water's seasonal flow for the operation of the channel, the generation of electrical energy and the water supply for human consumption.</p>
Mexico	Cuerpos de Conservación Guanajuato, CCG	<p>The NGO of CLARA in Guanajuato is the Consejo Nacional de Cuerpos de Conservación Mexicanos A.C., through Cuerpos de Conservación Sierra de Pénjamo (CCSP) and the Colegios de Estudios Científicos y Tecnológicos del Estado de Guanajuato (CECyTEG), who are located in the Pánuco River Hydrological Region, in the Tamuín River and Moctezuma River watershed.</p> <p>The CECyTEG is fomenting the environmental certification of the 24 campus that exist in the State of Guanajuato. As a part of this environmental certification the CECyTEC is invited all the campus to participate in a Program of Environmental Education for the use and protection of the water, the conservation of the microwatersheds and</p>

¹ Two NGOs from Honduras and one from Costa Rica participated in the first CLARA training workshop in Mexico. Both Peace Corps/Honduras and *Agua para el Pueblo* of Honduras made efforts to obtain funding and USAID support for CLARA implementation. Unfortunately, this was not possible; nevertheless, they constitute existing capacity for possible implementation in the near future.

Country ¹	Organization	Brief description
		the restorations of spring in the zone where they are established.
Mexico	Cuerpos de Conservación Mexicano, Merida, CCM	Cuerpos de Conservacion Mexicanos A.C. es una asociación que trabaja por la Conservacion del medio ambiente y da apoyo a otros grupos locales de voluntarios dedicados a la Conservacion. A este punto hemos formado grupos de voluntarios a través de todo el país. Desde Yucatán, hasta Monterrey. Dentro de los cursos que se les dan a los grupos locales incluyen, educación ambiental, campamentos juveniles, administración, procuración de recursos, relación con instancias de gobierno, etc. Todo esto con el fin de lograr tener una mayor participación de los jóvenes en la Conservacion de la naturaleza.
Mexico	Centro de Estudios Ecológicos, CESE, Patzcuaro	The NGO of CLARA in Pátzcuaro is the Centro de Estudios Sociales y Ecológicos, A.C. (CESE), which is located in the Lerma-Santiago Hydrological Region, in the Lake of Pátzcuaro-Cuitzeo and Lagoon of Yuriria watershed. CESE is a civil organization, who develops projects of ecology and sustainable development in the Lake of Pátzcuaro watershed. This projects are focused in fishermen, farmers, artisans, women and students. CESE has contributed to elevate the perception and awareness among the community about the environmental problems of this watershed. El CESE has been traditionally an institution to that the students attend to obtain information about environmental topics of Pátzcuaro.
Mexico	Colegio de Biólogos y Ecólogos, COBIOTEC	The NGO of CLARA in Chetumal is the RED MIRC (Manejo Integrado de Recursos Costeros, through the Colegio de Biólogos del Sistema Tecnológico, A.C. (COBIOTEC A.C), who are located in the Yucatán East Hydrological Region (Quintana Roo), in the Bahía de Chetumal and Río Hondo watershed. The COBIOTEC A.C. is a nongovernmental and nonprofit organization (ONG) from Mexico, founded on February, 1998. COBIOTEC is in charge to fortification of the knowledge, the management, the use and the conservation of the natural resources, applying innovating and successful technologies and methodologies. These are transferable to the social and environmental context of the Yucatan Peninsula, involving the active participation of the communities, academic institutions, institutes of investigation and the government in the process.

NGOs established school and community networks both in urban and rural areas. They also provided training and technical support for the participating CLARA teachers. Together with the latter, NGOs implemented strategies for the involvement and recognition of CLARA students.

Some of the ways in which NGOs provided technical support to teachers and students within CLARA include: the 6 Steps of the GREEN Methodology; research on knowledge, attitudes, and practices; participation and social mobilization; information dissemination and sharing through an electronic network; and, fund management.

NGOs engaged governmental and non-governmental organizations both locally and nationally, formed networks, organized events and activities relating to water to inform and/or educate the community and made CLARA known locally and nationally.

They kept the CLARA electronic network up to date, assisting teachers and youth in, and encouraging them to use and enrich the network.

Teachers were the facilitators for the implementation of CLARA through their own schools or educational institutions. They oriented students and facilitated the activities of the methodology. They kept students informed of resources and limitations, and worked hand-in-hand with others to establish decision-making criteria.

The youth –actual CLARA protagonists–, gave life to the methodology and promoted activities in their educational institutions and communities. They effectively engaged other local actors, including their own parents.

They spoke with the authorities and communications media and, hand-in-hand with their teachers and NGOs, forged strategic partnerships with local actors to develop their actions.

The **youth** played a key role in CLARA. They implemented the six steps of the GREEN Methodology, carried out research, selected problems, made decisions, designed and implemented projects, developed communication materials, involved their community, and analyzed results leading to improvement in water quality and watershed protection. The CLARA website also captured their action stories, pictures, achievements, lessons learned, and successes.

4. What support did the CLARA teachers, leaders, and youth receive?

- ◆ Training in how to implement the CLARA methodology.
- ◆ Technical assistance in the classroom and in the community through direct follow-up of the technical specialists of CLARA-associated NGOs.
- ◆ Information on the topic of water.
- ◆ Information from the CLARA website through its sections, “Ask an expert: contacts in your country,” “Ask an expert: did you know?,” and complete references on educational materials (books, CDs, videos, etc.) with publisher, title, price, how to obtain it, country, etc.
- ◆ The CLARA web page, an opportunity to exchange knowledge, concerns, and achievements and share with Spanish-speaking teachers, youth, and leaders matters pertaining to water quality.
- ◆ An opportunity to disseminate activities, success stories, etc., in online bulletins and news sheets.

B. Clara Activities

This section describes the activities developed under the three main components of the CLARA methodology, which are:

- Capacity Building and Social Mobilization
- Water Monitoring Capacity Building

o Water Network and Online Information Exchange

In addition, this section explains how a weather component was added to the CLARA Methodology, and describes the activities developed under the short term of implementation

1. Capacity Building and Social Mobilization Activities

Capacity building covers a range of different activities and is seen as a concerted effort to bridge the gaps between broad intentions and current organizational performance. Therefore, the aim of our capacity building was to enhance the ability of our partner organizations to achieve increased sustainability, effectiveness, and accountability in their development interventions.

In this sense, capacity building and social mobilization activities were key for CLARA. For AED, working collaboratively with the NGOs facilitated the achievement of significant progress in NGO capacities to: (1) train youth leaders by applying a methodology that promised significant changes and actions; (2) to become effective communicators with respect to water issues; (3) to use progress and impact indicators for effective planning; 4) to provide leadership and set up linkages, sharing resources with other actors locally, nationally and internationally; and 5) to enhance fund-raising capabilities.

"COBIOTEC is seen as the only NGO that has an environmental education program that goes beyond traditional environmental education. Education per se prepares you and guides you for the future. Recognition comes and opens doors in many instances, forging new partnerships through the marketing of one's products in the way taught by CLARA."

*Blanca Azucena García Gual,
CLARA-COBIOTEC Coordinator,
Chetumal, Quintana Roo, Mexico.*

The NGOs upgraded their abilities using new strategies, procedures and tools through:

- Diagnostics in the initial implementation phase
- Training and technical assistance
- Follow-up institutional needs assessment
- Established relations/collaborative agreements with NGOs for grants and seed money
- Setting up realistic work plans, and establishing tracking, monitoring, and reporting systems
- Supplying manuals, tools, and kits
- Receiving computer equipment (in some cases)

a. Summary of Capacity Building Activities

1. AED provided ongoing technical assistance to the CLARA NGOs through field visits and work meetings using online media and teleconferences. It also coordinated the technical assistance provided by Earth Force and CICEANA in the development of the components of monitoring water quality and online intercommunication and information exchange.

2. Technical assistance in the design and execution of 14 CLARA implementation workshops in El Salvador, Panama, Mexico, and Venezuela.

3. Follow-up and technical assistance in the implementation of the methodology so as to achieve its adaptation by the CLARA coordinators through its being acknowledged for promoting changes by means of innovative teaching strategies, including participatory learning, applied learning and cross-curricular integration.

4. Technical assistance and ongoing support for learning how to approach donors and potential national and international partners.

5. Technical assistance in promoting community approaches to mobilize local actors and form strategic partnerships.

6. Planning for, and facilitation of 4 workshops and technical meetings for CLARA coordinators to form a learning community and strengthen cooperation linkages and a sense of joint responsibility among the coalition NGO members.



Image 2: CLARA promotional murals in schools. Training and the Implementation Guide contributed to guiding and motivating the youth.



Image 3: Pánfilo Morales, Educational Projects Coordinator, gives his opinion on Radio Boconó, Venezuela, on the benefits of the CLARA methodology for bringing environmental education to the fore.



Image 1: "CLARA enabled me to be a knowledge facilitator and offered me tools for my academic work and for my responsibility for civic action," Renzo Herrera, Venezuela, 2003.

7. Getting to know the communications media and technical assistance in approaching them. More than 863,138 people were reached by messages on CLARA and the protection of water quality, as disseminated in the local, regional and national communications media.

8. Technical assistance in planning presentations and the development of guidelines and PowerPoint presentations as inputs for presentations on CLARA to different groups with different purposes: promoting the coalition, fundraising and other subjects.

Table 2: Selected Sample of Newspaper Coverage for CLARA

Newspaper Coverage of CLARA (selected sample)		
Country	Medium	Coverage
El Salvador	El Diario de Hoy One-page supplement	81,500
	El Diario de Hoy Two-page special report	81,500
Mexico	La Voz de Michoacán	10,000
	La Voz de Michoacán	50,000
	4o. Poder de Michoacán	5,000
	La Voz de Michoacán	50,000
	El Sol de Uruapán	10,000
	ABC de Michoacán	10,000
	El Sol de Uruapán	10,000
	La Opinión de Michoacán	50,000
	ABC de Michoacán	20,000
	La Voz de Michoacán	50,000
	El Sol de Uruapán	10,000
	La Voz de Michoacán	10,000
	El diario de Yucatán	180,000
	El mundo al día	120,000
	TV Azteca Regional	50,000
La Radio Yamabal	50,000	

Si deseas por primera vez una escuela, comuníquenos con nosotros al teléfono 2047-1000 o envíanos un correo electrónico a info@clara.org.ni necesitamos tu ayuda.



PROTEGIENDO LAS CUENCAS HIDROGRÁFICAS
VIGILANDO

El año 2002 inició con un taller de inspección para profesionales e involucrados, a cual se agregó del 4 al 8 de febrero se realizó un taller de inspección para el personal de CLARA, se designó al Dr. Carlos de la Cruz como el responsable de la inspección y se le asignó el área de inspección. Actualmente CLARA PANAMA está formada por 17 inspectores en la Ciudad de Panamá, La Chorrera, Amador, San Miguelito, Chiriquí, y a partir de la inspección en Barro Colorado en el nacimiento del Río Chagres.

El objetivo de la inspección es determinar los factores que afectan la calidad del agua, se debe garantizar la protección de las cuencas hidrográficas y el acceso al agua potable para la población.

La inspección está coordinada por Organizaciones no gubernamentales, colegios, clubes y particulares, para ello se creó un grupo de trabajo de inspección y se le asignó el área de inspección. Actualmente CLARA PANAMA está formada por 17 inspectores en la Ciudad de Panamá, La Chorrera, Amador, San Miguelito, Chiriquí, y a partir de la inspección en Barro Colorado en el nacimiento del Río Chagres.

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Si deseas por primera vez una escuela, comuníquenos con nosotros al teléfono 2047-1000 o envíanos un correo electrónico a info@clara.org.ni necesitamos tu ayuda.



Image 4: CLARA press coverage.

The following table presents the presentations done in Mexico, for the most part, during CLARA's expansion in Michoacán.

Table 3: Selected Sample Presentations on CLARA

Selected Sample Presentations	Participants
• CLARA presentation, 9/6/2002, CECyTEM	• 5
• CLARA review, 9/7/2002, Uruapán, Mich., "Barranca del Cupatitzio" National Park	• 20
• CLARA presentation, 9/9/2002, Morelia, Mich., Office of the Secretary of Education, State of Michoacán.	• 10
• CLARA Review, 9/9/2002, Pátzcuaro, Mich., A.C. Social and Ecological Studies Center	• 20
• CLARA presentation, 9/10/2002, Pátzcuaro, Mich., CBTIS 94	• 1500
• CLARA presentation, 9/10/2002, Pátzcuaro, Mich., "Silviano Carrillo" Preparatory School	• 50
• CLARA presentation, 9/12/2002, Uruapán, Mich., Forest Ranger School (CECFOR N. 01)	• 60
• CLARA presentation, Uruapán, Mich., 9/12/2002, Uruapán Advanced Technical Institute	• 40
• CLARA presentation, 9/17/2002, Uruapán, Mich., Don Vasco University	• 15
• CLARA presentation, 9/18/2002, Morelia, Mich., Government House, State of Michoacán	• 50
• Presentation on Protecting the Watershed, 9/22/2002, C.N.S de Lourdes	• 180
• Presentation on Protecting the Watershed, 9/29/2002, I.E. San Cristóbal	• 140



Image 5: CLARA launch presentation - Uruapán, Barranca del Cupatitzio National Park, Michoacán, Mexico.

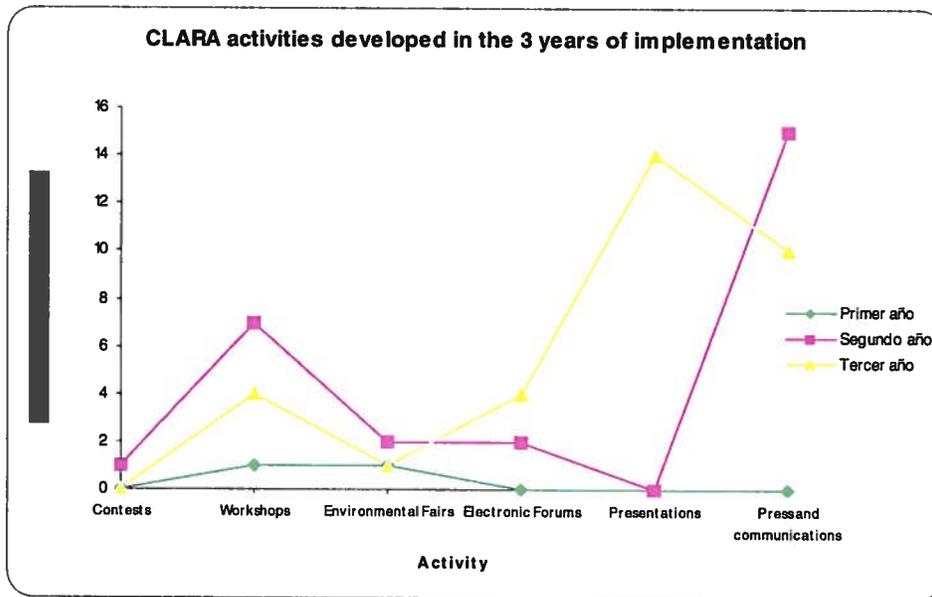


Diagram 3: CLARA activities developed in the 3 years of implementation of CLARA

b. 9 NGO Fundraising Capabilities

In order to increase the NGOs in-house and collective fund-raising capabilities to achieve long-term financial stability (for their own and the Coalition's programs) and sustain their efforts to champion the cause of clean and adequate supplies of water, the NGOs received training in resource mobilization. This section will provide a description of the activities developed, and will also explain the different ways that the different organizations engaged the interest and investment of the private sector. Private investment was considered to have the potential for helping sustain the CLARA activities after donor funding had ended and/or supplement portions of some of the activities being implemented by the NGOs.

AED coordinated two fundraising workshops in CLARA's third year of implementation. The agenda for the first workshop (February 2003) was drafted using a survey sent to all NGO representatives inquiring about their institutional capabilities, strategies, and techniques to do fundraising. In addition, real time conferences were coordinated to ensure active participation from all NGO representatives in the development of the agenda. The objectives of this first workshop were to:

- Learn about the innovations of other CLARA organizations, as well as their best practices in the area of fundraising
- Build strategies to attract and keep donors and learn how to increase their future support level
- Know about fundraising tools, including those used by AED, Earth Force, and CICEANA

"During the PROCURA course, it was well understood that databases showing who donors are don't exist in our countries, like they do in the USA, and that how to gain access to them were unknown. All this made us change our ways of thinking, ways that always seemed to keep us from achieving more in our fundraising." Erwin Otto Parrodi, PROCURA, Mexico, 2003.

- Explore how to better share information on fundraising.

The following materials were developed and distributed in the workshop:

- AED, in collaboration with Earth Force, developed a Fundraising Proposal Toolkit for participating NGOs. Information was collected from the participants to generate a toolkit which included the resources, materials, and general information from all the organizations involved in CLARA. This “toolkit” was burned onto CDs and distributed to all participants at the conclusion of the workshop.
- Earth Force and AED staff explored and pursued twenty-four (24) foundations for potential fundraising efforts for CLARA NGOs. This list was then shared with all NGOs with the hope that they would pursue one or another.
- AED created the following materials: PowerPoint presentation on the use of social marketing strategies for fundraising purposes, AED social marketing publications, and an instruction booklet on how to write a proposal prepared by CICEANA.

After this first workshop, all participating NGOs determined to meet some months later and hold an online forum to continue sharing their fundraising efforts. In addition, AED prepared a follow-up survey which was used to identify the specific needs in fundraising capabilities. Once these needs were identified, the AED team identified several fundraising experts and institutions that could provide the type of tailored training that was required.

AED sought written proposals (issued an RFP) from qualified organizations/individuals for the supply of an off-the-shelf or modified off-the-shelf fundraising and social marketing workshop. The services were required for the Second NGO Coalition Building Meeting, which took place July 14-18, 2003. PROCURA was the Mexican-based organization selected to provide the training. PROCURA has a partnership with Indiana University, which positioned it as an expert in the field. In preparation for the fundraising and social marketing workshop, the CLARA NGOs were asked to draft a proposal for review and improvement during the workshop.

Some of the main products resulting from this workshop were:

- PROCURA provided resources and a training manual on the principles of fundraising, which is a useful guide that will be used long after the training.
- PROCURA produced a report containing: a) a summary on the technical assistance provided to the NGOs (including copies of all e-mail exchanges); b) an evaluation report on the course; and c) recommendations for the NGOs to ensure the sustainability of CLARA.
- All fundraising proposals developed by the NGOs were reviewed by the “expert,” discussed during the training workshop, and improved upon during and after the training.
- Four fundraising proposals were submitted to potential donors.

c. Private Resources and Technical Assistance in Developing a Fundraising Strategy.

The events of September 11 had a strong effect on the fundraising world. At that moment, CLARA was beginning its second year of implementation. While donors shifted their priorities, CLARA was trying to lessen its dependency on USAID funding by seeking grants from foundations and private donors. It was not a good time to seek funds, and the results versus the number of efforts made evidenced the state of the fundraising climate.

Even with this financial climate, the AED Team:

- Encouraged the NGOs to seek donors, diversify and submit proposals
- Provided technical assistance in the development of fundraising and marketing strategies
- Worked with the NGOs in improving their financial reporting and establish a policy on the use of their indirect costs
- Identified potential donors and encouraged the NGOs to apply
- Worked to identify private donors who could potentially be interested in scaling up CLARA

The NGOs worked on seeking funds from foundations and private sources. While the results were not that encouraging, with 15 letters of interest and only 4 approved, the NGOs learned new strategies and fundraising techniques that we expect will carry on to their next projects.

2. Water Monitoring Capacity Building Activities

Water quality monitoring capacity building represented an opportunity to get to know and apply the GREEN/Earth Force methodology for protection and improving water as a resource. The methodology was designed to help the students in working to solve the problems and face the threats that the community faces in the watershed.

a. CLARA Training Workshops.

CLARA, through Earth Force, trained partner NGO technical specialists to promote and facilitate CLARA in their countries. In the first year of CLARA implementation, Earth Force led a training session in Mexico City. Besides training the NGO representatives selected from El Salvador and Panama, and other NGO representatives from Honduras, Mexico and Venezuela, Earth Force trained the CLARA partners, AED and CICEANA staff.

During the first year, the training focused on building the following CLARA program elements:

- Understanding key values in support of inquiry-based science education, demonstrated through Earth Force's emphasis on youth voice and decision-making, balanced research, and lasting change; and applying these values to classroom situations.

- Leading young people through the process of collecting data from a number of disparate sources, transforming that data into information, and identifying problems and the root causes associated with those problems related to the watershed they were studying.
- Creating mutually beneficial partnerships with local organizations, including assurances that opportunities for “hands on” watershed experiences would be applicable to science content.

**Table 4: CLARA Trainings and Coalition Meetings*
Sept 2000 – 2003**

Country	AED Team Lead Trainings	NGO Lead Trainings	Coalition Meetings	Total
El Salvador	2	1 weather workshops 2 regional meetings /fairs		5
Mexico	1 Mexico City 2 Pátzcuaro 2 Quintana Roo 1 Uruapán	2 Guanajuato 1 Merida 1 Pátzcuaro	2 Mexico City	12
Panama	3	3 policies and practices workshops 1 regional meeting		7
Venezuela	1			1
Total	12	11	2	25

- These numbers do not include the electronic forums and the yahoo meetings convened by AED in conjunction with all the NGOs.

The first CLARA training workshop consisted of three modules, each led by the CLARA partners. The modules were:

- ❖ Module 1. Steps to Create a Water-Focused, Action-Oriented Program of Environmental Education – Earth Force’s component based on the GREEN methodology implemented in the U.S.
- ❖ Module 2. Connecting Voices and Projects through Electronic Means
- ❖ Module 3. Mobilization and Creation of a Youth and NGO Water Network
- ❖ And a discussion on project management, monitoring and evaluation

In the first module, participants were led through the five steps to starting a GREEN project, modeling the activities in the Watershed Protection Guide, and practicing methods of physical, chemical and biological assessment of the health of a watershed. Through this process, they selected a watershed problem to address, identified important policies and practices, and brainstormed effective courses of action and potential obstacles.

The CLARA workshop continued with sessions on using the Internet to connect national and regional efforts, led by CICEANA, and effective techniques for community-based mobilization for youth, led by AED. As participants completed each phase, they listed their accomplishments and concerns, and described which concepts they were comfortable with and which needed more reinforcement.

The workshop concluded with independent work on each organization's plan of action. For *Parque Natural Metropolitano* (PNM) and FUNDAMUNI, these plans focused on follow-up workshops in July and August. For the other participating organizations, these plans focused on information-gathering and a fundraising strategy on the national and local levels to become integrated into CLARA.

Positive elements of the workshop included the variety of hands-on activities and small group format, which encouraged participants to get involved, ask questions and learn from each other's experiences. Each organization also had an opportunity to describe their philosophies and accomplishments in a brief presentation. The session on the CLARA website also described several effective ways for participants to share information and get their message out on national and international levels.

"Participating in, and assessing the CLARA Panama workshop was an enjoyable and heartening experience. It is inspiring to see such a strong example of good pedagogy taking place in areas where rote methodology has been the primary mode of teaching. I especially commend the level of preparation and solid facilitation that took place."
Report: Evaluation of the CLARA Training.
Evelyn Rodriguez, USAID NEP, Feb 8, 2002.

In the second and third year of the CLARA project, the NGOs led their own CLARA trainings. Earth Force and AED attended and provided technical assistance with the first NGO-led trainings.

The following table shows the number of people *directly* trained in the CLARA methodology, either by the AED team or the CLARA NGOs. The table following it shows the number of people who became actively engaged in applying the CLARA methodology.

**Table 5: Project Training Outputs
 Number of People Trained Through 2003**

Country	CLARA NGO Trainers	Educators Trained	Students Trained	Others	Total # (minus dropouts)
El Salvador	2	26	162	6	196
Mexico	9	57	47	43	156
Panama	3	29	59	26	117
Venezuela	5	23		14	14
Costa Rica	1	0	0	0	1
Honduras	2	0	0	0	2
Total	22	135	268	89	514

**Table 6: Project Implementation Outputs
Actively Participating Through 2003**

Country	CLARA NGOs Participating	Educators Participating	Students Participating	Total
El Salvador	1	18	270	289
Mexico	7	38	576	621
Panama	2	36	246	284
Venezuela	3	23	420	446
Total	13	115	1512	1640

The following table provides a summary of all the water testing kits that were distributed to the different partners in each of the CLARA participating countries. Please note that the number distributed of the Protecting our Watersheds Manual is much higher if we count the number of the first version of the manual, and also the number of manuals that were reproduced by each NGO for distribution to the schools.

Table 7: Water Testing Kits and Manuals Distributed to NGOs

Date	Low-Cost Kits	Standard Kits	Protecting Our Watersheds Manual (second and revised version of manual)
Mexico	75	11	60
El Salvador	67	5	25
Panama	65	5	25
Others	40	4	35
TOTAL:	247	25	145

b. Intercultural Exchange Program.

Earth Force developed a strategy for initiating an intercultural exchange program among El Salvador, Panama and the United States based upon earlier work by GREEN founder Dr. Bill Stapp, in the Cross-Cultural Watershed Partners Activities Manual. Cross-Cultural Watershed Partnerships furthers the ideal of global citizenship by linking students from different parts of the world. These efforts build understanding and respect for others' cultures while promoting environmental awareness and involvement. The knowledge, skills and awareness which participants develop build a foundation of understanding about shared environmental concerns and promote the international cooperation that will help create a more peaceful and ecologically sound world for future generations.

Based upon a model developed by Bill Stapp in *Cross-Cultural Watershed Partners* (1996), to begin a cross-cultural watershed partnership, students must first develop their understanding of their own cultural identity, identify their cultural misconceptions and build understanding of diverse cultural perspectives. Later, they can communicate with their partners about their communities, their interests and their local watershed.

Activities were designed to sensitize students to cultural differences and prepare information to share with students from other countries. CICEANA set up an online forum on the CLARA website to facilitate international exchange. The results of this forum were surprising, and a good lesson on adapting educational models to different contexts:

- Students and educators exhibited little interest in discussing cultural issues, instead preferring to focus on exchanging information about their local water quality problems and solutions. Earth Force staff recommended that future online forums focus on exchanging information on pressing water quality issues and best practices in the classroom, to enhance interest in participation.

3. Activities for Pre-testing and Implementing Weather in the CLARA Methodology

CLARA received funding from USAID's water team to add a weather component to CLARA. The AED team and USAID's interest in adding a weather component in CLARA was to have teachers and students consider the effects of weather. In other words, it was considered important for them to understand basic aspects of the science of meteorology and thus help them identify other factors involved in water quality problems. The importance of this idea is rooted in the realization that disasters caused by hurricanes, cyclones, floods, droughts and other causes are presently occurring more frequently and with greater intensity in developing countries in recent years because of alterations in the balance of nature. This situation affects the most at-risk populations and the poorest communities, and, as such, contributes to strengthening the culture for preventing and mitigating natural disasters that is being generated in some countries.

The hope was that the addition of a weather variable would improve the ability of local participants to correctly monitor the effects of temperature and precipitation on the quality of the water, and take action to solve watershed problems in their local communities.

The CLARA/Weather Initiative consisted of the following funding and technical assistance components:

- An of an equivalent of \$20,000.00 dollars;
- Support for the management, monitoring and evaluation of the implementation of this CLARA/Weather initiative;
- Technical assistance and tailored training on the three components of the CLARA methodology, particularly the weather piece.

The CLARA/Weather Initiative main objectives were:

- To engage teachers and students in learning about the effects of weather on water quality;
- To assist youth in the creation of a CLARA/Weather youth committee that would act as a board of advisors for youth working in CLARA, and would develop its own work plan and activities;
- To implement CLARA/Weather in all three of its components;
- To involve a minimum of 20 schools or well-organized youth groups in CLARA/Weather-related activities; and
- To generate an environment conducive to youth empowerment.

AED issued an RFA. *Cuerpos de Conservación Mexicanos* (Mexican Conservation Corps), Merida (CNCCM), was selected for their technical approach, ability to generate additional support from other institutions, past experience in working in CLARA and clear commitment to empower youth.

In the case of *Fundación para el Desarrollo de los Municipios de El Salvador*, (Foundation for the Development of Municipalities in El Salvador - FUNDAMUNI), they received the award because of the organization's potential and its CLARA Coordinator's mastery of the methodology, but, above all, because the Jiquilisco Bay watershed, where the coalition was developed, was an area vulnerable to landslides and floods. This was why it was important for the population's security and protection of the water for human consumption to integrate the weather component.

Previously, participants in the CLARA program identified threats or problems in their watershed using three sets of data: land & water use data, physical assessment data and water monitoring data (biological and chemical). The weather initiative expanded that data collection to include weather variables in the process of identifying threats and problems.

With the incorporation of the atmospheric factor, easy-to-access, -understand and -apply tools were designed and adapted. Basically, the tools were: (1) the Weather and Water module; (2) the Water and Weather poster; (3) the Climate and Weather manual for CLARA technical specialists; (4) the Climate and Weather: Building Meteorological Instruments manual; and (5) the Weather Section of the CLARA website.



Image 6: A young Salvadoran builds a thermometer, following handbook instructions.



Image 7: CLARA teachers trained in weather facilitate a workshop for youth leaders.

a. Activities for Incorporating Weather in the CLARA Methodology

1. Produce and upload a weather glossary on the web page. CICEANA has developed a weather glossary of 54 different words, available on the website and the Weather and Climate handbook. Successfully pilot tested the handbook for assembling low-cost weather monitoring tools.
2. Successfully pilot tested the new Spanish translation of the Protecting Our Watersheds Curriculum at the CLARA workshop in Quintana Roo, May 13-16, 2002.

3. The new weather materials were introduced at the CLARA workshop in Quintana Roo, 2002. These materials included several complementary activities in the Protecting Our Watersheds Curriculum, designed to augment the students monitoring activities and correlate the impacts of current weather conditions on their water quality monitoring results. Additionally, the Weather and Water Poster provided additional connections between land uses, weather and water quality. A “Weather and Water” poster explores the different ways that weather and land use can impact local water quality, including precipitation and runoff, erosion, flooding, drought, sanitation and thermal pollution.
4. An additional resource, a Low-Cost Weather Monitoring Devices manual, was also presented. The handbook for low-cost weather monitoring tools is also a key document, because it provides instructions on how to make a thermometer, barometer, hygrometer and a wet-dry bulb hygrometer, with inexpensive materials.
5. CICEANA has identified various weather monitoring online resources, which are available in the Weather Handbook and on the web page. These resources include governmental and non-governmental organizations, educational institutions, research centers and institutes, and informative websites related to weather.
6. Thirty six young students from 12 CLARA schools of the municipalities from Ozatlán and Usulután, in El Salvador, were trained in the use of the low-cost weather monitoring tools. These students learned about the importance of considering the weather, especially the rain, when monitoring the quality of water. But, most importantly, they became aware of the direct implications for flooding and the need to develop systems that would alert them of a change in weather which could have major implications for the security of their community.
7. As part of better understanding the connections to weather, students in Yucatán, and El Salvador visited a meteorologic station and got an opportunity to interact with the experts.

Table 8: Summary description of some of the weather materials developed

Water & Weather Poster	Climate & Weather Manual for CLARA Technical Specialists	Handbook : Building Meteorological Instruments
Presents the relationships among weather conditions, possible effects on water	Provides information to the CLARA technical coordinator, as well as teachers and other people interested in obtaining a deeper understanding of climate and weather.	With this manual, the youth construct their own instruments for measuring temperature & rainfall in water quality monitoring sites & carry out their meteorological observations.

4. Water Network and Online Information Exchange

During the three years of CLARA Project implementation, actions were carried out with the purpose of disseminating information and knowledge to the public in general, and advocating to the communities that they will be responsible for implementing CLARA. To do this, we developed promotional activities such as presentations to, and interviews with the various communications media. We also tried to achieve active information exchange among the coalition members and project participants in general, for which we used tools such as the online discussion forum, the CLARA website and the publication of online bulletins.

a. Developed CLARA Website

The CLARA website (<http://clara.ciceana.org.mx>) was developed by CICEANA to increase the exchange of information and communication among students, teachers and NGOs participating in CLARA, and to provide a focal point for the location of educational materials that could be used by teachers and students implementing CLARA.

Currently, the CLARA website provides, among other things, a glossary of water- and weather-related terms, an explanation section on how to do water quality and weather monitoring, and various links to water sites. These electronic pages have been an excellent tool for teachers and students as they start learning what a watershed is all about, and conduct their visual and chemical analysis of the water source.

A chat room, an online forum, a section where student's experiences are documented, listservers and FTP folders are part of the website in order to encourage communication among students in different groups and countries. All these different online tools have played a key role in the implementation of CLARA. For example, the FTP folders have been used to send large files, such as photographs and maps, over the Internet; the listservers and the chat rooms have improved our exchange of experiences. Three electronic forums were carried out during the second year of CLARA, and more were planned for the third year.

The website puts within reach of all CLARA participants a link and a unifying element for all coalition members, creating an opportunity for the distribution and exchange of information and communication, through:

- A section on events and news, where student experiences are documented and in which all program participants (youth, teachers and



Image 8: The CLARA website (<http://clara.ciceana.org.mx>) received 15108 hits up August 2003.

NGOs) can make known the program-related progress and experiences of their communities, thus making the information available to the entire coalition and all who are interested in conserving water.

- Technical and scientific information that complement the efforts of, and support both the project participants and the public in general, through a water, weather and related information glossary, and links to other useful web pages in these areas.
- Person-to-person interactive tools like the online forum and the chat room to animate communication among students in the groups in various countries. Among these are folders in FTP format that make it possible to exchange photos, maps and presentations that are generally presented in large files.
- We have worked with AED and EF to develop the structure and revise the content of the web page.

Access to the website increased over the three-year period of CLARA implementation, and the content of the website improved in quantity and quality. The CLARA website could become a landmark for educational information related to water.

b. Web Page Sections

The following are listed among the sections of the CLARA web page:

- “Educational materials,” for which we compiled a list of videos with environmental themes that CICEANA had and evaluated the links offered in this section.
- We revised the “Did you know?” section using a specialized bibliography that made it possible to obtain reliable and useful data, always seeking those that would be interesting and would attract the public’s attention at the same time that they would be informative.
- “About CLARA,” in collaboration with AED and EF; and “Green Methodology,” in collaboration with EF
- We revised the functionality and usefulness of the links among governmental institutions responsible for water questions that contained information about water quality criteria and standards for the “Sites of Interest” section
- We developed the applications necessary for administering this portal, which will be used in the “Get connected” sections (chat room and online forums)
- Interactive maps are developed for the “CLARA in Your Country” section.”

c. Electronic tools

Yahoo Messenger was used as a means of communicating, not only among students, teachers and NGOs, but also among staff of CICEANA, AED and Earth Force

participating in the program. The use of voice communication through Yahoo Messenger has been very useful and has saved money that otherwise would have been spent on phone calls.

The electronic tools have allowed teachers and students participating in CLARA to have discussions and exchange information which otherwise would have been limited or impossible because of the cost of traveling or using the telephone.

Utilizing the Internet as a resource and developing people's capacities to communicate through electronic means is new for many of the NGOs, teachers and students participating in CLARA. Also, the participants did not always have access to the Internet. In spite of the lack of an Internet culture (or how to use a computer) and infrastructure, the website has had a significant online forum.

d. Online Forums

The CLARA web page facilitated the implementation of online forums, bringing together coalition members and helping technical specialists, teachers and youth share ideas on topics of interest in real time. For most, this tool was a first-time experience.

Table 9: Online Forums Implemented thru the three years of implementation in CLARA

Forum	Participants	Objectives	Results
1 st "NGO Progress in CLARA Implementation" Nov. 26 – Dec. 05, 2001	19 CLARA members from Panama, El Salvador, Honduras, Costa Rica, Venezuela, Mexico & USA	<ul style="list-style-type: none"> Exchange of experiences, accomplishments & obstacles Assess results achieved in CLARA implementation 	<ul style="list-style-type: none"> CLARA NGO technical specialists shared experiences & practiced their knowledge of online tools in supporting youth, teachers in the future.
2 nd CLARA Discussion Forum, "CLARA Implementation Challenges in the Schools" April 22 – April 17, 2002.	Teachers in CLARA schools in El Salvador, Panama & Mexico	<ul style="list-style-type: none"> Promote sharing among CLARA NGOs & schools. Share experiences among the teachers in the various countries to enrich the application of the CLARA methodology. 	<ul style="list-style-type: none"> Exchange of experiences in CLARA implementation in the various schools Use of online communication media was practiced
3 rd CLARA Discussion Forum, "Youth Cultural Exchange," Sept. 02-30, 2002	CLARA youth in El Salvador & Mexico	<ul style="list-style-type: none"> Cultural exchange among youth in CLARA schools in the countries 	
Forum-Workshop, "Support to CLARA Implementation – Venezuela" March 18-21, 2003	Venezuelan teachers & technical specialists, & coalition members	<ul style="list-style-type: none"> Exchange of experiences in the implementation of the methodology in other countries 	<ul style="list-style-type: none"> Provided elements for improving & discovering web page potential:
Welcome to Mr. Antonio Garza, United States Ambassador to Mexico, & Mr. Paul White, USAID/Mexico Director March 28, 2003	Coalition members, CLARA youth & teachers	<ul style="list-style-type: none"> Welcome to Mr. Antonio Garza, United States Ambassador to Mexico, & Mr. Paul White, USAID/Mexico Director Bring them to participate in the project, its accomplishments & progress 	<ul style="list-style-type: none"> The Ambassador stated his interest in knowing more about CICEANA &, especially, about the CLARA Program. This is the first time that we will have the opportunity to know how much policy leaders are interested in programs like ours.
Preparation of the 2 nd workshop on "Coalition Consolidation & Sustainability," Mexico, May 2003	CLARA coalition members	<ul style="list-style-type: none"> Establish strategies for Mexico Workshop II Provide input to the coalition plan 	<ul style="list-style-type: none"> Inputs to the plan & key discussion points

II. PROJECT RESULTS & ACCOMPLISHMENTS

In this chapter, we present the achievements and accomplishments of the three years of CLARA implementation. These accomplishments are summarized below in the following areas and will be discussed in this chapter:

- A. Expansion of CLARA to other Latin American countries
- B. Training education-facilitators in CLARA methodology
- C. Sharing of experiences and activities led by youth
- D. CLARA in Action: Improving Water Quality
- E. CLARA impacts and accomplishments in NGOs, schools, youth, and communities
- F. CLARA's accomplishments in figures

A. Expansion Of Clara To Other Latin American Countries

When the Project started, it was thought that only two NGOs in El Salvador and Panama would be involved. However, CLARA was able to involve 8 NGOs in Latin America: 2 in Central America, 5 in Mexico, and 1 in Venezuela. This means that the Central American context, where the Project was conceived, expanded to Mexico and South America, which gave CLARA a Latin American connotation. The 8 CLARA partner organizations were the following:

Table 10: NGOs implementing CLARA

Country ²	Organization	Implementation Funding
El Salvador	Fundación para el Desarrollo de los Municipios de El Salvador, FUNDAMUNI	CLARA/Weather Funds
Panama	Parque Natural Metropolitano, PNM	CLARA Funds
Mexico	Cuerpos de Conservación Guanajuato, CCG	CLARA Seed Money
Mexico	Cuerpos de Conservación Mexicanos, Merida, CCM	CLARA/Weather Funds
Mexico	Centro de Estudios Ecológicos, CESE, Pátzcuaro	CLARA Seed Money
Mexico	Colegio de Biólogos y Ecólogos, COBIOTEC	Seed Money
Mexico	Parque Nacional Barranca del Cupatitzio	Own Funds
Venezuela	Red de Monitoreo de Calidad de Agua, Río Boconó, CEDINCO.	Own funds & related support

CICEANA also participated in Mexico during the second year of implementation as one of the implementing NGOs. However, its role changed so that it could continue strengthening the NGOs in electronic communications. On the other hand, in Quintana Roo, the CLARA implementation agreement with AED was implemented with the MIRC Network under the leadership of COBIOTEC. However, the other two NGOs that were part of the MIRC Network participated and supported COBIOTEC in the implementation of CLARA.

² Two NGOs from Honduras and one from Costa Rica participated in the first CLARA training workshop in Mexico. Both Peace Corps/Honduras and *Agua para el Pueblo* of Honduras made efforts to obtain funding and USAID support for CLARA implementation. Unfortunately, this was not possible; nevertheless, they constitute existing capacity for possible implementation in the near future.

B. Training Education - Facilitators In Clara Methodology

1. Youth Facilitators

In El Salvador, Panama, and Mexico, youth leaders became empowered to use the CLARA methodology. They are capable of conducting training sessions for other youth and teachers who have become involved as CLARA educators.

CLARA is a cross-cutting program in that it addresses a number of relevant social and teaching issues. It addresses civil participation, watershed protection and advocacy and affective/effective teaching methodology. This program offers teachers and students an incredible opportunity to expand their teaching and learning styles. The facilitators are not only delivering the CLARA curriculum, but are also exposing the participants to new ways of delivering instruction. Evelyn Rodriguez, USAID NEP, Feb 8th, 2002



Image 9: Amílcar and Sósimo, (both wearing white shirts in the foreground) are members of the group Defensores del Agua-CLARA. They facilitate the water quality monitoring activity for 28 teachers and students.

While mastery of the methodology is important for training others, the ability to communicate and self-confidence that the youth acquired in their participation in CLARA has given them the potential to be credible leaders-facilitators to other youth and adults.

In El Salvador, the youth of the group *Defensores del Agua* (Defenders of Water) participated as facilitators for the first time in the CLARA Implementation Training Workshop II, held in August 2002.

The participation of the youth facilitators, supported by their teachers, was valuable, both because of their capacity for managing the process of water monitoring and the development of the action plan, and because of the acquired experiences that they could transfer to other groups. Groups of teachers and youth from 12 new schools were successfully motivated into becoming involved with CLARA. There was a body of field experience that gave confidence to achieving similar results while working with the same resources and facing the same limitations.

"We have already begun to assemble the next CLARA AQUALIG group. I already have nine new participants, and a total of 15 who are receiving technical guidance from the AQUALIG girls. These groups will monitor three bodies of water: Lake Guerrero and Raudales Lagoon, both of which are manatee breeding areas, and Huay Pix Lagoon. The latter is where work is beginning with the population on how to use organic compost. This work is being done by other members of the AQUALIG group." Austrebertha Rojas, CLARA Group Teacher. CBYTIS 124. Quintana Roo, Mexico, 16, December 2003

2. CLARA Coordinators Lead Trainings In Other Countries/States

“This was the first time that I played the role of CLARA workshop facilitator but it helped me reinforce the methodology and think about how to improve it. In addition to the workshops, I compared the teachers who participated in the Quintana Roo workshop with those in Yucatán. The teachers at the latter achieved a higher level of commitment, as well as forging linkages among themselves,” stated Blanca Azucena Gual, CLARA-COBIOTEC Coordinator, after her experience as facilitator in Yucatán, Mexico.

3. Challenges

The challenges that the coordinators faced and overcame satisfactorily are illustrated by the descriptions of Blanca Azucena Gual, Quintana Roo, Mexico, and Jaime Ascencio, El Salvador, after their experiences facilitating the CLARA implementation workshop in Yucatán.

- “In thinking about my being a facilitator, my main challenge was to involve the teachers and kids in the CLARA methodology. But I did not take into account the involvement of the NGO in the methodology. At the end, my efforts were directed toward teachers, youth, and technical specialists.” *Blanca Azucena Gual, Mexico*
- “Be prepared for the activity in terms of handling the methodology. It is true that you will receive logistical and materials support that will strengthen your skills. However, the challenges both before and after give you understanding and translate it into a work dynamic and expected results.”
- “Another important challenge was breaking the traditional teachers’ ways of doing things so that when each teacher was making his or her implementation plans, they showed surprising change, their plans incorporated a facilitation role and a change from directing processes to constructing processes with the CLARA group.” *Jaime Ascencio, El Salvador*



Image 10: Jaime Ascencio, El Salvador CLARA Coordinator, shares with a group of teachers during web surfing practice on the CLARA web page.

C. Sharing Of Experiences And Activities Led By Youth

CLARA youth and teachers organized and facilitated meetings in Mexico, El Salvador and Panama to share experiences, knowledge and successes.

The ways in which the groups carried out their exchange meetings were marked by differing details based on ages, educational levels and expectations. In this sense, in Panama, the meeting was led by private sector groups and was more oriented toward the dissemination of experiences through exposition panels.



Image 11: Young leaders at the First CLARA Fair of Achievements organized by FUNDAMUNI and the Ministry of the Environment in El Salvador.

Meanwhile, in El Salvador, the groups participating in the meeting were for the most part from rural areas. So the meeting orientation was similar to that of the meeting for the Panamanian groups, highlighting the creativity of the youth in overcoming their economic limitations and creating panels of their experiences and conceptions of their watershed. The spirit of the meeting was put into the context of an “Achievement Fair.” It should be noted that most of the youth attending this gathering were 12 to 18 years of age.



Image 12: Youth leaders chair the Quintana Roo CLARA gathering.

1. CLARA Gathering - Quintana Roo

In Quintana Roo, Mexico, CLARA youth, most of whom were from 15 to 20 years old, played a very active role in the meeting. They facilitated plenary sessions and work tables in which 100 youth participated. The leaders’ idea was to create a local network, identifying support elements in the development of activities to improve water quality and marine-coastal life in Chetumal Bay.



Image 14: Authorities attending the CLARA-Quintana Roo gathering listen to a Squalos Group presentation. Representatives of the Committee for the Protection of Chetumal Bay invited the youth to present their work. As of that moment, they received support from the National Navy.



Image 13: Youth show other youth their youth action plan for the Bay.

In the gatherings, the youth had the opportunity to disseminate their findings, experiences and activities to key audiences.

D. Clara In Action: Improving Water Quality



Image 15: *The Director of Environmental Education from the Office of the Secretary of Education observes a stand at the CLARA-Panama meeting.*

More than 45,000 people from Central America and Mexico have benefited from activities designed and implemented by youth to improve water quality in their communities and protect the watersheds where they live. The following are some of the civic action success stories from the CLARA program.

1. Giving Back Life To a River and Benefiting People

8,235 people have benefited from the actions of students concerned about their river. These CLARA students found widely varying levels of dissolved oxygen in conjunction with low levels of temperature in the Gualache River in El Salvador.

After learning about the effects of erosion on the water, these CLARA students coordinated a reforestation campaign to plant trees 100 meters on both sides of the river that would then help stabilize its water quality. These young students will continue their reforestation efforts on both sides of the river with native trees that they are producing in the school's greenhouse.

2. Harvesting Rainwater for Human Consumption

150 students and approximately 15 families have benefited from the actions of the CLARA group in the Cantón El Palmo, El Salvador. While monitoring the quality of water from a faraway well, they realized that their school lacked even basic access to water.

The group, together with the teacher and technician, reactivated a rainwater tank (with a capacity of 70 m³). To ensure that the water quality would remain clean and safe, they complemented their actions with educational activities targeting other students so that the latter could learn about good water use and management.



Image 16: *Youth move the rainwater tank.*

Today, the rainwater tank has become of great importance to the community, especially during the summer when water consumption increases.

3. CLARA Raising Awareness through Communications

a. Forest Animals Protected by CLARA Youth in Panama

The CLARA Colegio Yitzhak Rabin group, consisting of 12 boys and 8 girls, perceived that one of the biggest problems of their watershed was dead animals in the street.

Because of fast driving and drivers' lack of consideration, forest animals crossing the highway are hit in the Clayton area, where a large number of universities, schools and offices are located. For this reason, there is a lot of daily traffic in the area.

The youth decided to carry out a campaign directed at drivers so as to reduce the number of animals hit. They designed posters with the support of an art teacher.

One poster with the message, "Bridge coming, don't drive like an animal" was developed. Another shows an armadillo, an animal often hit on the highway.

The group received the help of CLARA seed money (\$593.35) and carried out the negotiations to obtain permission from the Inter-Ocean Regional Authority to publicize the posters. In September 2003, they put up the first 3 on the Clayton road.

With this campaign, the youth hoped to protect the forest animal species representative of Panama, some of which are endangered: "Gato Solos," "Titi" Monkey, Opossum, "Oso Perezoso," Giant Anteater, Iguana and "Boas."



Image 17: CLARA road sign.



Image 18: Another CLARA road sign.



Image 19: Youth in the Radio Ecológica la Voz del Mayab Studio.

The Colegio Yitzhak Rabin facilitated a site on its web page entitled, "CLARA Program: Time for Action." In navigating it, one finds their work history and more details on the campaign to protect the forest fauna. Visit: <http://cirabin.digitalbrain.com/cirabin/accounts/staff/casandra/PROYECTOS%20SEC.%202003/CARTEL%20CLARA>

b. Youth Broadcast for Clean Water

50 youth (35 women and 15 men) from 13 CLARA schools have been the voice for the radio program "Agua-CLARA" (Water-CLARA). For 30 minutes, the youth disseminate their experiences and progress in conserving the water of their school community and their communities in general.

At least 5,000 people listen to these youth one day a week on *Radio Ecológica la Voz del Mayab*, 102.3 FM. The station receives the enthusiastic youth, who, with the support of Rocío Viveros from *Cuerpos de Conservación Mexicanos* (CCM), speak about, "The use of water in daily urban activities;" "Water use by rural communities;" "Discovering the danger of bad water quality in schools;" "Student health, diarrheal diseases and water

quality;" "A call for help to the authorities of the rural community of Sierra Papacal to disinfect the community's drinking water " and other topics of interest concerning water as a resource.

Youth who are articulate and confident before the microphone take phone calls from their audience and air their concerns and comments. The CLARA- Yucatán youth have become radio pioneers who, because of their excellence, reach thousands of people. Their audience includes classmates, teachers, friends and the community.

The *Agua-CLARA* radio program aired for the first time in April 2003 as a pilot program which was very well received by the public. In response, Radio Mayad will continue providing the airtime free so that the youth, with CCM technical specialists and their teachers, can continue speaking out on the air for clean water and inviting more youth and adults to become involved in the activities aimed at caring for water in the Yucatán.

c. Youth Raise Awareness Among Other Youth



Image 20: *Youth in the Radio Ecológica la Voz del Mayab Studio.*

This group, led by Carolle Rohim, leader of the CLARA San Cristóbal Episcopal Institute group, noted major contamination problems in the Abajo River, but the main problem they found was the excess of solid waste in the watershed, a product of the lack of community awareness and the tendency to throw trash in the streets.

During Science Week 2002, they set up an exposition with the results of their monitoring events and conducted an activity illustrating the connections between policies, practices and pollution, which had a lot of impact. More than 2,000 visitors were informed by the CLARA youth.

Additionally, they presented talks on watershed conservation and the adequate management of solid waste. The youth prepared to speak about solid waste management by doing research in books and on the Internet, and obtained the support of a mother who was a specialist in water contamination.



Image 21: *Youth in the Radio Ecológica la Voz del Mayab Studio.*

As their main campaign, they prepared a talk on the problem of solid waste dumped in the parishes of the Abajo River. However, for reasons beyond their control and the lack of help from the parishes and churches, they decided to give their talks in primary schools in the community. They gave the talks in a way that the children could take the useful information to their homes so that it could be seen by their families.

They also designed an educational brochure about solid waste and recycling that was distributed. 2,000 brochures and 1,000 decals were produced with CLARA seed money (\$622.33). To supplement their campaign, the youth worked with the Office of the Mayor of the Municipality of Panama for the latter to donate trash bags, on which the youth placed the decals for distribution in their schools and in primary schools where their messages were being given.

d. Presentation to the Peace Corps: Beyond Awareness



Image 22: *Sósimo directed the water quality monitoring carried out by Peace Corps volunteers.*

Three youth leaders of the “*Defensores del Agua*” group of the Eleanor Roosevelt School, accompanied by their teacher-facilitators, presented CLARA to a group of Peace Corps Volunteers in El Salvador.

CLARA was invited by the Water, Sanitation, and Health Program to participate in the volunteer refresher workshop carried out in Laguna de Apaneca, Ahuachapán. The youth prepared their presentation on how to learn about one’s watershed, prioritize problems, and take action involving the community.

The youth were transported to Laguna de Apaneca by FUNDAMUNI, a CLARA partner NGO in El Salvador. At the lagoon, 25 Peace Corps volunteers monitored water quality. This activity made it possible for them to know water conditions at the lagoon as an example of what the youth are capable of doing with a simple, practical method.

The exchange between the volunteers and the youth of the *Defensores del Agua* group was fruitful, both for everyone’s learning and for the interest of the Peace Corps in supporting the work to include more schools and actors in their efforts.

In April 2003, *Jean Murry* was named the first Peace Corps volunteer in El Salvador. For 2 years, she will work with the youth living in El Tablón community, San Francisco Javier, Usulután.



Image 23: *Jean Murry, together with Jaime Ascencio, CLARA Coordinator, El Salvador, Angelina Zamboni (center), Peace Corps Program Director for Water and Sanitation, and representatives of the Roosevelt School and the community.*

The *Defensores del Agua* efforts to make Jean's assignment to their community possible have been supported by the educational authorities of their school, the Board of Directors of the El Tablón community and FUNDAMUNI, thus benefiting 1,290 people.

e. Motivating their Classmates to Protect Water Quality

The CLARA group of Instituto Comercial Panama, consisting of 23 students, decided to take action on the problem of solid waste.

The youth launched their campaign, preparing a conference that was directed by all members of the group to reach 3,600 students in the school. The message that they disseminated was oriented toward making their classmates aware that they should not throw garbage in the street and should keep the town clean, highlighting the importance of not throwing garbage in the rivers.

The group carried out group exercises and set up exhibitions to make their presentations attractive and achieve greater understanding of the messages by their classmates.

It is important to highlight the help received from the high school authorities, who helped them obtain materials to prepare their presentations, secured the school's auditorium for the presentation, and gave class time to the youth to give the presentations to their classmates.

The authorities' response and the interest of the classmates was significant for the CLARA group, especially considering that the school's focus is on business and, as such, was not oriented toward environmental topics.

f. Informing Others as a Spur to Action

West of Panama City is the town of Arraiján, and it is here that the 6th graders at the Charles Darwin Bilingual Institute have been monitoring the Cáceres River watershed. The students identified a garbage problem in the community – the citizens did not adequately manage their trash, and the collection system was inefficient.

The group decided to talk to local authorities, including the mayor of the Arraiján, as well as to the Director of the Sewers and Aqueducts Institute. The students informed them of the result of their monitoring program, and presented several alternatives to solve the problem, including passing a new law that would require people to place their trash in high cages, out of the reach of animals. The number of people benefited was 25,091.

g. Raising Awareness to Protect the Chilibre River

More than 1,500 people were informed by the CLARA youth about the importance of protecting the Chilibre River. The youth participated in the Science and Technology Fair of the Office of the National Secretary of Science and Technology (SENACYT).

The CLARA group was asked by the educational authorities to represent their school, the Chilibre First Cycle. The motivated youth decided to make known the problem of river contamination. To do this, they used models showing the existing contamination problems in the river by comparing them to a river and community free from contamination.

To reinforce the message of the models, the youth distributed 500 brochures on the problems of the Chilibre River. The educational authorities, motivated by the CLARA youths' enthusiasm and capacity, funded the production of the brochures and the development of the models.

With the experience of the fair, the group has been motivated to continue its educational labor of raising awareness among children in the primary schools of its community. For this, the youth developed its action plan to develop its Awareness Campaign and collected seed money for the CLARA Project in the amount of \$336.67. They have already launched the plan, giving a talk and providing brochures on the importance of protecting the Chilibre River.

E. Clara Impacts And Accomplishments Among NGOs, The School, Youth And The Community

CLARA's impacts and relevant accomplishments during the life of the project are presented in the sections corresponding to the actors: non-governmental organizations, teachers, and youth involved.

1. Accomplishments of Partner NGOs

The impacts and accomplishments are shown through the responses and comments of the partner NGO coordinators to the survey, "Let's discuss what we've learned in CLARA".

For the coordinators, as representatives of the organizations, the impacts and relevant accomplishments are summarized in the following aspects:

- Development of an environmental education program recognized and supported by the Ministry of Education for its implementation in most countries.
- Development of institutional and community partnerships, providing significant support to the implementation of activities by CLARA youth, such as the partnership of FUNDAMUNI and the AGUA/CARE/USAID/El Salvador and Peace Corps Project.

COBIOTEC is seen as the only NGO with an environmental education program that goes beyond traditional environmental education. Education per se prepares and guides us for the future. Recognition and doors have been opened in many instances, forging new partnerships in marketing products in the way taught by CLARA.

- The attention of the local, regional, and national mass media in promoting, mobilizing, and disseminating activities and progress. Media such as Radio Mayab in Yucatán, Mexico, which gave two hours/week of airtime to the CLARA youth.
- Increase in NGO capacity to forge linkages with other non-governmental organizations, schools, governmental institutions, private enterprise, and the community.
- Development by each partner NGO of a vision for working as part of a coalition based on cooperation and joint responsibility.

These points were verified in the results of the survey discussed above. The most significant results are presented in the diagram on the next page.

It is important to mention that the diagrams are presented in terms of the 7 NGOs active at the time that the survey was carried out, with 4 funded by CLARA and 3 using their own funding. This was the case for *Cuerpos de Conservación*, Guanajuato, Mexico; CEDINCO, Venezuela, and *Parque Barranca Cupatitzio*, whose spokespersons were CICEANA technical specialists.

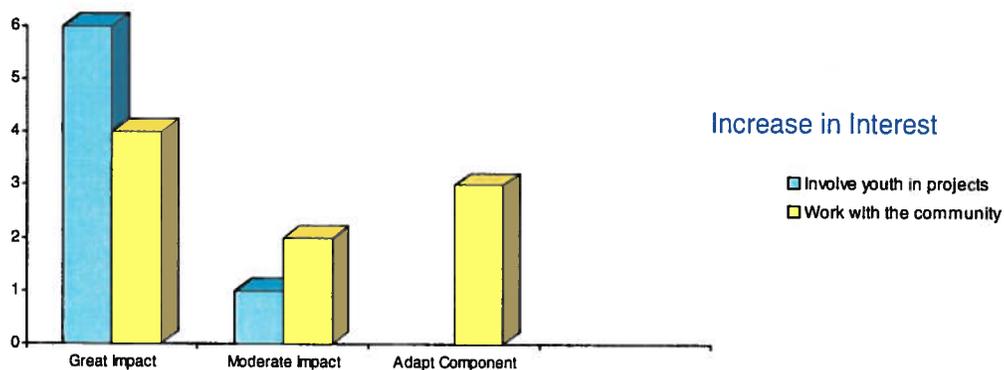
a. Interest Generated in NGO Partners

The institutional impact in terms of interest and increase in capacity among the NGO partners, as well as the national and international recognition that something is gained by being a CLARA partner, were, for the most part, of great and moderate impact.

b. Achievement in Terms of Interest and Capability Generated

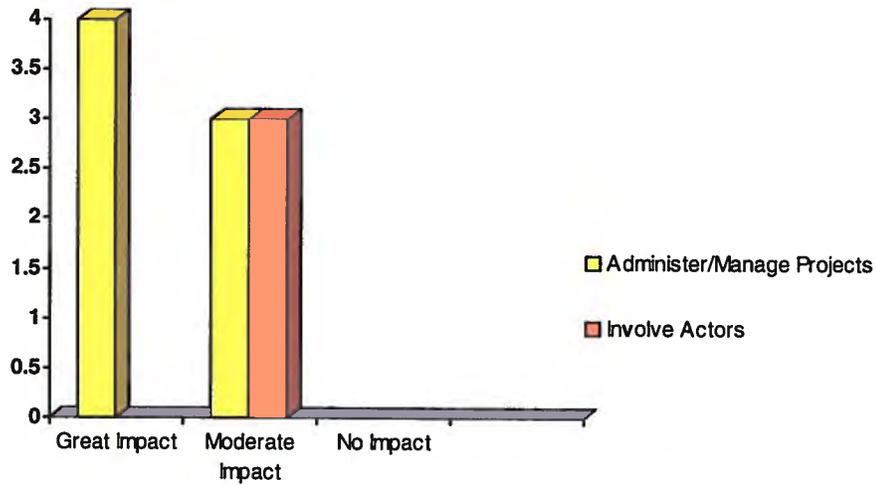
The following diagram presents NGO interest in involving the youth as actors and project managers, and in working with the community, or in adapting the community component to projects:

Diagram 4: NGO interest in involving the youth project managers and working with the community



The capacity to incorporate actors from various sectors ended up having significant impact on building NGO capacity, as well as the capacity to manage projects like CLARA.

Diagram 5: NGO capabilities to administer and involve other actors



c. Accomplishments in Terms of Recognition

The CLARA coordinators have discerned an increase in recognition of the organization in its capacity to develop environmental education projects and in managing watershed projects. In the same way, impacts of great importance have been generated in recognition of the organization internationally and nationally.

Diagram 6: NGO increase in recognition of the organization because of CLARA activities

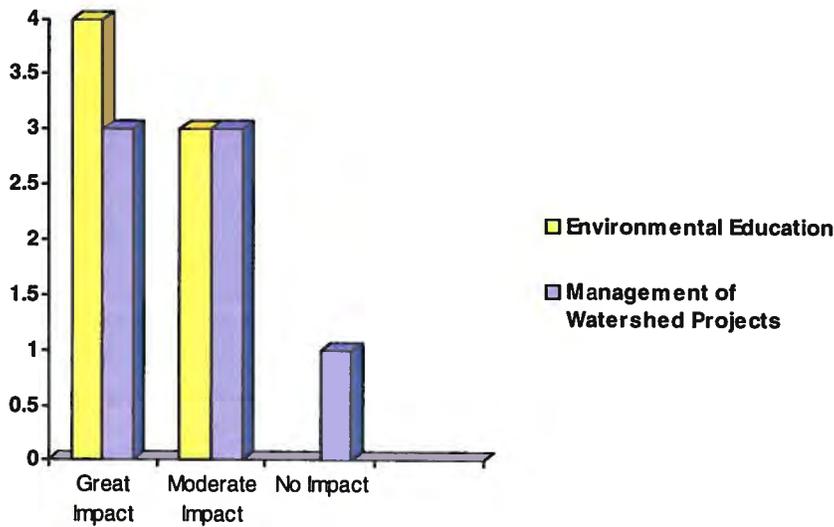
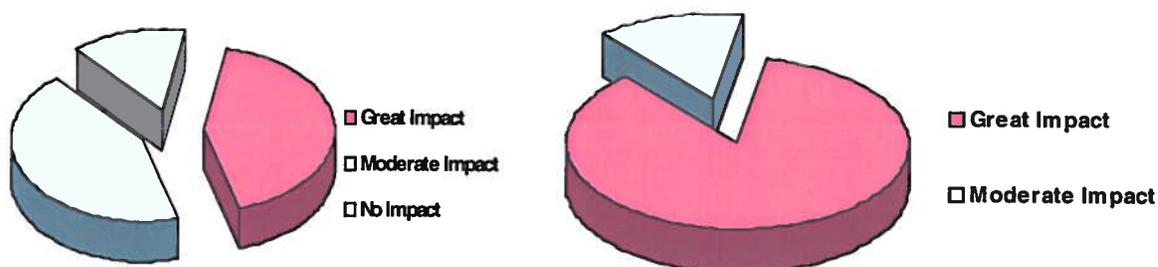


Diagram 7: NGO recognition of the organization internationally and nationally



2. Accomplishments in the School and in the Teaching-Learning Process

In this section, we present CLARA impacts and accomplishments as expressed by CLARA coordinators and teachers through a poll taken both to identify links between CLARA and the educational systems, and to ascertain the support that CLARA has provided to the teaching-learning process in the areas of the environment, values training, and other areas.

- “CLARA contributes to integrated training since its main objective is leadership training. This implies education for management, decision-making, proposing policies, promoting, and disseminating activities, and negotiating and achieving collective well-being. All these are learning experiences that are not included in the usual content of our academic programs at any educational level”.
- “CLARA contributes to consolidating education for life. It is active, participatory, and linked to the daily life of the individual who is learning”.
- “The CLARA methodology allows for that kind of proactive youth participation in the solution of “real” local problems from the classroom, linking content and integrating significant learning experiences”.
- “CLARA makes it possible for me to systematize the process in my role as facilitator of knowledge since it provides me with tools for my academic work and my function as social activist by bringing together those two facets of my work. Moreover, the whole methodology proposed is applicable to other areas of one’s personal and professional life, which gives it great practical value.” Renzo Herrera, CLARA Educator-Venezuela.



Image 24: The CLARA Youth Group, General Homero Ayala Basic Education Center in Panama, during a discussion circle with their teacher, Edgardo E. Gutiérrez V.

- “In Mexico, there is currently no program at preparatory level that deals with environmental education as a study program. This represents a serious problem since if you don’t know much about natural resources in the area, you don’t know how to conserve them. For this reason, I consider CLARA to be an essential tool for orienting the youth in making decisions about the best method for conserving their natural resources.” *Autrebertha Minger, CLARA Educator, Quintana Roo, Mexico.*
- “A different cohesion between the teacher and his student group provides a confidence level that translates into active participation by the students.
- “Converting theoretical classes into practical learning is measured in the interest that you observe in the youth through program monitoring.” *Fernando Herrera, CLARA Coordinator-Venezuela.*

a. Accomplishments of the CLARA Educators

“As a CLARA educator, I’ve been able to make my classes more active, and it has helped me involve the youth in projects that are beneficial to their community.” *Autrebertha Minger, CLARA educator, Quintana Roo, Mexico.*

“The greatest accomplishment of the teachers is having taken CLARA into their own hands and taking responsibility for its follow-up. It is also an accomplishment that the teachers consider CLARA as a valid tool for integrating the educational curricula and as a different methodology in the environmental focus and the work outside the school with outreach to the community. Jaime Ascencio, CLARA Coordinator CLARA El Salvador.

In CLARA, teachers played a key role. They took the methodology to the classroom, turning it into an alternative educational program, which broadened CLARA’s objectives, focused mainly on encouraging the capacities of youth to become water quality leaders.

In addition to CLARA’s accomplishments as a tool for building new knowledge, the generation of competence and values was also significant, stated Iris de Cruix, Colegio Anglo Mexicano, Bella Vista District, Panama City, Panama.

“As an educator, I’ve learned to organize the environmental education work with the team and, with the training I’ve received, I’ve also won the confidence and esteem of the boys and girls who participate in the program. They have allowed me to be their friend as well and guide them in finding solutions to difficulties and to celebrate their accomplishments with them.”

The graphs below present the results from the survey, “Let’s discuss CLARA and you,” in which CLARA teachers assessed the project’s impacts on various areas:

Diagram 8: Impacts on the CLARA Educator's Work

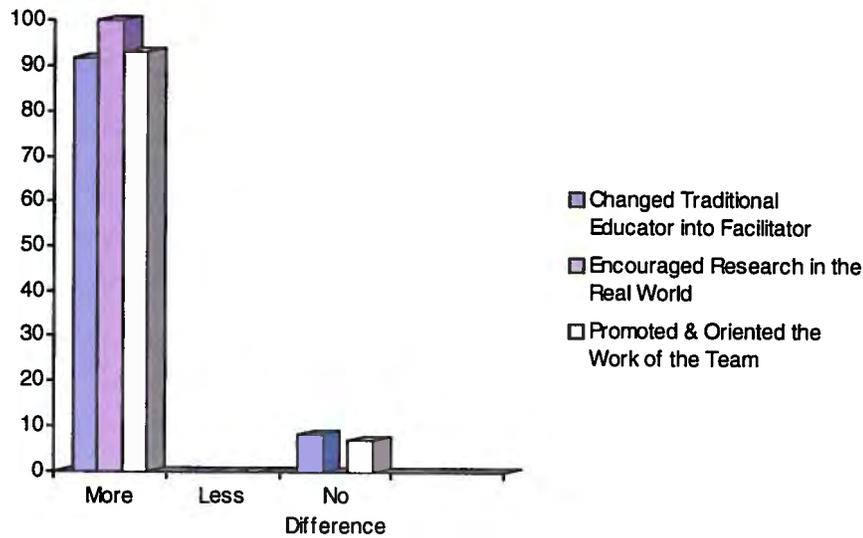
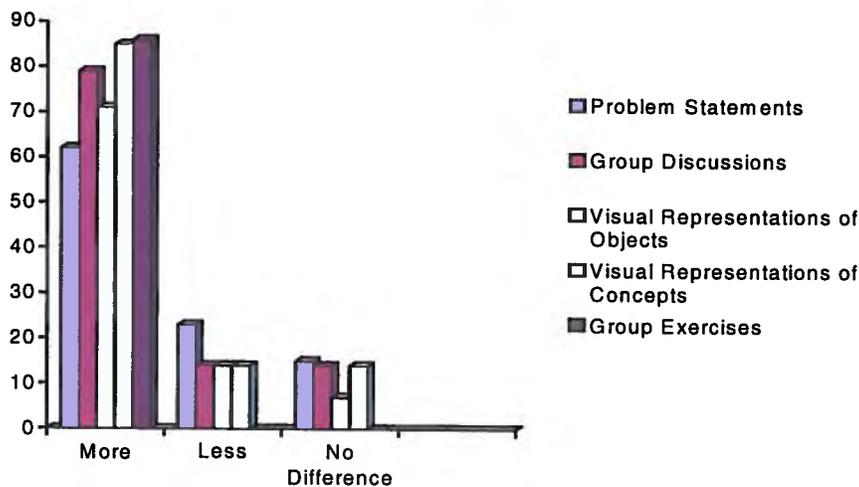


Diagram 9: Capacity to Use Teaching Strategies



3. CLARA and Youth Leaders for Water

“Not only have my students acquired more knowledge about their watershed and community’s water situation, they have developed abilities and skills that they apply in other subjects and in their daily lives. They are more confident in themselves since they know that they can do things that they themselves doubted that they could do. They have dared to speak in public and openly defend their points of view. They see themselves as being responsible for the future of the society to which they belong.” *Iris de Cruix, Colegio Anglo Mexicano. Bella Vista District, Panama City, Panama*



Image 25: Young Salvadorans follow the steps in the water quality monitoring methodology by themselves.

The CLARA youth, according to coordinators and teachers, have adopted a new attitude with respect to conserving water and have been leaders in activities that contribute to water and environmental conservation. They have greater self-confidence and better teamwork skills.

CLARA has awakened in them an interest in research, an attitude that has been seen in their search for information, both in CLARA and their schoolwork.

They feel that they are an important part of a project, as has been observed in the exhibit activities in El Salvador, Panama and Mexico.

Diagram 9: Percentage of Youth Participating

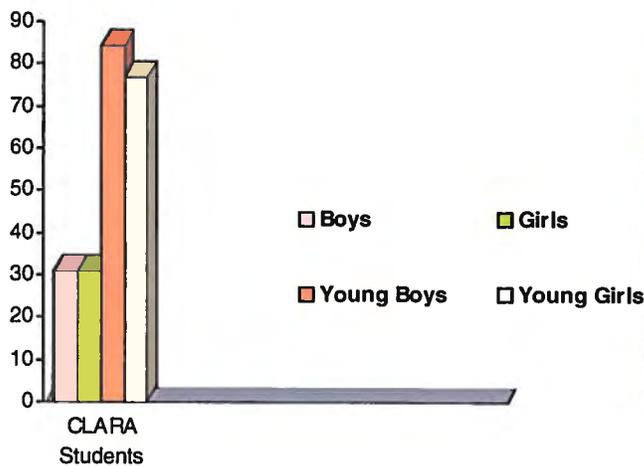
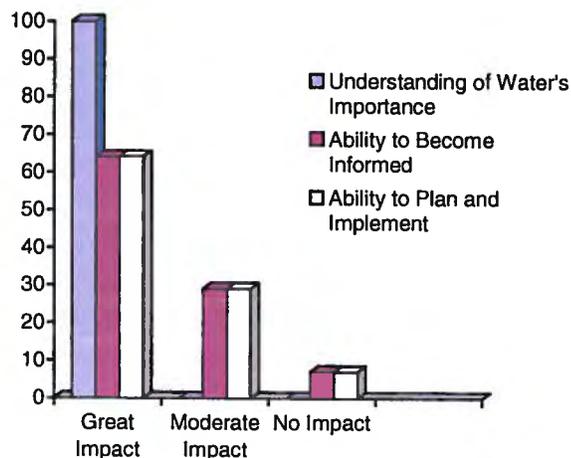


Image 26: CLARA students participate in water testing.

More than 1,500 children and youth have actively participated in CLARA. Some of them have, through their responses to the survey, “Let’s talk with CLARA,” shared their knowledge, abilities and motivations. This can be shown in 3 sentences:

- Able to help in water quality and raise awareness among those with whom they collaborate in this project.

Diagram 10: Teacher’s perception of the impact of CLARA on youth’s knowledge and abilities

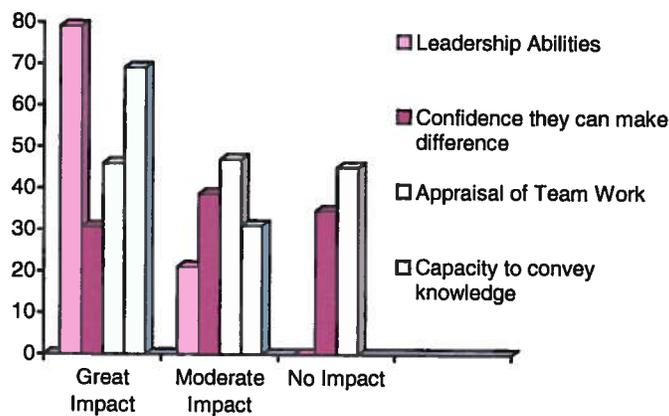


- More confident and motivated in conserving water.
- Capable of overcoming great challenges and relate to more people.

The above graph presents CLARA teacher’s perceptions in the areas of knowledge acquisition, local awareness, and the abilities that students have developed for planning and implementing community projects.

The following graphs present the results related to the acquisition of leadership skills and abilities, appraisal of the work in teams, and the capacity to convey one’s knowledge to other youth, parents, friends and neighbors, as well as a very important aspect: the confidence that they can make a difference in their community.

Diagram 11: Teacher’s perception of the impact of CLARA on youth’s leadership skills and abilities



Parallel to teacher’s perceptions, the youth also stated an increased ability after CLARA to work with classmates, teachers, community leaders, technical specialists, and other adults to solve watershed problems.

Diagram 12: In their opinion, CLARA youth can work with different actors for their watersheds

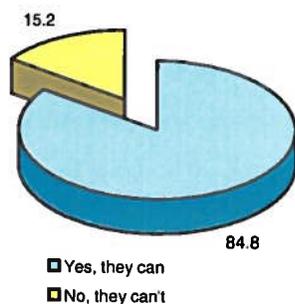
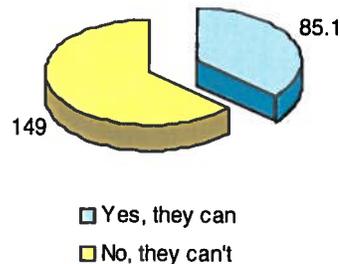


Diagram 13: CLARA youth can convince other youth and adults to do something for their watershed



4. CLARA Accomplishments in the Community

According to CLARA coordinators, the project had a moderate impact in terms of community response, both in funding and/or in-kind support, and in its degree of participation. However, they consider that knowledge of environmental problems and sense of personal responsibility have increased.

Moreover, CLARA has had great impact in increasing the communities' confidence in the youth and their abilities to persuade others to actively engage in improving the environment.

F. Clara's Accomplishments In Figures

The following table presents the number of technical specialists, educators, students, observers, and community members who participated directly in CLARA interventions and/or benefited from them.

**Table 11: Project Training Outputs
Number of People Trained Through 2003**

Country	NGO CLARA Trainers	Educators Trained	Students Trained	Others	Total # (minus dropouts)
61	22	135	268	89	514

**Table 12: Project Implementation Outputs
Actively Participating Through 2003**

Country	NGO CLARA Participating	Educators Participating	Students Participating	Total
Total	13	115	1512	1640

**Table 13: Project Implementation Outputs
Number of CLARA Schools and Groups Through 2003**

Country	Number of Schools	Number of Groups
Panama	16	16
EL Salvador	18	18
Quintana Roo	3	3
Pátzcuaro	5	5
Guanajuato	3	3
Yucatán	14	23
Venezuela	28	28
Total	87	96

**Table 14: Project Implementation Outputs
Beneficiary Population of CLARA Group Actions**

Country	Beneficiaries
Panama	5,450
EL Salvador	11,350
Quintana Roo	4,100
Pátzcuaro	6,500
Guanajuato	3,600
Yucatán	14,000
Total	45,000

**Table 15: Project Implementation Outputs
Number Receiving Messages**

Country	Comment	Coverage
Student population reached through CLARA activities		
Panamá	total student population	5,450
EL Salvador	total student population	6,883
Quintana Roo	total student population	4100
Pátzcuaro	total student population	6,500
Guanajuato	total student population	3600
Yucatán	total student population	19600
Venezuela	total student population	4,600
Newspapers		
El Salvador	Guaquin	81500
El Salvador	El Diario de Hoy	81500
Uruapan, Michocan	El Sol de Uruapan	10,000
Uruapan, Michocan	La Voz de Michoacán	10,000
Pátzcuaro, Michoacan	La Voz de Michoacán	50,000
Pátzcuaro, Michoacan	4o. Poder de Michoacán	5,000
Uruapan, Michocan	ABC de Michoacán	10,000
Uruapan, Michocan	El Sol de Uruapan	10,000
Pátzcuaro, Michoacan	La Voz de Michoacán	50,000
Uruapan, Michocan	La Opinión de Michoacán	50,000
Uruapan, Michocan	ABC de Michoacán	20,000
Uruapan, Michocan	La Voz de Michoacán	50,000
Uruapan, Michocan	El Sol de Uruapan	10,000
Uruapan, Michocan	La Voz de Michoacán	10,000

Country	Comment	Coverage
Yucatan	El diario de Yucatán	180000
Yucatan	El mundo al día	120000
Yucatan	TV Azteca Regional	50000
Yucatan	La Radio	
Hits on the website		15108
Presentations		
CLARA presentation 9/6/2002CECyTEM	Daniel Marquez, Eduardo Moreno, Hazett Cervantes, Norma Flores	5
Repaso de CLARA 9/7/2002 Uruapan, Mich.Parque Nacional "Barranca del Cupatitzio"	Eduardo Moreno, Hazett Cervantes	20
Presentación de CLARA 9/9/2002 Morelia Mich.Secretaria de Educación del Estado de Michoacán.	Daniel Marquez, Eduardo Moreno, Hazett Cervantes, Norma Flores	10
Repaso de CLARA 9/9/2002Pátzcuaro, Mich.Centro de Estudios Sociales y Ecológicos A.C.	Eduardo Moreno, Hazett Cervantes	20
Presentación de CLARA 9/10/2002Pátzcuaro, Mich.CBTIS 94	Jóvenes CLARA del CBTIS, teachers Mayela Medina and Eduardo Moreno	1500
Presentación de CLARA 9/10/2002Pátzcuaro, MichEscuela Preparatoria "Silviano Carrillo"	maestro Javier Huanosta, Daniel Marquez y Eduardo Moreno	50
Presentación de CLARA 9/12/2002Uruapan, Mich.Escuela de Guardas Forestales (CECFOR N. 01)	teacher Jesús Chávez Barajas, Eduardo Moreno, and Hazett Cervantes	60
Presentación de CLARA Uruapan, Mich. 9/12/2002Instituto Tecnológico Superior de Uruapan	Eduardo Moreno, Monica Jiménez, José Luis Miranda, Hazett Cervantes	40
Repaso de CLARA9/13/2002 Morelia	Eduardo Moreno, Mayela Medina, Daniel Marquez, Hazett Cervantes, Norma	15

Country	Comment	Coverage
Mich.CECyTEM	Flores	
Presentación de CLARA 9/17/2002Uruapan, Mich.Universidad Don Vasco	Eduardo Moreno	15
Presentación de CLARA 9/18/2002 Morelia Mich.Casa de Gobierno del Estado de Michoacán	Eduardo Moreno	50
Presentación Protegiendo la Cuenca 9/22/2002C N.S de Lourdes	C N.S de Lourdes Angel Tribaldos T	180
Presentación Protegiendo la Cuenca9/29/2002I.E. San Cristóbal	I.E. San CristóbalAngel Tribaldos T	140
Charla: Ayudemos a Cuidar el Agua	Colegio Nuestra Señora de Lourdes- Angel Tribaldos	180
Conferencia: Importancia de la Protección de la Cuenca	Centro de Enseñanza Básica General Monseñor - Panamá	150
Conferencia: Importancia de la Protección de la Cuenca	Colegio Internacional Saint George- Panamá	80
Charla: Ayudemos a Cuidar el Agua	FAO- Ministerio de Educación- Panamá	120
Charla: Ayudemos a Cuidar el Agua	FAO- Ministerio de Educación-Panamá	150
Charla: Ayudemos a Cuidar el Agua	Instituto Bilingüe Charles Darwin-Panamá	60
Conferencia: La Basura un Problema Ético	Colegio Javier-Panamá	210
GRAND TOTAL		865,946

IV. SUSTAINABILITY OF CLARA INTERVENTIONS

The level of funding provided to the NGOs involved in CLARA was not sufficient to provide for continued involvement in water monitoring, implementation of activities, and participation in the coalition itself. The NGOs needed to identify new sources of support. In this process, they faced major challenges in trying to build a sustainable strategy for CLARA. Some of these included:

- A lack of experience in the CLARA technical coordinators in the training of partnerships, fundraising, and strategic planning
- The NGOs were unaware that fundraising is a process that requires constant exercise and imitation to know how to do it well.
- The NGOs tended to request funding only from governments or international donors.
- Normally, NGO staff covered all the organization's operational functions, in addition to fundraising.
- The NGOs tended to request small amounts for certain materials or activities, instead of sizable grants.
- NGOs lacked institutional compliance with respect to their legal structure.

AED's strategy to help overcome these challenges involved strengthening the NGOs' ability to develop new approaches that would enable them to twin resources or collaborate with an array of private-sector entities, government agencies, and other NGOs. AED provided two tailored trainings which focused on increasing the NGOs in-house and collective fundraising capabilities to achieve long-term financial stability and sustain their efforts to champion the cause of clean and adequate water supplies. In addition, AED provided technical assistance in negotiations, collaboration agreements, proposal writing, and fundraising strategy development.

Table 16: Two-year* Sustainability Strategy for CLARA NGOs (2000 – 2003)

Major program activities	Phase I	Phase II	Phase III	Phase IV
Implementation of CLARA	Develop plan of action NGO coordinators get acquainted with the CLARA methodology	Implement CLARA Establish collaboration mechanism with schools	Monitor results of the first training workshop & implementation	Evaluate program outcomes Celebrate success
Building Strategic Partnerships		Develop strategic partnerships	Seek new strategic partnerships & formalize collaborations	Evaluate results stemming from the formation of strategic alliances
Developing Fundraising Capabilities			Develop a fundraising & marketing strategy Identify institutional strengths, strategies & techniques to do fundraising Share experience, knowledge & techniques for fundraising	Identify donors Develop a proposal Receive training on the principles of fundraising & social marketing

*As can be seen from this table, the NGOs had only two years to implement CLARA. Even though CLARA started in September 2000, the NGOs did not start implementing CLARA until mid-2001 (the end date of the project was September 2003). This is an important factor considering that the participating NGOs first needed to become as proficient as possible with the CLARA methodology. While strong emphasis was placed on developing and formalizing strategic partnerships and alliances from the beginning of the project, the strengthening of NGO fundraising skills was left for the last two phases of CLARA implementation.

The following was CLARA’s approach to keeping portions of the coalition viable once the three-year period had run its course:

- 4.1 Form strategic alliances and partnerships with local organizations.
- 4.2 Build the fundraising capabilities of NGO leadership.
- 4.3 Leverage private resources and provide technical assistance in developing a fundraising strategy.

This chapter will explain the activities that were developed under each of the above tasks, and during the life of the CLARA Project.

The last section of this chapter, 4.4, The Future of CLARA, will explain the results of these activities and describe how the CLARA methodology will be continued in the future.

A. Strategic Alliances & Partnerships With Local Organizations.

To build support for a youth project, program managers must inform policymakers and community leaders, as well as potential collaborators, partner or twin resources, to maximize the impact of development interventions. In CLARA, major efforts were made

to identify organizations that presented unique opportunities for collaboration which could supplement funds required for implementation and strengthen the CLARA methodology.

By the end of 2003, CLARA partners were involved in 41 strategic alliances. Some will last after CLARA’s period of implementation, and others were one-time collaboration efforts for specific purposes. Table xxx provides detailed information on the partnerships formed and their results.

Table 17: Partner Profile

NGOs formed partnerships with:	El Salvador	Panama	Mexico	Venezuela	Strategic Partnerships TOTAL
Local NGOs	2	1	4		7
Academia	1		5	2	8
Government Institutions	2	1	13	5	21
Private Sector	1		2	1	4
Foundations	1				1
TOTAL	7	2	24	8	41

Analyzing the table above, we can see that the CLARA NGOs had a tendency to form alliances with different government offices. In some cases, this type of partnership was needed to formalize a relationship with the schools. In other cases, however, the NGOs sought the collaboration of government because it was considered a potential source of funding. While partnerships with government institutions are important, we learned in CLARA that NGOs need to diversify their sources of funding, and better evaluate partnership opportunities.



Image 27: “We learned that partnerships must be formalized so that they become inter-institutional rather than an agreement among individuals with objectives in common.” Angel Tribaldos, Parque Natural Metropolitano, Panama

Planning, identifying partners (mapping), seeking collaboration arrangements, and formalizing agreements are part of a strategy that most NGOs did not follow. Consequently, for some NGOs, building these strategic partnerships was not an easy task. NGOs did not have a culture of building formal alliances, and lacked experience in developing written agreements (such as MOUs). AED provided technical assistance³, and developed sample MOUs for the NGOs to use.

The CLARA NGOs formed formal and informal partnerships. The ways in which these were formalized varied according to each NGO’s particular context and experience.

³ For a description on how CLARA provided technical assistance to participating NGOs, see The Lessons Learned document.

Nevertheless, partnerships formed at the beginning of the project tended to produce partners that became much more involved and invested in the project's success.

Less than 8% of all the partnerships resulted in actual funding, but most of the partnerships provided:

- Recognition for supplying good educational materials and methods to teachers. Such is the case for Panama, where the Ministry recognized the CLARA workshop, and awarded a certificate to the participating educators. This counted as credit for competitive examinations and salaries.
- Recognition to the program for winning contests.
- Validation of the water monitoring results.
- An expert to speak to the CLARA students about a particular water-related topic.
- Microscopes or other water quality monitoring equipment to assist the students in understanding the different water quality monitoring factors.
- Authorization for the NGOs to work with school teachers.
- Authorization for students to work in CLARA as part of their social service program.
- Assistance in the development of maps of the sub-watersheds in which CLARA is carried out.
- Transportation for the CLARA coordinator or the students to go monitor a site.
- Publication of CLARA activities.
- Loan of multimedia equipment.
- Technical assistance in the design and development of specific communication materials.
- Lodging and meals for CLARA trainings.
- Access to computers and the Internet.
- Access to the radio as a way of encouraging youth to communicate their concerns on CLARA.
- An area where the NGOs and CLARA youth groups could hold their trainings.
- Support letters.

The type of support provided through these partnerships was important to supplement areas where the NGOs lacked funding, expertise, or materials. Some of these partnerships, such as in the case of FUNDAMUNI and CARE, have now developed into more of a long-term partnership which will build on previous CLARA experience. FUNDAMUNI is currently receiving CARE's support through AGUA (a USAID/El Salvador funded project). This partnership with CARE/AGUA complements the CLARA intervention in some rural schools where water was scarce.



Image 28: Students of the El Palmo School, Jiquilisco Bay watershed, El Salvador, satisfy their curiosity by observing how a rope pump installed in their water tank operates.

The youth, with the Coordinator's support, managed infrastructural resources to build rainwater collection tanks, rehabilitate wells and install "rope pumps". The CLARA-El Salvador report provides more information on this collaboration.

Other partnerships did result in additional monies for the CLARA NGOs. These partnerships will be addressed in this chapter under a section entitled, "Leveraging Private Resources."

Building partnerships was not an easy task for the CLARA technical coordinators. They were busy working with the schools and teachers, and felt challenged by trying to accomplish everything that the CLARA methodology demanded. But, as can be seen from the number of partnerships built, the NGOs succeeded in developing them.

PROCURA's workshop was instructive for all the participating CLARA NGOs, particularly for identifying the challenges faced to improve their fundraising capabilities.

Some of the main lessons learned by the NGOs were the need for:

- Increased institutional strengthening
- Additional fundraising training
- Strengthening of their own internal marketing and fundraising structures
- Better fundraising strategies and planning, with at least one year lead time
- Donor diversification and emphasis on individuals as potential "donors."

B. Private Resources And Technical Assistance In Developing A Fundraising Strategy

Some of the lessons that all CLARA NGO technical coordinators learned included:

- Developing a fundraising plan at least one year ahead of time. This was not a common practice among the NGOs, especially since they depended on projects to supply their funding.
- The need to diversify the NGOs' sources of funding. As mentioned before, there is a tendency to rely on governments or international agencies for funding, and no thought is put into exploring partnerships with the private sector or donors.
- Everyone is a fundraiser. Even though you might be the coordinator of a project working for an NGO and hired to do the job, you also have a responsibility to raise funds and seek the continuation of a project, particularly if you are interested in seeing it continue after its period of performance.
- A fundraising plan and marketing strategy should be developed for the whole organization, and one should seek to build the necessary support per project, not the other way around.
- A fundraising plan and marketing strategy should cover more than one year, and include an assessment of the organization's needs and the funds that need to be obtained to support the program, as well as the grant instruments that will be offered.
- Maintaining good financial records is key to showing accountability.
- Partners contribute cost share. The key is to have a good system set in place to account for cost share.

- Fundraising has a cost. “It costs money to make money”.
- A phase-out period should also be included in a fundraising plan so as not to create dependency on a sole donor/grantor.
- Fundraising should be one of the first tasks that the NGO should focus on in addition to implementing CLARA. Partnerships should be mapped and reassessed to see if they are actually generating the impact and benefits desired.
- Knowing with whom and for what you are requesting funds is fundamental when communicating with a potential donor. NGOs seldom researched their target donors, and were unclear on their requests.

In the following tables, we present potential CLARA donors that we have identified. Table 18 shows what was done and its results in monetary terms. In the previous section, partnerships that were formed and those that resulted in in-kind donations are listed. Table 19 shows potential donors to whom requests were made but from whom no positive response was received as of the closing of the project.

Table 18: Results of Approaches Made to Donors to Continue and Expand CLARA

Foundation or Governmental Agency	Status Report	Provided funding	
		Yes	No
Summit Foundation	Cannot accept any new grant proposals. The Summit Foundation has suffered a significant decline in their asset base due to the economic downturn, which has curtailed their grant-making activities for the present.		X
Ted Turner Foundation	Given the state of the stock market at that time, and the resulting decline in the Foundation's asset base, its Board had determined to forgo any funding requests in 2003. The Foundation also planned to implement an invitation-only process in 2004.		X
Water Action Contest	AED and Earth Force submitted a joint proposal. AED is also assisting the CLARA NGOs in producing their own proposals.		X
Intel Corporation	The company was not interested in funding CLARA's efforts at this time. They have not had any funds available since September 11.		X
Banco Nacional de Mexico, (National Bank of Mexico – BANAMEX)	CLARA representatives met with the Director of BANAMEX in Pátzcuaro and made a formal presentation of CLARA in the hope of securing additional private sector funding. BANAMEX could not make any decisions on whether or not they could support CLARA because of BANAMEX incorporation with CITIBANK.		X
Centro de Educación y Capacitación para el Desarrollo Sustentable (Sustainable Development Education and Training Center -(CECADESU/SEMARNAT)	A proposal was approved, and CECADESU provided \$1,250 in April 2002 and \$1,250 in June 2002 to hold additional workshops in the offices of CREDES. CICEANA and AED provided the instructors and CREDES provided their facilities including living quarters, food and teaching facilities with Internet access.	X	
Municipality of Uruapán, Michoacán	A memorandum of understanding was signed between CICEANA and Parque Nacional Barranca de Cupatitzio to implement CLARA in Uruapán, Michoacán. Under this agreement, Parque Nacional, with the support from the Municipality of Uruapán, Michoacán, allocated US\$3,000 for this fiscal year to implement CLARA locally.	X	
Fondo de América del Norte de la Comisión de Cooperación Ambiental para Norteamérica (North America Fund of the North American Environmental Cooperation Commission - FANCA-CCA)	The proposal, "Youth Doing Environmental Monitoring and Evaluation in Relation to Health in the Yucatán Watershed" was approved.	X	

Foundation or Governmental Agency	Status Report	Provided funding	
		Yes	No
<p>State Coordinator of Tourism, State of Guanajuato, with the State Ecological Institute and the Office of the State Procurer for the Protection of the Environment called a State-wide contest known as the “Environmental Conservation and Urban Image Prize”</p>	<p>In May 2002, the CEC and TEG Comonfort nursery was judged the best body of water project; and Cuerpos de Conservación Sierra de Pénjamo was judged best solid waste management project in the competition (the project was derived from the CLARA methodology).</p> <p>The result was that of more than 70 projects in each area, the CEC & TEG Comonfort nursery came in first with a prize of 50,000.00 (fifty thousand pesos) and Cuerpos de Conservación Sierra de Pénjamo came in third with a prize of 13,000.00 (thirteen thousand pesos). These prizes should be used to strengthen the projects in question.</p>	X	

Table 19: Approaches Made With No Positive Response to Date
Foundation or Governmental Agency

Foundation or Governmental Agency
CLARA Team
▪ The Coca Cola Think Tank
FUNDAMUNI – El Salvador
▪ Cooperación Española (Spanish International Cooperation Agency)
▪ Canadian International Development Agency (CIDA)
▪ Partners of the Americas
▪ Fondo Nacional para el Medio Ambiente del Salvador (National Salvadoran Environmental Fund - FONAES).
▪ Fondo Iniciativas Ambientales de El Salvador (Environmental Initiatives Fund of El Salvador – FIAES)
Parque Natural Metropolitano, Panama
▪ Industrias Bonlac, S.A.
▪ C.E.M.E.X
▪ Sánchez, Sebrizi y Asociados
▪ Astilleros Braswell
▪ Gerencia de Proyectos de la Ciudad del Saber (City of Learning Project Management), Consejo Nacional para la Ciencia y la Tecnología (National Science and Technology Council – CONAC)
COBIOTEC, Quintana Roo, Mexico
North America Fund of the North American Environmental Cooperation Commission (FANCA-CCA)
The World Bank and the Mesoamerican Reef System
Youth Water Action
Cuerpos de Conservación Sierra de Pénjamo (Sierra de Pénjamo Conservation Corps) - Mexico
▪ State Coordinator of Tourism, State of Guanajuato, with other government agencies, such as the State Ecological Institute and the Office of the State Procurer for the Protection of the Environment, among others, announced a State-wide contest known as the “Environmental Conservation and Urban Image Prize”

C. The Future Of CLARA

CLARA’s sustainability is seen in different ways:

- **Knowledge sustainability:** the fundamental parts of the CLARA methodology have been picked up by the NGO and adapted to other projects where funding has been found. In other cases, CLARA principles have been institutionalized and became the organizational standard.
- **Financial sustainability:** This refers to fundraising to continue CLARA after the AED contract ends.
- **Activity sustainability:** This involves the continuation of activities directed through the action of CLARA youth and their teachers.
- **Coalition sustainability:** This concerns the scope of CLARA’s development of commitments which, in one sense, is derived from interest in forming a coalition.

1. Knowledge Sustainability

In El Salvador, FUNDAMUNI adopted the principles of the CLARA methodology, including working with youth and maintaining a focus on water. After August 2003, they would continue working with the CLARA groups in the key schools, including their participation in the microwatershed management plan that FUNDAMUNI will implement for 3 years, with the AGUA/CARE/USAID/El Salvador Project.

In addition, FUNDAMUNI will integrate the CLARA methodology in working with school youth and communities in the areas in the northern part of the country, and will undertake the Youth for Democracy Program from the perspective of training leaders and civic action. The organization is implementing this program with funding from the World Council of Churches and other future donors, according to a personal communication from Mr. Guillermo Galván, FUNDAMUNI Director.

2. Financial Sustainability

Table 20: Strategies Developed by NGO's to Continue Implementing CLARA

Country	Organization	Will continue to implement after 8/03?		Will continue to implement by			
		Yes	No	Supporting CLARA youth	Funds	Applying principles, methodology	Seeking funds
El Salvador	Foundation for the Development of Municipalities in El Salvador (FUNDAMUNI)	X		X		X	X
Panama	Parque Natural Metropolitano (Metropolitan Nature Park – PNM)	X		X			X
Mexico	Cuerpos de Conservación Guanajuato (Guanajuato Conservation Corps – CCG)	X			X	X	
Mexico	Cuerpos de Conservación Mexicanos (Mexican Conservation Corps), Mérida (CCM)	X			X	X	
Mexico	Ecological Studies Center (CESE), Pátzcuaro		X				
Mexico	College of Biologists and Ecologists (COBIOTEC)		X	X			
Mexico	Parque Nacional Barranca del Cupatitzio (Barranca Cupatitzio National Park)		X				
Venezuela	Water Quality Monitoring Network, Río Boconó, CEDINCO.	X			X	X	X

Mexico, Yucatán. El *Consejo Nacional de Cuerpos de Conservación Mexicanos*, (National Council of Mexican Conservation Corps - CMM), in Yucatán, Mérida, presented the proposal for the “Community Water Monitoring” Project based on CLARA methodology to seek funding from the North American Environmental Cooperation Fund of the NAFTA-related Environmental Cooperation Commission (FANCA-CCA).

This proposal called for the coordination and training of 20 youth groups (approximately 200 participating youth) in the application of the CLARA methodology in the North Yucatán Watershed. The proposal was successful and CNCCM received \$20,000.00, which will be used for implementation during 2004.

Mexico, Pénjamo. The Guanajuato Conservation Corps develops CLARA through their AED/CLARA seed money-supported activities, through the implementation proposal for the Leona de la Sierra de Pénjamo watershed. CCM, with the local support of the network of CEC and TEG education centers (education centers, middle level, public sector), appointed the youth Luis Miguel Fernández as CLARA Coordinator. Since 2002, he has been supporting and providing follow-up to 5 groups and training more youth interested in the methodology. These youth participate through the CEC and TEC network.

It is important to mention that, in addition to funding and logistical support, CCM has managed to obtain the recognition by CEC and TEG in León, Guanajuato, of the participation of chemical laboratory students in CLARA as professional practical work credit. To date, 3 youth are completing their graduation theses on the CLARA methodology.

3. Sustainability of the Activity

Chetumal, Quintana Roo, Mexico. The youth members of the *Grupo Squalos* of the CECYTE educational center of Chetumal, motivated to continue their work for the Bay, have organized themselves into a student association. At the moment, they are in the process of signing bye-laws for the creation of CLARA student associations in the schools as a result of the group’s initiative. The attached CLARA-COBIOTEC Chetumal report provides additional information.

In addition, the CLARA-Aqualig group of the CBTIS 214 center will continue carrying out its actions with the support of their teacher and educational authorities, orienting their activities in support of communities and schools located near the Rio Hondo. They involve protection of the manatee and composting with the community.

El Salvador. Three groups in El Salvador will continue to work with FUNDAMONKEY through the AGUA/CARE/USAID Project.

Panama. Four CLARA groups operating in the Homero Ayala school, the Ernesto Lefevre school, the Colegio Yitzhak Rabin, and the Colegio Javier have continued CLARA activities with their own efforts and in coordination with the Parque Natural

Metropolitano, which provided them with monitoring kits and watershed protection manuals, after having submitted their action plan for the approval of the delivery of materials on behalf of AED.

This effort by centers and groups takes on singular importance as they become the Park's partners in the search for funding to establish CLARA as a permanent environmental education program.

In that sense, the Board of Trustees of the Parque Natural Metropolitano (PNM) has stated its interest in continuing to support CLARA-Panama's fundraising. Together with the new Director, Ms. Roxana Segundo, they have contacted people and organizations interested in environmental education and working with youth, including the World Tourism Organization and the City of Knowledge, CONACYT Panama.

4. Sustainability of the Coalition

The development of networks or coalitions is challenging. Nonetheless, the AED team, with the encouragement and participation of the NGOs, decided to undertake this task. This coalition was expected to bring recognition to their work, inside and outside the region, and provide opportunities for mutual sharing and assistance. Chapter II describes the process and the activities developed.

The Coalition's Vision is:

To be the leading Latin American institution in training the new generations to have a responsible attitude towards the management of water as a resource, and achieve sustainable development via a policy of strategic partnerships through which they tap potential efforts and resources of international, national, and local institutions.

The coalition was successful in developing its own mission statement and identity.

The Coalition's objectives are:

- 1- To train citizen leaders, especially aware and capable youth, to encourage community participation in solving water quality problems through specific action plans on the problems that they face.
- 2- To develop new capabilities and skills among the youth, teachers, and NGOs to improve water quality in their communities and support the sustainable development of the watershed in which they live.
- 3- Involve students, teachers, and NGOs in the management of improving water as a resource, creating an environment of communication, interaction, and collaboration among the various sectors of society.
- 4- Stimulate the dissemination of information and sharing of knowledge and experience related to water through an electronic network.

The mission of the Coalition is:

To train aware and capable youth to act to improve water quality and support the sustainable management of this resource in their communities.

The steps taken to give structure to the coalition were key in bringing all the participants closer together in a real sense, as well as in confirming and validating the interest that

each has in being a part of CLARA. Although not all the institutions could count on having funds to continue CLARA, they confirmed their commitment in the Commitment Letter of the Lions' Desert Convent and identified necessary activities for the continuation of CLARA as a coalition.

These activities can serve as a guide for the establishment of CLARA Phase II, which will make it possible to consolidate this coalition. One important aspect to note is that these NGOs and, above all, the technical coordinators have maintained a personal interest and commitment, which constitutes a CLARA Project success. This is counted as a success since every action carried out, whether at the level of the CLARA educator, CLARA technical coordinator or NGO itself, takes on one of the forms of sustainability mentioned above and thus CLARA continues being applied as a methodology.

It is considered necessary to define the following points for the formation of the Coalition:

- *Membership criteria*
- *Coalition administration and management*
- *Organizational structure of the Coalition*
- *Coalition operational mechanisms*
- *Creation of bye-laws, regulations and strategic plans.*

Conclusions

This section draws general conclusions about the CLARA methodology and its implementation. The three main points that it will address are:

- a) CLARA presents an innovative educational approach to water quality monitoring and civil action CLARA sienta un precedente de un nuevo enfoque educativo para la proteccion del agua y la accion civica
- b) The methodology promotes youth leadership development and behavior change and enables students to become active promoters of change in their communities.
- c) It is necessary to place a stronger emphasis on resource mobilization and promoting the use of electronic communications.

❖ **CLARA presents an innovative educational approach to water quality monitoring and civil action. It sets a precedent for a new educational approach CLARA for the protection of water and civil action.**

The CLARA methodology is different from other environmental education programs because it does not promote one time solutions to serious water problems. Current environmental problems require long term solutions, but most importantly they require the development of skills in youth, teachers and NGOs. These skills will allow them to tackle any environmental problem following a well defined strategy, and take action, even mobilizing other people. During CLARA's implementation we saw the effect that CLARA made on youth from El Salvador, Panama and Mexico, who were able to develop their own water quality improvement project to benefit approximately 45,000 people.

The CLARA methodology's approach is an effective way for the development of scientific and practical skills, as well as analytical and leadership skills in youth. Furthermore, the methodology has demonstrated to be an effective way to engaging youth in the development of projects for the improvement of water quality. But, to implement CLARA, it is necessary to have a clear framework of the educational context of the country where it is being implemented, and realize that it will take time to implement, and see the results.

Teachers, students, and even the facilitators of the methodology require time to adopt the methodology, and then put it in practice. The methodology requires time so that everyone involved can become good facilitators of both the learning and the teaching process, mediators between the development of knowledge and learning, and most importantly promote autonomy and self-direction for youth. All these elements require time, and a change in our form of teaching and learning from the conventional style followed in most Latin American countries.

It is important to remember that the main objective of the CLARA Project is to develop youth with strong analytical skills, and leadership abilities to formulate a project that will help solve or improve an environmental problem. Developing these skills is fundamental

if we aim to form a generation that can and will engage in civic action. In CLARA, we were even successful in supporting a second generation of young people who were trained by the first generation of CLARA students!!

When there is enough time to implement CLARA (minimum 2 years), as can be seen from the results of implementing CLARA in El Salvador, Panama and Mexico, there will be:

- An increased number in youth involved and engaged in solving water quality problems in their community.
 - Change will be noticeable in the teachers involved, which in turn, stimulates a shift in the pedagogy used and applied under their current educational system.
- ❖ **The methodology promotes behavioral change in the young segment of the population and enables students to take civic action, and become promoters of change in their communities.**

The CLARA project has had a significant impact on people's behaviors and has helped alleviate water quality problems in participating communities. While CLARA's results can be measured in a number of ways, two particularly important benefits of the project highlight the effort:

First, young people involved in CLARA are improving the environment in their communities. For example, in Usulután, El Salvador young people are working to ensure that high levels of fecal coliform are not present in water to be used by their community. At the beginning of the year, students from the Francisco Antonio Lima School in San Francisco Javier, tested the health of the water sources and studied land use in the surrounding area. Students discovered uncovered wells, trash, outhouses, and clothes washing at or near the water's source. Furthermore, a lack of social organization resulted in minimal efforts to keep the area clean and well maintained. The most alarming discovery was the presence of fecal coliform bacteria in water destined for human consumption. As a result of their project, the students worked with local authorities to institute proper treatment and sanitary control at various points in the water system.

Second, CLARA trains young people in civic leadership skills and provides the experience necessary to make a difference in their community. In Usulután, the students' determination gave voice to health concerns that otherwise may have gone unnoticed. Now their neighbors can rely on a healthy water supply and can look to the youth of the community to continue their efforts to protect their local water resources. Students also learned a fundamental lesson in how to constructively participate in the health of their community. While the short-term benefits to their actions are clear, the real value of the program comes over the long-term as these students develop into -citizens with the power and knowledge to protect their own resources. The students in Usulután are already working on follow up efforts such as a student-training program for appropriate use of water, the installation of storage tanks to avoid water spillage, and collaborating with the local health department to encourage chlorination. An independent evaluation of the program has shown that the civic skills of young people participating in CLARA improve

substantially after their initial exposure and involvement in the program.

- ❖ **It is necessary to place a stronger emphasis on resource mobilization and, promoting the use of electronic communications.**

During CLARA's implementation phase, there were several challenges that the participant NGOs confronted due to the complexity of the project in the field. The NGOs play a full range of roles, from the application of the methodology itself, to engaging youth, teachers and the community; promoting participation; developing partnerships; to the management and accounting of the Project. All sites had substantive training communications components; and finally the essential need for resource mobilization. All of these activities together created a constant high pressure to achieve and maintain coordination during the life of the projects, and constitute a significant organizational challenge.

In this report we emphasized a need improve the fundraising or resource mobilization activities. This should be one of the first tasks that the NGO focuses while implementing CLARA. In addition, a system ought to be set in place to map and reassess partnerships to see if they are actually generating the impact and benefits desired.

There is a strong need to fully develop materials and to use inquiry based approaches to engage the target audiences to go beyond the simple use of communications to analyze problems and to solve them.

Final Note: CLARA, today, can be considered an effective model that is grounded in good pedagogy, and a theoretical framework that has been successfully applied in four countries over a period of three years.

CLARA is an innovative environmental education program that combines the experience and expertise of various grassroots, regional, and international organizations. At its base, CLARA trains educators and students to monitor and assess the status or quality of local watersheds; identify a watershed issue to address; and engage local community members in the process of creating long-term solutions to the problems they have identified. CLARA builds upon and supports young people's interest to act on behalf of the environment and their desire to help their communities through voluntary service. The CLARA approach combines service-learning, project-based learning, and environmental education. CLARA also employs an innovative organizational design that brings together NGO's from the United States and Mexico to train and support NGO's in Panama, El Salvador, and Mexico.

All the deliverables stated at the beginning of the Project have been accomplished, and in several cases exceeded, as it can be seen in the following table:

**Table 21: Project Outputs
Planned vs. Actual Performance**

Activity	Indicator	Actual at Completion	In numbers
Improved Understanding of and Participation in Water-Quality Monitoring and Improvement Practices by Stakeholders			
Selection of NGO partners	Established relation/collaborative agreement with one NGO partner in El Salvador, and Panama (total 2 NGOs).	Established and expanded relation/collaborative agreement with one NGO partner in El Salvador, Panama, Mexico, and Venezuela.	8 NGOs implementing CLARA in El Salvador, Mexico, Panama, and Venezuela
Development of training materials	Produce a training compendium	Produced a whole set of training materials that were updated and completely redone to include weather. In addition, an implementation guide was produced, a proposal toolkit, a handbook for low-cost weather monitoring tools, among many other supporting materials.	Produced and distributed <i>TO NGOs</i> : 145 Protecting our Watersheds Manual, 247 low cost water monitoring kits, and 25 standard kits, 14 implementation guides, 10 proposal toolkits, 20 handbooks on low-cost weather monitoring. The distribution number is much larger since the NGOs themselves reproduced the materials for the schools and CLARA groups.
Training workshop for NGOs	One-week workshop at CICEANA training facility for NGO representatives.	The AED Team lead 12 training workshops for NGOs.	12 trainings lead by the AED Team.
NGO Training of CLARA trainers	2 In-country workshops conducted by each NGO partner resulting in 5 GREEN trainers per country (10 total).	The 8 NGOs conducted, at minimum one teacher training workshop resulting in approximately 25 trainers per country. Three of the NGOs conducted additional teacher trainings to reinforce teacher's understanding of the CLARA materials.	11 NGO and Teacher Training Workshops resulting in approximately 25 trainers per country, a total of 115 for all countries. 58 participant schools: 17 urban schools in Panama; 11 rural schools in El Salvador; and 30 rural schools in Mexico
Water-quality improvement activities	600 youths engaged in 40 youth-designed and youth-driven water-quality improvement activities per country per year under supervision of 40 trained GREEN Educators (adjusted for dropouts).	1512 youths engaged in youth-designed and youth-driven water-quality improvement activities per country under supervision of 115 trained CLARA Educators (adjusted for dropouts).	1640 people (including youth) TRAINED in the CLARA methodology 1512 YOUNG PEOPLE CURRENTLY ACTIVE IN CLARA
Water-quality report cards	Water-quality report cards submitted by each NGO, made available through the network's website.	Water-quality report cards submitted by each NGO, made available through the network's website.	1 Water-quality report cards produced by each NGO, and distributed through the website.
Improved Human and Institutional Capacity for Community-based Water-Quality Monitoring and Improvement Activities			
Training on financial sustainability	On-site workshops on fundraising strategies and financial sustainability for each NGO.	Two coalition meetings convened for sharing information on fundraising strategies. One Fundraising Training provided by a fundraising expert institution.	3 fundraising related meetings resulting in 41 strategic alliances, 5 NGOs continuing implementation, 2 NGOs receiving funds for continuation, and all NGOs leveraging funds or donations at different times during implementation.

Activity	Indicator	Actual at Completion	In numbers
Fundraising-strategy development	Development of fundraising proposals for each NGO and/or one joint proposal to secure non-USAID support for the projects and the network.	Development of fundraising strategies and proposals for each NGO. Some NGOs will continue to implement CLARA, and will have institutionalized the methodology.	5 out of 8 NGOs will continue implementing CLARA, or applying the key concepts of the CLARA methodology, even after the completion of the project in August, 2003. Some schools, and youth CLARA groups, will implement CLARA, even though the NGO will not be able to fully support their efforts.
On-line conference	Four on-line meetings conducted to strengthen communication between the NGOs, discuss program plans, and advance network objectives.	Four on-line meetings and six group yahoo conferences conducted to strengthen communication between the NGOs, discuss program plans, and advance network objectives.	10 on-line conferences Effective transfer of skills in the use of electronic communications. NGOs will continue to use as a communication instrument.
Informational material	Spanish and English informational brochures produced and distributed to potential donors and interested organizations.	Information packet produced, which included the brochure, leaflets, power point presentation, post card on the website, and copies of news reports.	5000 brochures and 200 information packets, produced and distributed in different venues.
Network meeting	Meeting of NGO representatives in conjunction with final conference to advance a joint proposal for the sustainability of the network.	Held two NGO meetings, and approximately 3 on-line conference calls to further discussions.	The meetings resulted in a definition of a vision, mission and action plan for someone to follow-up in a phase two of CLARA. 8 letters of support were generated in hopes that it would help seek funds for a second phase of CLARA.
A Lessons learned document	Production of Lessons Learned/Best Practices Guide.	Lessons learned produced with an added section providing recommendations for future implementation.	Lessons learned document produced.
Increased Dissemination of Concepts and Tools Developed for Water-Quality Monitoring and Improvement.			
Quarterly electronic newsletter	Production and dissemination of electronic newsletter (total 9)	Production and dissemination of electronic newsletter, in conjunction of a series of leaflets	6 electronic newsletters 16 leaflets produced by the AED Team and the CLARA NGOs The distribution of these documents is much larger since the newsletter was electronic, and the leaflets were reproduced by the NGOs.
Network website	Development of website for posting data collected by participating NGOs, students, and community projects and information on other network activities.	Development of website for posting information on the CLARA methodology, teacher resources, news reports on CLARA, photo gallery, interactive maps, and the posting of an electronic bulletin. In addition, an electronic forum was developed to promote sharing of experiences.	15108 hits on the CLARA Website. Effective transfer of skills in the use of a website to help promote a project, and promote interaction with people collaborating in project. CICEANA will continue to promote the website. NGOs will continue to seek ways of developing their own websites and using it as a communication tool.

Activity	Indicator	Actual at Completion	In numbers
Listserve	Establishment of a network-wide listserve to facilitate communication among NGOs and partners.	Establishment of an array of electronic communication tools (listserves, FTP, instant messenger, electronic forums, e-mail) that facilitated communication among NGOs and partners.	CLARA partners learn and utilize 5 different means of communicating electronically (listserves, FTP, instant messenger, electronic forums, e-mail). Effective transfer of skills to NGOs, but preferred the use of e-mails, and the use of yahoo messenger to generate better interactions.
Promotion of on-line communications	Providing 600 youth in each country on-line access to environmental information and resources	The website received 15108 hits, but we are not able to define if these were solely from young students. 514 people received direct training in the CLARA methodology.	514 people were trained in the CLARA methodology, which included the electronic communications component. 268 were students.

ATTACHMENT 1

LIST OF MATERIALS DEVELOPED FOR EACH CLARA COMPONENT OF THE METHODOLOGY

CLARA FINAL REPORT

COMPONENT 1: Capacity Building and Social Mobilization Activities

A. CLARA Implementation Guide

This guide was developed to guide and support the NGOs in the various processes that were carried out in implementing CLARA through its sections, “An Introduction to CLARA, Low-Cost Ideas for Implementing CLARA, and Monitoring and Evaluation.” The guide also provided instruments such as formats for drafting memoranda of understanding, training agendas, and formats for news sheets, letters and diplomas. In short, the guide facilitated the development of CLARA in the educational community, systematizing processes and experiences that strengthened the methodology and its various adaptations in each country’s context.

B. Toolkit

The CLARA Proposal Toolkit was developed by AED with the idea that CLARA NGOs could have access to a simple toolkit which would provide them with online resources necessary for proposal writing, as well as general information on CLARA. The CLARA Proposal Toolkit includes the following resources:

- A guideline on whom to contact on the CLARA team when producing a proposal
- A sample proposal in English, budget template, checklists and information sheets
- A glossary of proposal writing terms
- Information from the founding organizations, CLARA NGOs and a brief synopsis of the history of CLARA
- A NGO's key achievement and past performance sample form
- CLARA success stories
- Progress indicator table
- CLARA logo guidelines

Promotional Materials

A. CLARA Brochure

The Academy for Educational Development (AED) was responsible for the conceptual and artistic design, which was pilot tested by the member NGOs. The production run of 5,000 was shared with the CLARA organizations.

B. Promotional Video

CICEANA designed a three-minute, forty-second promotional video in Spanish to promote CLARA in Mexico. Margie Simon, Stephany Vallarta, Vincent Abreu and Eduardo Moreno developed the script, with the collaboration of Ana Celia Domínguez and Atziri Ibáñez. The video was done in digital format and later transferred to 3/4 format to make copies in VHS. The video includes audio, music and original photos of CLARA, as well as animation.

COMPONENT 2: Water Monitoring Capacity Building Activities

Educational Support Materials in Support of Water Quality Improvement

A. Watershed Protection Curriculum

The *Watershed Protection Guide (Spanish Language Edition)* was distributed in the first year of CLARA implementation. This *Guide* was later completely changed into what is currently called “*The Protecting Our Watersheds Manual*” (see details below).

The *Watershed Protection Guide* was designed to help teachers lead students in watershed protection efforts. The goals outlined for students using the *Guide* include:

“CLARA represents an option for working with youth in particular as part of the generation of new leaders that possesses greater capacity and improved tools for moving processes that make better living conditions possible along.”

Jaime Ascencio, CLARA Coordinator, El Salvador

- Learning about water quality issues in their local watershed, as well as the people, processes and institutions involved in, and affected by water quality-related policy and practice
- Developing the social, political, analytical and problem-solving skills necessary to work effectively on sustained solutions to local watershed problems and threats
- Fostering within themselves the habits of responsibility and environmental stewardship
- Engaging in activities that influence local water quality-related policy or community practice for the common good.

B. Water Testing Kits and Instruction Manuals

The user manuals that accompany the LaMotte Standard Water Monitoring Kit and Low-Cost Water Monitoring Kit were also translated into Spanish. Students test the quality of the water using chemical, physical, biological and land use assessment tools and techniques. Each kit includes:

- Tools for conducting biological monitoring.
- Materials to test 100 water samples for pH, dissolved oxygen, biochemical oxygen demand, nitrates, phosphate, turbidity, coliform bacteria and temperature change.
- Land use assessment instructions and data collection materials.
- Developed the Protecting Our Watersheds curriculum, which provided a more user-friendly version of the Research to Action process. The activity guide, teacher’s manual and “Making Water Quality Connections” posters were then translated into Spanish.

C. Protecting Our Watersheds

Protecting Our Watersheds is the most updated version of what constitutes the core curriculum for the CLARA Project. The previous manual, entitled the *Watershed Protection Guide*, was tested during the first set of trainings, and reviewed to ensure that it fit the cultural context of the countries in which CLARA was being implemented.

Protecting Our Watersheds is an innovative curriculum and the first educational tool to give educators a step-by-step process to help their students understand the problems facing a body of water and create a solution to those problems. It takes students and educators through a process of analyzing the information they have found about their watershed to identify environmental problems or threats. It then helps them select a problem to address, devise a solution and implement an action project to address it.

The students take on projects that enable them to “do science.” They get to explore and solve real-world problems—a proven method to improve student learning. Earth Force translated both the Protecting Our Watersheds activity guide and teacher’s manual from English to Spanish during the second year of the project. Protecting Our Watersheds was introduced at the CLARA workshop in Quintana Roo (May 2002).

Other Supplementary Educational Materials Provided by Earth Force

Earth Force provided a water quality “scorecard” spreadsheet to CICEANA. This scorecard was used to compute the overall water quality of a sampling site, and to facilitate comparison between water quality monitoring events at one site on different dates, or between different sites. The spreadsheet was uploaded to the CLARA website so that participating schools could download it at their convenience.

Earth Force compiled and distributed additional monitoring resources for NGO partners. These included supplemental information on monitoring site selection, safety precautions and macro-invertebrate identification. These were designed to provide more information for CLARA teams who were using the LaMotte Low-Cost Kit.

A WEATHER COMPONENT IN THE CLARA METHODOLOGY

The new set of Educational Support Materials for Weather include:

A. The Weather and Water Module

The module is the general orientation tool on how to relate atmospheric or meteorological conditions to water quality and watershed protection. The module is incorporated into the second edition of the Watershed Protection Manual, CLARA methodology, Component 1.

This module, Weather and Water, contains four activities whose titles tell us the topics that can be developed: daily temperature tendencies, measuring rainfall and weather conditions and the importance of weather. Each of these activities presents key information, a procedure and instruments to collect information, as well as the necessary glossary. Most of the activities are carried out in the field with the support of the Water and Weather poster, as well as through visits to specialized websites.

B. The Water and Weather Poster

This tool is very valuable. It presents the relationships between weather conditions, their possible effects on water and possible causes in a simple and organized way. The

conditions are the most common for, and relevant to the CLARA groups, and for those interested in these relationships. These conditions are precipitation, flood, drought and temperature changes.

This poster is part of the collection of posters contained in the Watershed Protection Manual, CLARA methodology, Component 1.

C. Handbook for Low-Cost Weather Monitoring Tools

The specialist's manual's purpose is to provide better information to the CLARA technical coordinator, as well as to teachers and other people interested in becoming more knowledgeable about climate and meteorological aspects of weather. This manual presents the procedures for developing low-cost meteorological instruments using appropriate technology and weather forecasting techniques.

D. Climate and Weather Pocket Manual: Building Meteorological Instruments

This is the short version of the manual for technical specialists. It has been adapted for all audiences and is organized into two sections: Temperature and Rainfall Affect Water Quality, and Weather Forecasting.

With the assistance of this manual, the youth can build basic instruments to carry out their temperature measurements and know the amount of rainfall that falls at their water quality monitoring sites, and do their meteorological observations using the instruments that they themselves have built.

E. The Weather Section on the CLARA Website

The online weather guide contains:

- A weather glossary;
- Links to information provided by web pages that provide weather information in Spanish for every country, including current satellite images and current measurements of weather variables;
- Instructions on how to measure and interpret weather variables locally;
- A web form to enter local weather measurements; and
- A bibliography and links to other weather and weather-related information.

ATTACHMENT 2

PARTNERSHIPS DEVELOPED IN CLARA

CLARA FINAL REPORT

**STRATEGIC PARTNERSHIPS DEVELOPED BY THE PARTICIPATING NGOs IN SUPPORT OF CLARA ACTIVITIES
2000 – 2003**

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
FUNDAMUNI - El Salvador					
CARE	Transportation of the CLARA Coordinator from the beginning of the Project. Development of maps of the sub-watersheds in which CLARA is carried out. Geographical referencing of monitored schools and sites for a specific map tracing CLARA intervention.	X			
Ministry of Education	Signed a memorandum of understanding with the Ministry of Education FUNDAMUNI. The Ministry provided support for: A selection of CLARA schools and teachers. Teachers' release time to develop the implementation training. Infrastructure for the development of activities.			X	
University of El Salvador, Interdisciplinary Faculty of the East	Provided microscopes and water quality monitoring equipment to assist the students in understanding the different water quality monitoring factors. Technical support for two educators and eleven students in one-day trainings on how to monitor water quality. The university validated the results of the water analyses made by the CLARA groups.		X		
Office of the Mayor of San Francisco Javier	Received a donation (notebooks, colored pencils, markers, etc.) for the contest, "Let's paint CLARA."			X	
Spanish Cooperation Agency	Allocation of two months' time of a communications volunteer, who supported CLARA, organizing its photographic catalogue, taking photographs & assisting in the development of murals made by the students.				X Category: "Foundation"
El Diario de Hoy	Publication of CLARA activities in the newspaper supplement called El Guanaquin.				X

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
AGUA Project	Invited CLARA's teachers and students to participate in environmental education & seminars relating to watersheds to enhance their level of understanding of the factors affecting water quality & watersheds. Shared didactic material that introduced the concepts of watersheds & water quality problems.	X			
Parque Natural Metropolitano – Panama					
Ministry of Education	Ministry recognized the CLARA workshop, awarding a certificate to the participating educators. This counted as credit for competitive examinations and salaries. Revised & approved the technical plan for the development of the CLARA-Panama implementation training. Identification of participating schools. Participation of authorities in briefing meeting for the heads of public & private schools engaged in CLARA.			X	
GREENCOM-Panama	Lent multimedia equipment for presentations Presentations on "Methods for the Preparation of Impact Walls." In the design and elaboration of a stand in the Water Fair.	X			
CICEANA – Mexico					
Education and Training Center for Sustainable Development (CECADESU/SEMARNAT)	The Centro de Educación y Capacitación para el Desarrollo Sustentable (Education & Training Center for Sustainable Development -CECADESU/SEMARNAT) & CICEANA wrote a proposal for funding CLARA workshops in Pátzcuaro, Michoacán. The proposal was approved, & CECADESU provided \$1,250 in April 2002 & \$1,250 in June 2002 to hold additional workshops in the offices of CREDES. CICEANA and AED provided the instructors & CREDES provided their facilities, including living quarters, food & teaching facilities with Internet access.			X	

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
Paper Industry COPAMEX	CICEANA obtained a donation of paper for activities developed by CLARA in Michoacán. The results of this process were the following: 1) COPAMEX became a sponsor of CLARA in Michoacán; 2) On June 21, COPAMEX made the official paper donation of a total of 4 boxes of Bond Letter Sheets (20,000 sheets), and a thousand sheets of Unibond Paper (flip chart), that represents \$500.00 This material was sent to the Parque Nacional "Barranca del Cupatitzio", Uruapan and to the Centro de Estudios Sociales y Ecológicos, A.C. (CESE), Pátzcuaro, in similar proportions.				X
Municipality of Uruapan, Michoacán.	A memorandum of understanding was signed between CICEANA & Parque Nacional Barranca de Cupatitzio to implement CLARA in Uruapan, Michoacán. Under this agreement, Parque Nacional, with the support from the Municipality of Uruapan, Michoacán, allocated \$3,000 for this fiscal year to implement CLARA locally. An implementation plan was developed & the first CLARA workshop was held in June 2002.			X	
Consejo Nacional de Cuerpos de Conservación Yucatán, Merida – Mexico (National Council of Conservation Corps)					
Comisión Nacional del Agua (National Water Commission),	Collaborated in encouraging youth participation in the Watershed Council of the Yucatán Peninsula, an organizational participant in the CAN, which will fund the continuation of the activities initiated by the CLARA groups to protect water quality. The CAN has donated \$25,000 to CCM to implement in 1 year starting October 2003.			X	

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
Universidad Autónoma de Yucatán (Autonomous University of the Yucatán)	Cooperative agreement with the Cuerpos de Conservación Mexicanos (Mexican Conservation Corps) so that education bachelor's degree students can support CLARA-CCM. Up to now, 2 students are developing materials to support the training of CLARA groups in the use of the Web Page & in developing special activities, in which 23 CLARA groups were invited to participate.				
Regional Management Authority, Yucatán Peninsula	In-kind support Monitoring permits Presentation of an "expert."			X	
Yucatán Potable Water & Sewage Board				X	
TELMEX Península de Yucatán	Support in the use of the facilities of the Centro de Capacitación de TELMEX (TELMEX Training Center) in Merida to complete the CLARA Project training step on the Internet & electronic communications, using the video conferencing facilities with access to 50 high-speed, Internet-enabled computers & training support facilities.			X	
102.3 F.M., Radio Ecológica del Instituto para la Protección de los Recursos Naturales A.C. (Ecological Radio of the Institute for the Protection of Natural Resources)	Memorandum of understanding, Radio – CCM, for the weekly transmission of the program, "CLARA Water & the Cause of Youth." Those programs are organized by CCM to bring CLARA youth in closer touch with the radio. The youth have the opportunity to address the public to share their knowledge, experiences & activities that they are carrying out in their communities to protect the quality of water as a resource.				X
Comisión Nacional del Agua (Nacional Water Comisión - CNA), the Yucatán Regional Management Authority & the Office of the Secretary of Health of the Yucatán State Government	To operate a "Water Knowledge Opportunity" as an environmental education strategy & the participation of youth of the CLARA groups as youth promoters & leaders of water knowledge. This proposal is under consideration for implementation beginning March 2004.			XX	

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
Ayuntamiento del Municipio de Mérida y el de Progreso (Office of the Mayor of Merida & Progreso)				XX	
Cuerpos de Conservación (Conservation Corps), Sierra de Pénjamo – Mexico					
PPEA of the CEC & TEG	They have provided support to the projects in the form of nurseries through the PPEA of the CEC & TEG, & their own nursery resources, consisting of paper materials, loans of official trucks, permits to students & teachers to use class time & requests for parental permission to go to a camp.		X		
The Tourist Coordinator of the State of Guanajuato, together with other government dependencies, such as the State Institute of Ecology, the Office of the State Procurer for Environmental Protection, among others, launch a state convocation called, "Environmental Conservation & Urban Image Prize."	In May 2002, the CEC & TEG Comonfort nursery was judged the best project of the water body project; & Cuerpos de Conservación Sierra de Pénjamo, was judged best solid waste management project (which derived from the CLARA methodology). The result was that from more than 70 projects in each area, the CEC & TEG Comonfort nursery received first prize with an award of 50,000.00 (fifty thousand) pesos & Cuerpos de Conservación Sierra de Pénjamo, came in third place with a prize of 13,000.00 (thirteen thousand) pesos. These funds will be used to strengthen the projects in question.			X	
	National Youth Water Contest 2002 (was among the country's 14 finalists)				
COBIOTEC - Mexico					
Amigos del Manatí (Friends of the Manatee)	Participation in the selection of CLARA leader schools in Chetumal & in dissemination activities carried out by the youth.	X			
Comisión Nacional del Agua (National Water Commission)	Sent expert to give talks to the youth Validated the water quality monitoring			X	

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
Comité de Marina (Marina Committee)	Implementation of action plans Draft of support letter Will integrate youth into monitoring tasks being carried out & will support their participation in monitoring courses.			X	
Office of the Mayor of Bacalar	Funding for the Bacalar Lagoon clean-up campaign			X	
Office of the Secretary of Education	CLARA implementation in the schools			X	
CBTIS 214	Authorization for social service & CLARA-AQUALIG facilities		X		
CECYTE	Authorization for social service & CLARA facilities Incorporation certificate of the Asociación Estudiantil CLARA – CECYTE (CLARA – CECYTE Student Association)		X		
Water Keeper Alliance	CLARA-COBIOTEC support letter	X			
CEDINCO- Venezuela					
School Municipality & the Office of the Coordinator of Bolivarian Schools	Formation of strategic partnerships with the School Municipality & the Office of the Coordinator of Bolivarian Schools to gain the schools' commitment & arrange release time for the teachers for CLARA activities without salary restrictions that could endanger Project progress. Authorization for social service & CLARA facilities			X	
Bocono Ecological Center (CEB) of the University of the Andes (ULA)	Advisory services & monitoring workshops in schools Authorization for social service & CLARA facilities		X		
Instituto Nacional de Parques (National Park Institute - INPARQUES)	Advisory services & monitoring workshops in schools Authorization for social service & CLARA facilities			X	
Ministry of Agriculture & Lands (MAT)	Advisory services & monitoring workshops in schools Authorization for social service & CLARA facilities			X	
Universidad Nacional Abierta (National Open University - UNA)	Development of research project, which will serve as the baseline for project evaluation		X		

Name of the Collaborating Organization	Outputs from the Partnerships	Local NGOs	Academia	Governmental Organizations	Private Sector
Ministry of the Environment	Transportation of personnel to remote, difficult-to-reach areas of the Alta & Rio Burate sub-watersheds, a project area of influence (90,837 ha.).			X	
HIDROANDES, regional hydraulic firm	Laboratories for confirming the results obtained by the schools in their monitoring activities Local communications media to promote & disseminate the CLARA effort				X
Ateneo de Boconó	Physical space to carry out intramural activities				

The Academy for Educational Development is seeking resumes from experienced professionals for director of a global communications and education project, GreenCOM II. Specific field-based projects are concerned with issues ranging from sustainable agriculture to water and irrigation to energy efficiency to management of watersheds, coastal zones, forests, and solid waste. The Project Director will provide vision and strategic direction and have overall substantive, administrative, logistical, and management responsibility for the effective, efficient, and timely implementation of all activities undertaken by the GreenCOM II Project. He/She will guide and oversee the activities of key personnel so that they function as a single, cohesive team with a common purpose.

Individuals must have extensive work experience in management with international field experience. Advanced degree in agriculture, natural resource management, environment, communications or related field preferred. Candidates must have superb communication skills and strong organizational, negotiation, and problem-solving abilities. At least 10 years experience managing complex, field-based donor agency (World Bank, ADB, USAID, DFID, etc.) programs required.

ATTACHMENT 3

MONITORING & EVALUATION REPORT

CLARA FINAL REPORT

MONITORING AND EVALUATION

This report addresses the following points:

- a) Monitoring and evaluation plan activities
 - Context for monitoring and evaluating CLARA
 - Methods used for implementing the M&E plan
- b) Results of the CLARA evaluation
 - Project indicators
 - Project impact with respect to KAP on teachers, students, and NGOs
 - Use and effectiveness of the online tools.

A. Monitoring and Evaluation (M&E) Plan Activities

Under CLARA, two M&E methods were used: a more traditional method, and a participatory one. The reason for using a combination of both methods was: 1) to respond to donor needs based on a structured monitoring system that would yield the information required; and 2) to engage key stakeholders more actively in reflecting and assessing the progress of their project, and the achievement of results.

At the inception of the CLARA Project, the AED team defined the use of certain traditional M&E methods, among which were monitoring and reporting on a specific set of indicators, use of pre- and post-surveys, and structured observation. However, after two years of implementing CLARA, it became clear that doing participatory monitoring and evaluation (PM&E) would better follow from the key concept of the CLARA methodology of being highly participatory, and provide much richer information on the overall impact of the project. This approach meant substantial work on everyone's part to engage all the stakeholders in a participatory monitoring and evaluation process, but the AED team was willing to take on the challenge.

The objectives in using PM&E for CLARA were to:

- 1) Engage key stakeholders more actively in reflecting and assessing the progress of their project, as well as the achievement of results;
- 2) Provide accountability at the level of the teacher, the NGOs and the students to those responsible for the implementation and funding of the project;
- 3) Increase the ownership in, and responsibility of all stakeholders in the success-failure and sustainability of CLARA in their communities;
- 4) Build the local capacity of project stakeholders to reflect, analyze, propose solutions, and take action;
- 5) Provide feedback for lessons learned that could help the CLARA team and other NGOs that would become engaged in CLARA improve program implementation; and
- 6) Celebrate and build on what is working.

When applied, participatory evaluation can be expected to breathe life into more traditional evaluation approaches by involving project stakeholders, and supplementing formal methods of inquiry (standard questionnaires) with non-formal techniques that yield richer information about project impact. Atziri Ibanez and Ana Celia Dominguez, CLARA Coordinators.

In order to implement this PM&E evaluation, the CLARA NGOs were first introduced to this concept during a coalition meeting held in Mexico, July 2003. A focus group was convened, and the NGOs discussed the efficacy of applying this methodology with the teachers and young CLARA students. Moreover, emphasis of the discussions was placed on learning about the process, the actions, and the achieved results, rather than only compiling results.

Finally, the NGOs also discussed their capacity to lead a similar exercise with the teachers, and concluded that they would rather fall back on traditional methods (such as using surveys) to do a final summative evaluation. The NGOs felt that using surveys would be more efficient, especially if done electronically (a method that none of them had used before).

Sound PM&E requires the participation of stakeholders throughout the development process in project planning, decision-making, implementation, and evaluation. In this particular case, CLARA aimed to use PM&E specifically for the final project evaluation. Ultimately, a combination of conventional and participatory methods was used. The PM&E focus group with the NGOs yielded three important results:



CLARA Coordinators working on defining the procedure for the summative evaluation.

Key Characteristics of a Participatory Evaluation

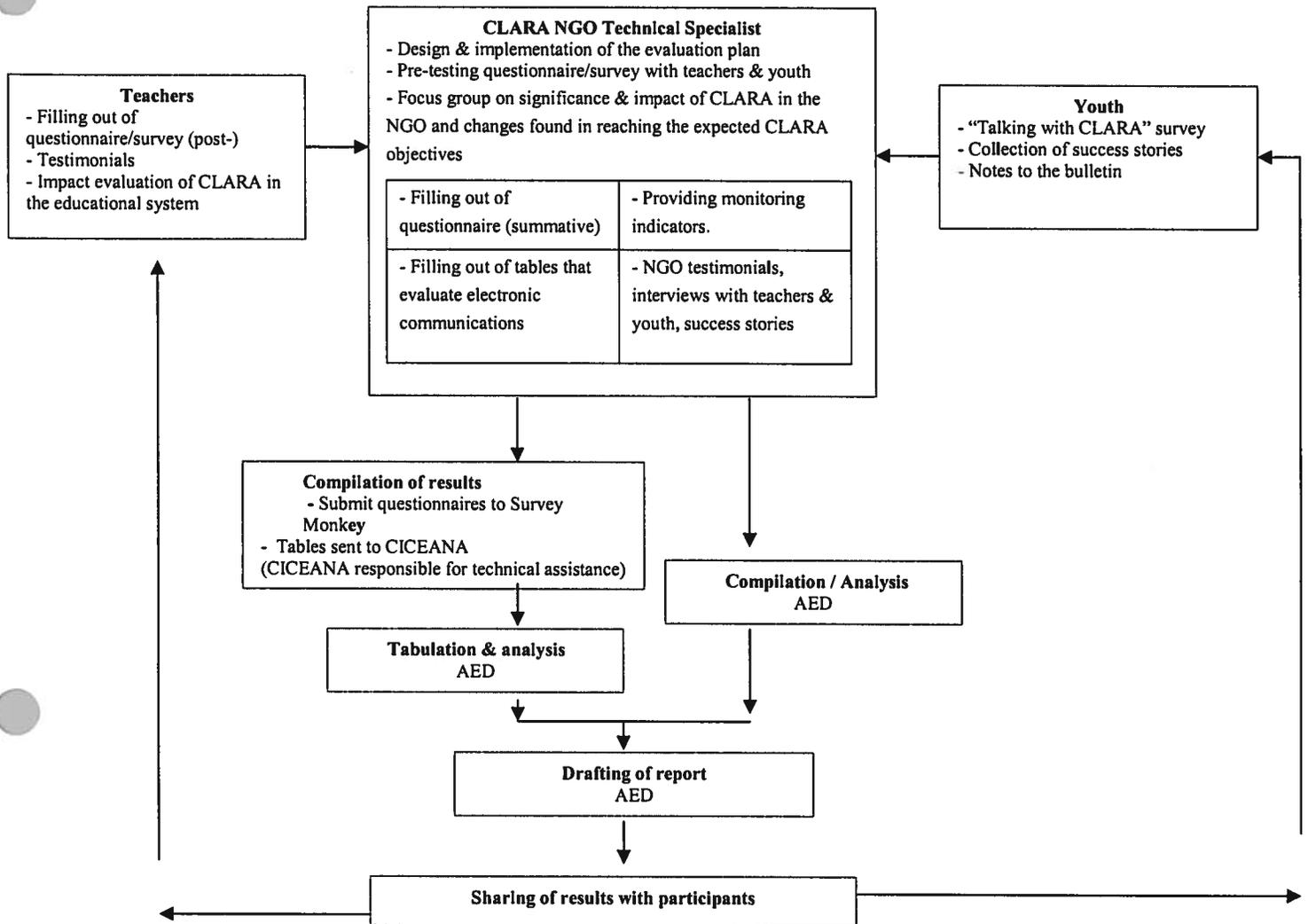
- *Draws on local resources and capacities;*
- *Recognizes the innate wisdom and knowledge of end-users;*
- *Demonstrates that end-users are creative and knowledgeable about their environment;*
- *Ensures that stakeholders are part of the decision-making process; and*
- *Uses facilitators who act as catalysts and who assist stakeholders in asking key questions.*

1) The NGOs became engaged in defining the steps that would be taken and the content and the formats used to produce the final summative evaluation on CLARA.

2) The NGOs discussed in detail the process of implementing CLARA, reflected and assessed the progress of their project, and the achievement of results.

3) The NGOs defined the scope of the final lessons learned document.

Methodological Scheme for the Participatory Evaluation Process



▪ Context for monitoring and evaluating CLARA – Study Area

The context in which the evaluation was done corresponds to the watersheds where CLARA was implemented since its inception in 2000. For the most part, these watersheds were designated priority watersheds by the USAID missions in Panama, El Salvador, and Mexico: the Panama Canal watershed, the Jiquilisco Bay watershed and the Gulf of Mexico watershed, respectively. The Sierra Leona watershed in Guanajuato, and the Lake Patzcuaro watershed in Michoacán, Mexico, were selected on the basis of the priority that they represented for the localities in which CLARA came to be implemented.

In these watersheds, the participating schools and communities are located in rural and urban areas, the latter being official and private.

The youth participating in CLARA varied in ages between approximately 8 and 23 years. The teachers were, for the most part, of varying academic background.

Study Area

The various study areas consisted of sub-watersheds and micro-watersheds within the watersheds mentioned above.

Country	Watersheds & Sub-Watersheds
Panama Districts of Panama, La Chorrera & Chilibre	Rio Caimito, Rio Cáceres, Rio Cárdenas, Rio Curundú, Río Abajo, Río Juan Díaz, Rio Calzada Larga, Río Chilibre, Quebrada Santa Rita, Quebrada Monte Oscuro.
El Salvador Department of Usulután, Municipality of San Francisco Javier, Tecapán, Usulután & Ozatlán.	Jiquilísco Bay watershed, San Lazaro, El Borbollón & El Molino sub-watersheds.
Venezuela	Río Boconó watershed
Mexico	
Patzcuaro	Lake Patzcuaro watershed.
Guanajuato State	Sierra De Pénjamo, Pénjamo, Coroneo, Comonfort, León, Cuerámaro, Tierra Blanca, Atarjea, Xichú, Tarandacua, Tidas Ellas.
Yucatán Merida State, Municipality of Yucatán	Yucatán Norte watershed
Quintana Roo Chetumal & Bacalar	Chetumal Bay, Lake Bacalar watershed

Methods used to implement the M&E plan

The M&E plan implemented under CLARA employed a variety of methods, some which are described below:

Monitoring indicators

CLARA monitored a set of indicators defined with the help of the USAID missions. These indicators allowed us to measure impact while providing a basis for discussing implementation realities with our partners and participating USAID missions. AED staff monitored these indicators from the beginning of the project and used the information gathered to guide mid-course adjustments.

Structured Observation and Joint Reviews

On occasion, an AED staff person visited field projects and used structured observation techniques to verify or corroborate quarterly status reports from our NGO partners. During these field visits, and when possible, the AED staff person met and interviewed the CLARA teachers and students. In addition, input was also requested from knowledgeable USAID mission personnel in each country.

Joint review sessions (conducted via teleconference) were also held to verify or corroborate quarterly status reports from our NGO partners and address any discrepancies in assessed progress.

Surveys- Formative Evaluation

Pre- and post-workshop surveys for teachers: All training courses had rapid pre-workshop surveys of participants to measure changes in knowledge, skills and confidence levels as a means to help guide subsequent capacity-building activities.

Focus group

During the third coalition meeting, we carried out a focus group with the 4 NGOs who were active at that time. The leading questions for the focus group, “Immersion in the CLARA Evaluation Process,” were:

Why will we evaluate?

For what purpose will we evaluate?

How and when will we evaluate?

How will we capture and process the data?

What roles and commitments will we assume in the evaluation process?

Surveys – Summative Evaluation

Post-questionnaire developed by the youth and pre-tested at the Final Quintana Roo Meeting: “Let’s talk with CLARA.”

Questionnaire developed by the CLARA teachers: “Let’s talk about CLARA and you.”

Questionnaire developed by the NGOs: “Let’s talk about what we have learned in CLARA.”

CLARA Educational System Impact Evaluation Guide

To use the CLARA Educational System Impact Evaluation Guide in El Salvador, Panama, Mexico, and Venezuela, we identified educators who had participated in CLARA with great enthusiasm and commitment in their country. The purpose of the evaluation focused on identifying support and linkages between CLARA and the country’s educational system, as well as understanding the support provided by the teaching-learning process in the environmental, values, and other areas that the teachers discovered during implementation. Eight teachers responded, including the Mexican teacher whose responses we share below:

CLARA Educational System Impact Evaluation Guide

1. Are there educational programs at the elementary, secondary, and post-secondary levels with content and/or methodologies that make it possible to develop environmental education both inside and outside the classroom?

R = Unfortunately, no.

2. Are there educational programs at the elementary, secondary and post-secondary levels with content and/or methodologies that make it possible to develop the capacity of the youth to serve as a catalyst for the solution of real problems?

R = No. However, through materials like research methodology, an attempt is made to implement programs that help the youth learn about action programs being implemented for the benefit of natural resources and how to protect them.

3. Do you consider CLARA to be an opportunity to carry out environmental education with your students? Why?

R = I consider it to be an indispensable tool that enables the youth to become decision-makers in the future.

4. Based on your experience as a CLARA educator, in what way has CLARA contributed to the development of programmatic content in general and/or vocational educational materials?

R = By supporting the youth in making decisions on the best method to use in conserving their natural resources.

5. Apart from the environment, to what other areas of training do you consider that CLARA has contributed through its methodology? And in what aspects?

R = In vocational education programs.

6. How do you believe that your CLARA experience is contributing to increasing your abilities to teach based on reality?

R = Using the GREEN methodology, I've been able to make my classes more active. It has also helped me involve the youth in projects that benefit the community.

Thank you, CLARA.

Sincerely,

M.C. Austrebertha Rojas Minguera

B. Results from the CLARA Evaluation

AED established a set of indicators that reflected the Results Frameworks employed by USAID/G/ENV's Water and EE&C Teams, as well as those of USAID missions in participating countries. In particular, we ensured that our efforts contributed to the overall objectives of improving the conservation and sustainable use of water resources throughout the Central American region.

Overall indicators:

Project Indicators		
Beginning vs. End-of-Project Performance		
Indicators	Beginning of the Project*	End of Project Performance
Improved Understanding of, & Participation in Water-Quality Monitoring & Improvement Practices by Stakeholders.		
Change in understanding & attitudes of causes & consequences of insufficient & unclean water	42 %	100%
Change in understanding of, & attitudes toward options/solutions for clean water	10	16
Index of participation by stakeholder groups (i.e., communities organized around water issues)	0	96
Change in the number of youth-led/community-based water monitoring or water improvement initiatives routinely conducted	0	30
Change in number of hits on website & requests for assistance by participating NGOs	AI - compute	
Improved Human & Institutional Capacity for Community-Based Water-Quality Monitoring & Improvement Activities		
Change in number of people trained in water monitoring, improvement & related subjects through NGO-led interventions	0	514
Change in number of water educators trained in EE&C strategies/methods/tools	0	135
Change in number of new institutional structures (NGOs & CBOs) undertaking local water-quality monitoring & management projects	0	8
Increased Dissemination of Concepts & Tools Developed for Water-Quality Monitoring & Improvement.		
Change in number of hits on website	AI - compute	
Change in number of water-monitoring kits distributed	AI - compute	
Change in the people informed about CLARA through participation in, & activities organized by CLARA staff	0	50,733

- **Project Impact on Teachers' KAPs**

CLARA's impact on participating teachers' knowledge, attitudes and practices are assessed through responses to the pre-workshop surveys for teachers. We compared the initial KAP survey results with those obtained in the evaluation survey, "Let's talk about CLARA and you."

The impact on KAPs presented below relate to the first two indicators of the corresponding table in "Change in understanding of, and attitudes toward causes and consequences of insufficient and unclean water" and "Change in understanding of, and attitudes toward options/solutions for clean water."

The comparison in KAP changes was carried out among teachers in an urban area (Panama), a rural area (El Salvador) and a coastal-marine area (Chetumal, Quintana Roo, Mexico) who responded to the pre-workshop surveys for teachers at project inception and a total of 14 teachers who responded to the evaluation survey, "Let's talk about CLARA and you," who represent CLARA teachers today.

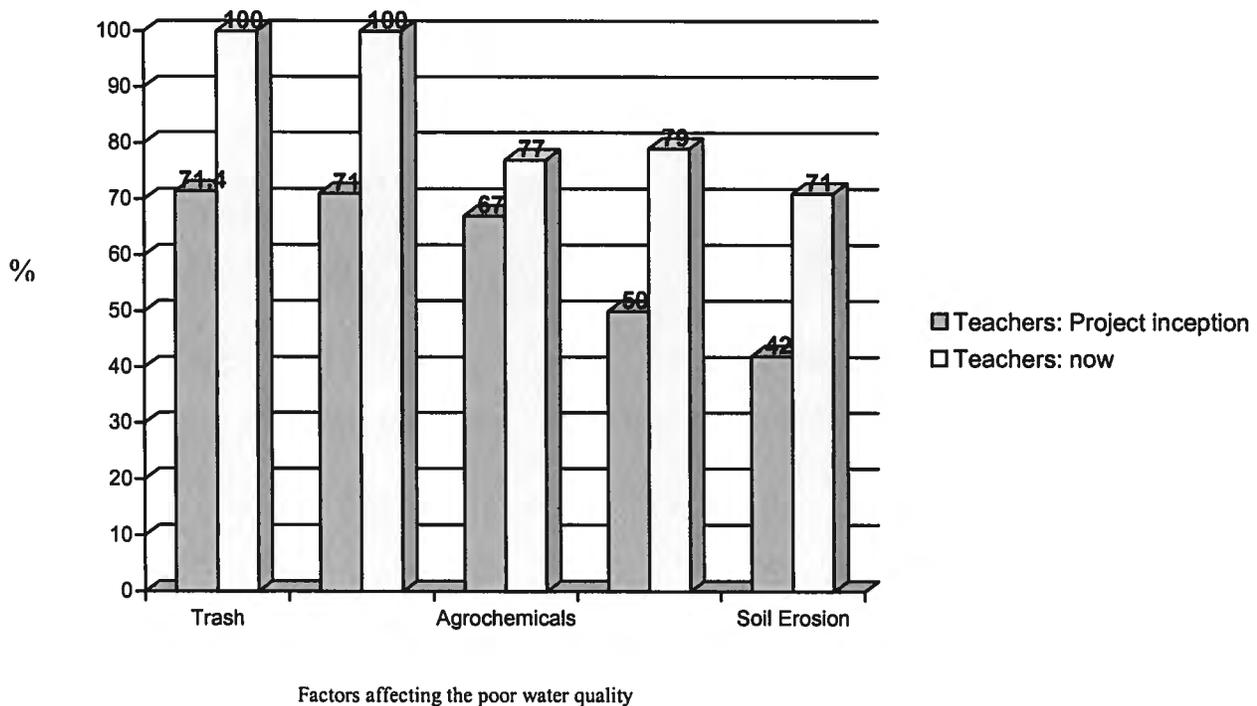
- **Change in understanding of, and attitudes toward causes and consequences of insufficient and unclean water**

The main causes mentioned by the teachers at the start of the first CLARA implementation workshop in Panama, El Salvador and Quintana Roo, Mexico, were similar to those mentioned by the teachers who responded to the evaluation survey; namely, trash and solid waste, human excrement, soaps and bleach, agrochemicals and soil erosion.

The percentages mentioned by the CLARA teachers today have increased, as shown on the following page, based on the percentages of teachers who responded.



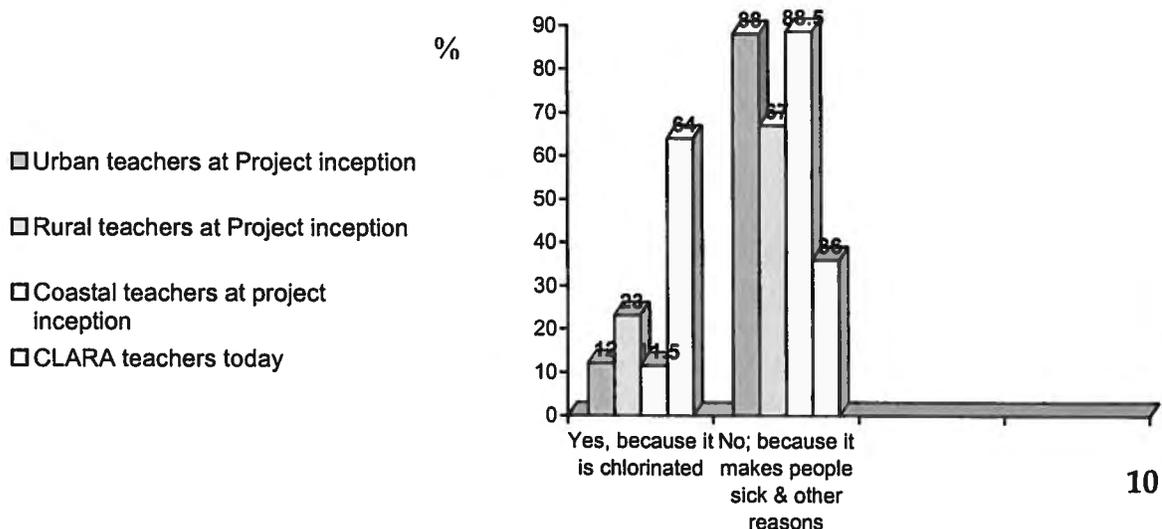
Changes in perceptions of the causes of poor water quality, by percentage of



total responses of teachers at CLARA inception and end.

It is important to mention that the increase in percentage of trash as one of the causes of poor water quality is stated in terms of the conditions of poor management of solid waste in most of the communities in which CLARA was implemented. And in the case of the increase in human excreta as another cause, this can be attributed to the frequency of finding E-Coli in water quality samples collected for monitoring.

Moreover, the increase in the understanding of the causes and consequences is shown in the following graph, which corresponds to the question, is the water arriving at your school of good quality? Those who responded affirmatively knew that water for human consumption must be treated and chlorinated for this purpose. Otherwise, it will make whoever drinks it sick.



- Change in understanding of, and attitudes toward options/solutions for clean water

The changes in this sense are more reflected from the point of view of understanding of, and complexity in the development of solutions than in the numerical indicator itself. This is based on some of the responses of the teachers who responded to the evaluation survey:

- Promote the spirit of student leadership and work in teams to watch over water quality
- Work with the water council responsible to the project so that it uses good quality products.
- Constantly monitor water quality and send results as quickly as possible so that the water council carries out its activities.
- The educational community could raise awareness in the youth as to management of water as a resource for a better personal and collective future.
- Continue implementing programs like CLARA.
- Educate more youth about to the importance of protecting water.
- Treat water adequately, using chlorine.
- Work with local councils, city halls and clinics with respect to conserving the water source.
- Create awareness that water is a resource that can become contaminated and that future generations could be at serious risk.
- Given this situation, it is necessary to promote a culture of resource economy and protection within the educational community, from pre-school through secondary school, and involving the family as well.

A group of young CLARA students found widely varying levels of dissolved oxygen in conjunction with low temperature levels in the Rio Gualache in El Salvador. Thanks to their monitoring of the water, learning about the effects of erosion on the water, and their concern, these young CLARA students coordinated a reforestation campaign to plant trees 100 meters on both sides of the river, which would then help stabilize the quality of the water in the river.

These young students will continue their reforestation efforts on both sides of the river with native trees that they are producing in the school's greenhouse. Community benefitted: 8,235.

Survey Results – Summative Evaluation

The results of the surveys for CLARA NGOs, teachers and youth were processed using the Survey Monkey software. The responses and opinions of each respondent can be seen on the Internet through the software used by clicking in the box of interest in the following reference table:

Surveys	Date Posted		Tabulation & Respondents
LET'S TALK ABOUT WHAT WE LEARNED IN CLARA	9/19/2003		9
LET'S TALK ABOUT CLARA & YOU (TEACHERSZ)	8/22/2003		14
CLARA: EVALUATION OF THE ELECTRONIC MEDIA	7/28/2003		19
LET'S TALK WITH CLARA	7/10/2003		49

Number of people responding to the evaluation

Country	NGOs ¹	Teachers	Students
Panama	100% (1)	14.3% (2)	(0.48%) 1
El Salvador	100% (1)	57.1% (8)	(33.3%) 16
Quintana Roo	100% (1)	7.15% (1)	(37.5%) 18
Guanajuato	100% (1)	7.15% (1)	(6.2%) 3
Merida	100% (1)	14.3% (2)	(20.8%) 10
Totals	100% (5)	100 % (14)	100 % (48)

▪ Results of the CLARA youth evaluation

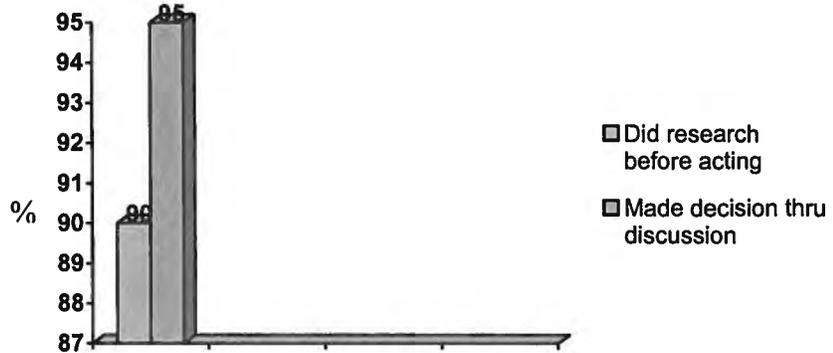
The results of the Let's Talk with CLARA evaluation have been prioritized on the basis of the knowledge and significant competencies or abilities that the youth acquired in the course of their participation in the project, as well as their perceptions and degree of internalization of the benefits of their CLARA participation. This is shown through the recommendations that they have made to other youth.

¹ Not all the CLARA NGOs participated in the PM&E. CESE had finished its contract several months before the PM&E was launched. CEDINCO in Venezuela was not able to attend the meeting in Mexico, and neither was Parque Nacional Barranca de Cupatitzio.

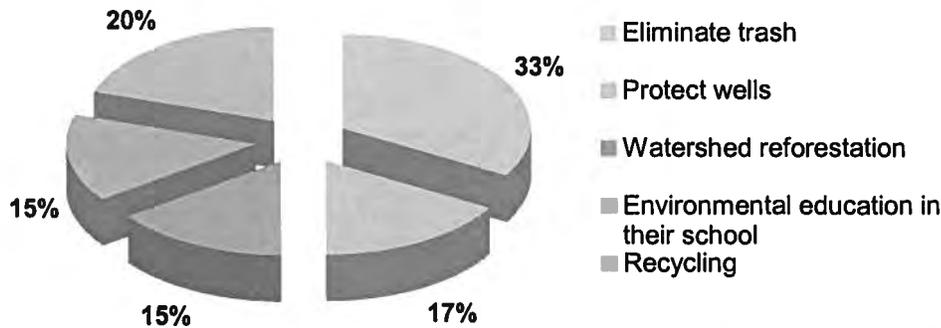
Evaluation of the knowledge of CLARA youth

Seventy-seven percent of the youth respondents correctly defined a watershed. Eighty-six percent knew the name of the watershed in which they and their classmates had been working under CLARA.

Mastery of the watershed protection methodology is significant, as expressed in the graph, in which we observe that most of them know that they must do research and make democratic decisions before acting.



The youth are also able to identify and prioritize the problems of their watershed and water quality, as well as articulate solutions; that is, projects involving civic action, as can be observed in the survey responses via the Internet. Nevertheless, given the nature of the problems that they chose and their context, the actions that they, the 34 youth who, at the time they responded, were developing into priority projects were:



CLARA groups present their results and action proposals to the community and organizations present in the Jiquilisco Bay watershed, El Salvador, 2002.

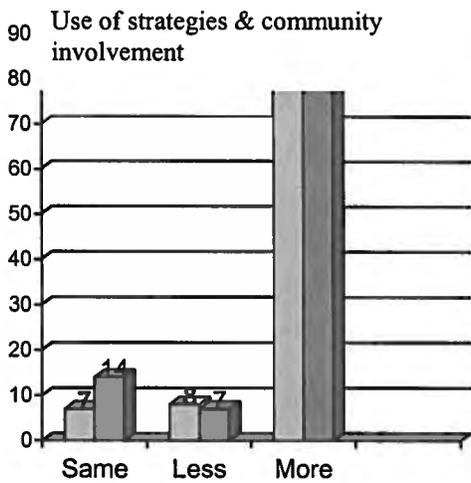
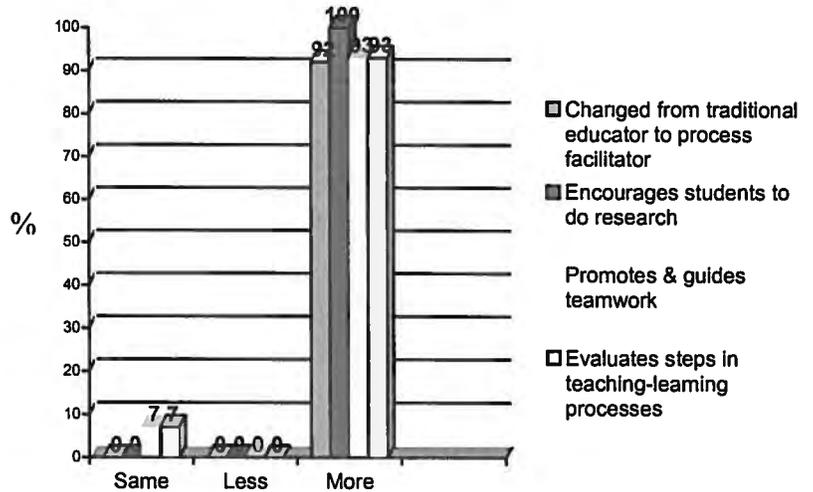


▪ Results of the CLARA teachers' evaluation

CLARA's influence on teachers

According to the percentages obtained in the responses of the teachers who participated in the evaluation survey, CLARA has had significant influence through its educational work in the areas of process facilitation, educational strategy use and significant community involvement, as can be seen in the graphs that show increases in the areas mentioned.

CLARA Educator – Facilitator



- Uses teaching strategies (group exercises, visual representations of concepts)
- Activities developed with community participation



In the meantime, with CLARA's influence on teachers as environmental managers, based on percentages, 100% say that they have greater knowledge about environmental issues and natural resources in their educational community. Likewise, 100 % state that they are capable of speaking about environmental issues in their classroom.

In the same way, 100% of the teachers feel capable of working with institutions, NGOs and community leaders to develop CLARA and other projects.

More information is available in the CLARA lessons learned document, and evaluation details are available at www.surveymonkey.com.

- Results of the CLARA NGO evaluation

Project objectives met

In the words of the CLARA coordinators, the project objectives have been met since the following could be seen in the field:

CLARA Objective
 To train people and especially youth who are aware and capable of generating change, taking a leadership role in working with water as a resource. Angel Tribaldos, CLARA Coordinator, Panama

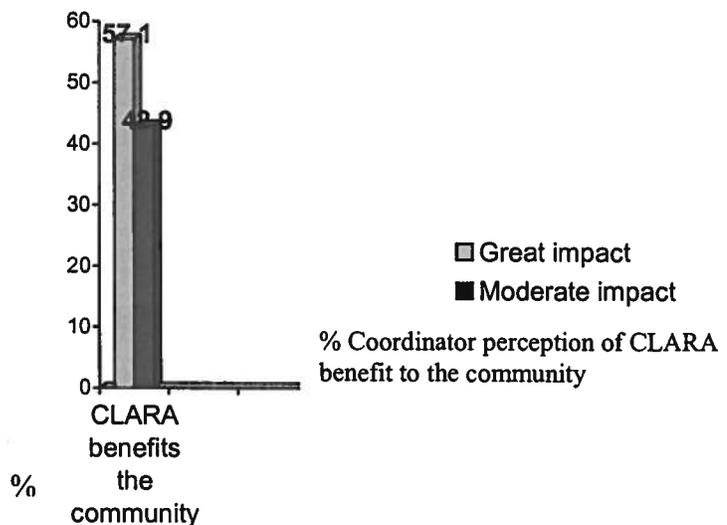
- Many participants have taken on a new attitude with respect to water management and have been leaders in actions that contribute to the management not only of water, but also of the environment.
- In accordance with the results obtained in Guanajuato, Mexico, a series of proposed elements have been put forward with the objective as the starting point, and also because the support received and attention given were adequate and of excellent quality and warmth.
- The youth discovered that there is a watershed and understand that they can help make changes beneficial to water conservation.
- There are palpable experiences that hark back to the CLARA methodology in the ways the youth act and proceed in their attitude and in concrete or measurable results such as the management of their own resources and, the application of research via the Internet, which is not easy to access under current conditions. These and other experiences make one acknowledge that the program has produced the stated results.

- CLARA's impact in the community

According to the perception of the coordinators, in the communities where CLARA operated, knowledge about environmental issues increased over a range of percentages from great impact (57.1%) to moderate impact (42%).

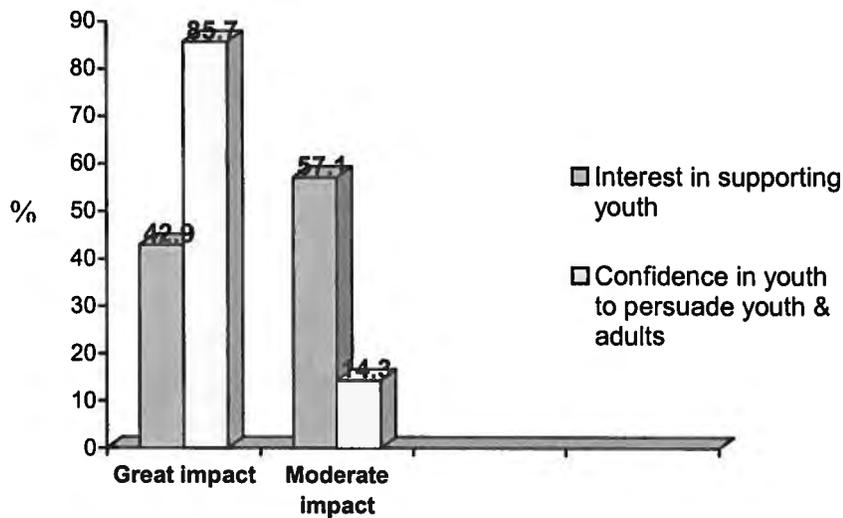
It was the same for community participation, at 42.9% and 57.1% respectively.

It was not the same for the level of in-kind or funding support from the communities. The majority (85.7%) were of the opinion that the impact was moderate.



- Relations between the community and the CLARA youth

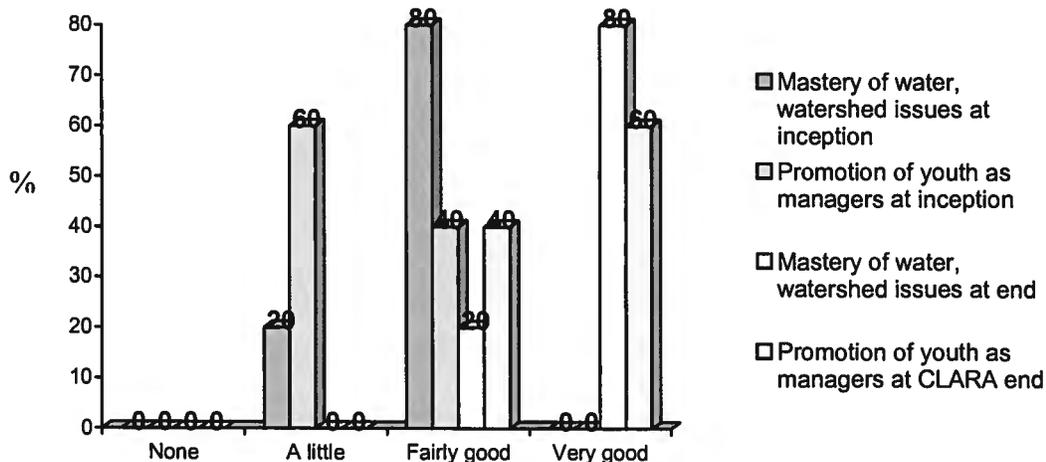
With respect to impact on relations between the community and the CLARA youth, the resulting percentages were encouraging. They stem from the community's interest in supporting the youth in solving problems, the people's sense of responsibility for helping solve the problem and the confidence that the youth can persuade other youth and adults to make things better for their environment.



- CLARA's impact on coordinator knowledge and abilities

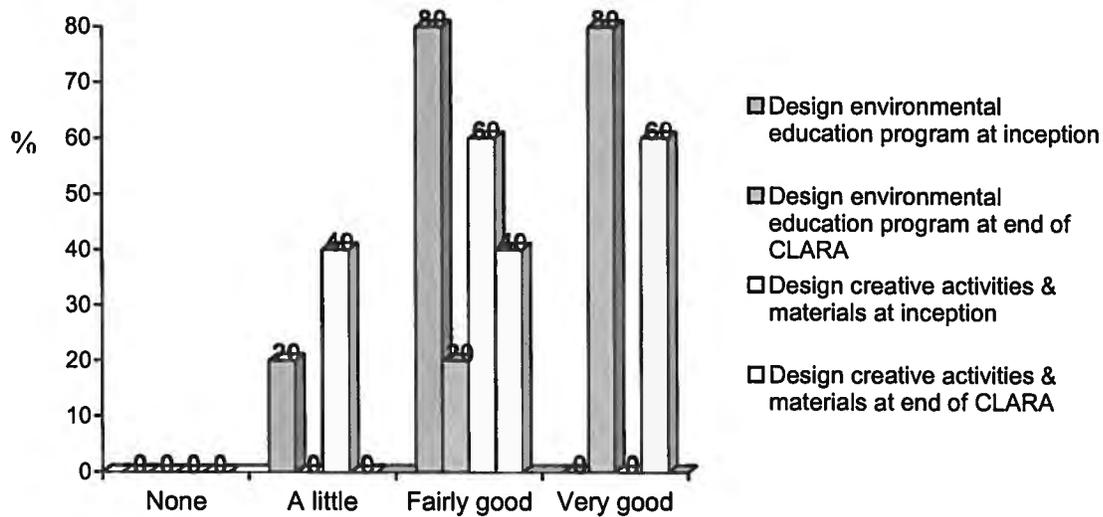
The CLARA coordinators in Mexico, El Salvador and Panama evaluated the impact of their participation in the project in specific areas of technical knowledge and abilities, comparing their level at CLARA Project inception and at the end. The following shows the most significant results:

- Increase in knowledge about watersheds and water quality, as well as the ability to promote the youth as managers of their own initiatives and actions.

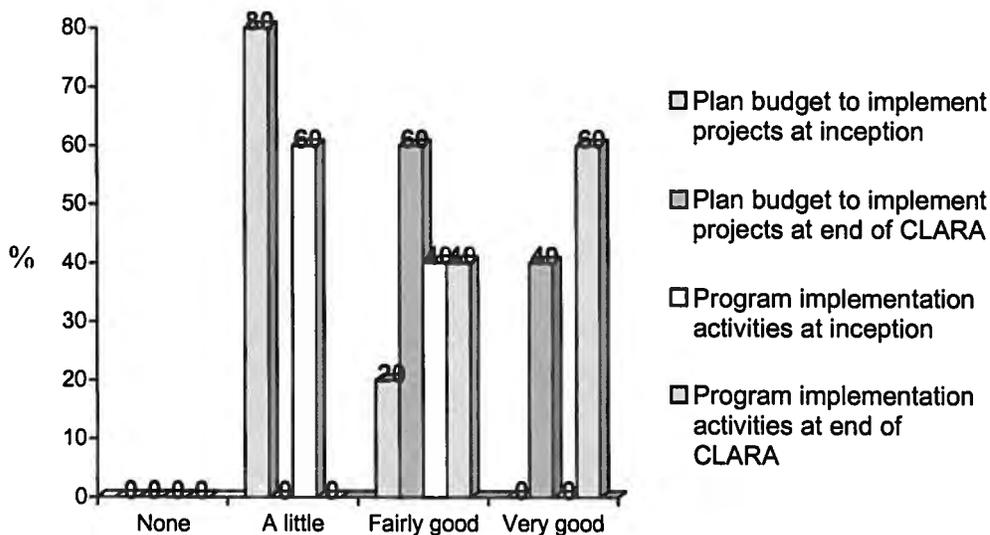


■ Strengthening of coordinator capacities and abilities

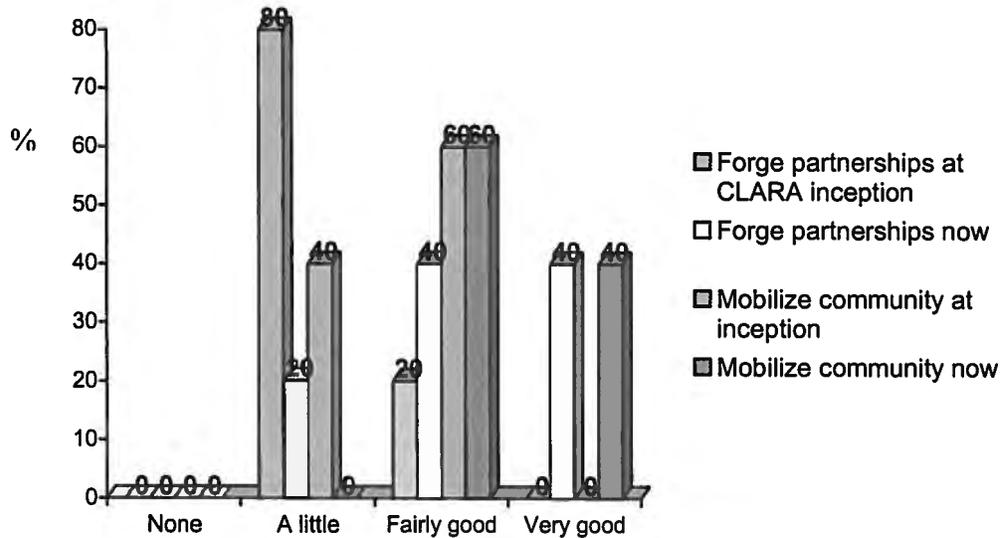
The coordinators evaluated the increase in their technical capacities and abilities after their participation, taking as their reference point their status when the project began. Thus, they considered that their capacity for designing environmental education programs and creative activities and materials had increased. The percentages of their assessments are shown in the graph:



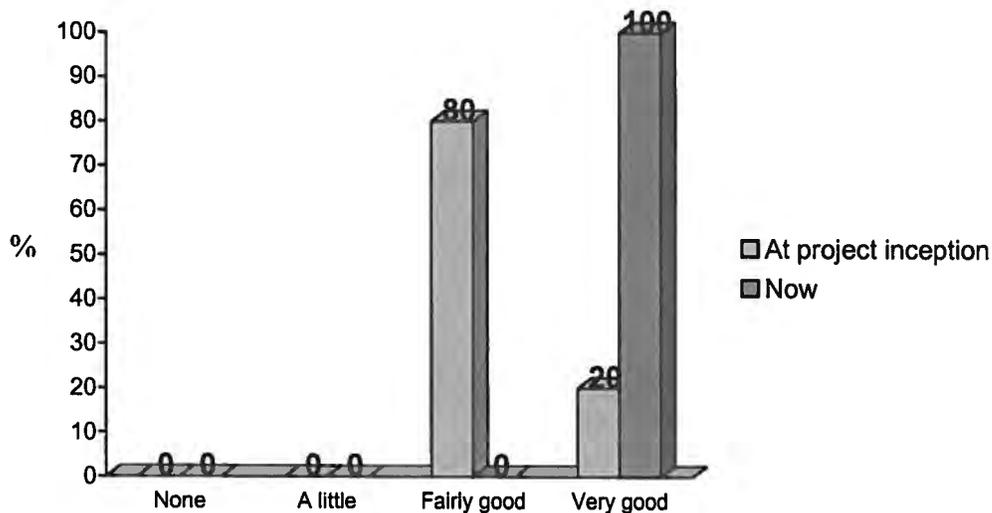
At the same time, the coordinators noticed an increase in their capacities to plan budgets and program activities.



Coordinators' abilities to forge partnerships developed after their participation in CLARA is shown in the response percentages in the following graph. The partnerships forged, as mentioned in Chapter II of this document, were with organizations and individuals present in the CLARA intervention area and/or involved in issues related to water, watersheds, youth or environmental education

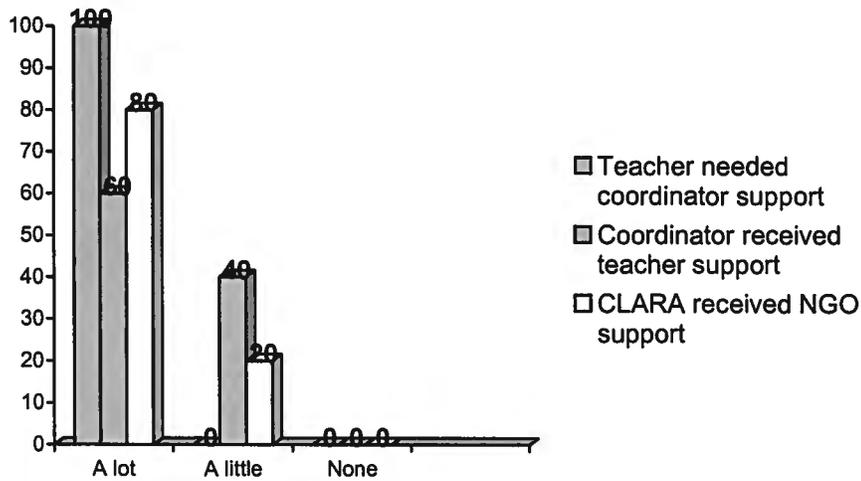


Finally, the coordinators evaluated their level of self-confidence as educators, communicators, facilitators and environmental education project coordinators. In the graph, the percentages of their assessment stand in contrast with the end of the project (i.e., now).

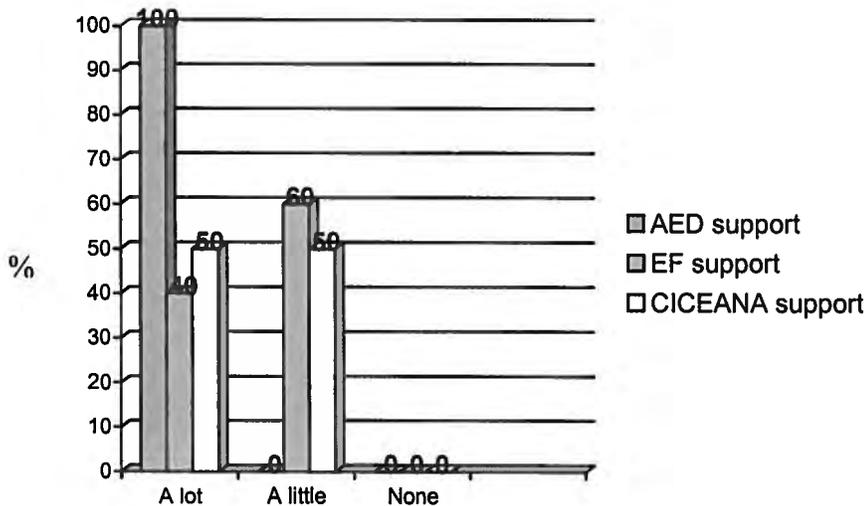


■ CLARA implementation support needs

With respect to the coordinators' responses about the support that they and the teachers requested to implement CLARA, we have developed graphs that show their assessments in this respect by percentage:



For technical assistance provided as support, the coordinators stated that they received it per the following percentages:



ATTACHMENT 4

**RECOMMENDATIONS
FOR
NEW ORGANIZATIONS
INTERESTED IN IMPLEMENTING CLARA**

CLARA FINAL REPORT

This report explains some of the main challenges in implementing CLARA and provides recommendations for any new organizations that might be planning to utilize the CLARA methodology. It provides recommendations in the areas of training coordination, facilitation, working with teachers, engaging youth, forming partnerships, utilizing electronic communications, planning a fundraising strategy, and other aspects of interest. A separate document that complements this section entitled, Lessons Learned on the CLARA Methodology, provides an in-depth explanation of the main items that distinguish CLARA as an action-oriented and leadership-building project for youth.

The report is organized around specific themes:

- a) How to better facilitate CLARA training workshops
- b) How to facilitate a better understanding of the CLARA methodology
- c) How to overcome in-country challenges in implementing the CLARA methodology
- d) How to solve project logistical problems
- e) How to engage teachers and students
- f) How to build up the institutional NGO capacity to implement CLARA and ensure its sustainability

A. How to better facilitate CLARA training workshops

□ Challenge: Timely scheduling of implementation workshop

Recommendation: It is important to consider when to hold the workshop within the school calendar. One should avoid holding it at the end of the school year because the opportunity for follow-up will be limited due to the students' going on vacation. We recommend that it be implemented during the first part of the school year.

□ Challenge: Should we have a CLARA teacher training workshop with no students?

Recommendation: Including students in the workshop has provided another perspective during trainings, but their time must be structured. Students have helped enormously in "test driving" the different activities in the methodology; however, if left unsupervised, they can easily lose focus. Teachers should assume responsibility for their students during the trainings – students should cluster in groups with at least one adult to guide their efforts.

□ Challenge: What materials should I prepare for the CLARA training?

Recommendation: A poster or handout describing the six-step process from "Research to Action" would be helpful throughout the trainings -- analogies like a "staircase" help participants see how it all fits together.

- Include all materials in one binder, with extra copies of worksheets in the back. This helps avoid confusion during sessions. Teachers are also encouraged to take notes in the binder, and actually use the worksheets included, if they know they have an extra copy.
- Material requests need to be processed at least 2 months in advance to avoid costly shipping and customs fees. A smoother mechanism for shipping to Mexico remains to be identified. USAID can play a significant role in facilitating future shipments to Mexico and Central America.

□ Challenge: *What do I need to do to convene a computer training session?*

Recommendation: Prior to a CLARA workshop, it is essential to evaluate the existing local infrastructure with regard to the Internet, Internet-related knowledge, and the experience of teachers and students. This information should then be used to design a strategy and decide whether to provide the training during the CLARA workshop or defer it until later. In case the computer training is carried out during the CLARA workshop, alternative arrangements should be made ahead of time for the possibility that the computer center where the training is planned does not work adequately.

□ Challenge: *When do I emphasize the need to develop good facilitator skills for the teachers?*

Recommendation: It has proven effective to spend some time at the beginning talking about how CLARA is different from much of what teachers are doing in their classrooms. Teachers and NGO staff are sometimes unfamiliar with CLARA's expectations for program facilitators. Shifting teaching strategies and building good questioning strategies are critical to this program's success, and these skills were incorporated into the pre-workshop in Quintana Roo, Mexico, as well as the subsequent teacher training.

Many teachers have a "pet project" that drives the selection process during the first year. This seems to be an inevitable step in their evolution from dispenser of information to facilitator of student investigation. Teachers should be allowed to focus on issues that are important to them, but the role of the student in the research and action process should be continually emphasized so that they take on an increasingly prominent role in the process.

□ Challenge: *How do I determine who comes to the CLARA trainings?*

Recommendation: Teacher workshops and training-of-trainers sessions should be limited to individuals who will actually be doing the implementation and/or development efforts in their communities. Schools get an invitation to participate in CLARA, but, in order for them to send a teacher to attend the workshop, they follow selection criteria and fulfill a requirement to formalize an agreement with CLARA. This ensures that there is a commitment among the parties, and the participating teacher is notified ahead of time of his/her participation in CLARA

□ Challenge: *CLARA facilitators need to model attitudes and skills.*

Recommendation: Trainings should show teachers how to lead their students through the process and direct them to needed information instead of providing all information through lectures or handouts. If the research-to-action process is to be student-driven, training facilitators must model appropriate behavior for classroom teachers. AED and Earth Force staff have taken the lead in modeling appropriate facilitation throughout pre-workshop trainings and during teacher trainings.

□ Challenge: *Making Policies and Practices Comprehensible*

A major challenge is enhancing the policy and practice segments of the trainings to make these elements understandable. These segments are important for students to select the most appropriate strategy for action in their communities. The concepts are critical to an understanding of local power dynamics, and central to balanced research.

Recommendation: We have incorporated additional activities and discussions into the workshops to deepen the participant's understanding of local policies and practices, and reviewed their options as they select the most effective strategy for action.

B. How to facilitate a better understanding of the CLARA methodology

□ *Challenge: Teachers and students tend to jump into action without properly following all the steps of the CLARA methodology.*

In many instances, after the training, participants tend to move directly to the fifth step in the CLARA methodology, which is to "take action," without executing the initial steps. We believe the main cause of this behavior is that, in some instances, the teacher does not have sufficient knowledge or is too busy to direct the students. Consequently, it is easier to carry out immediate actions which are within their reach than to go through the steps of truly understanding the situation in their watershed and acting on real problems. Sometimes it is also difficult to access the necessary information through the Internet or meeting with local authorities who can provide them with the information they need.

Recommendation: Provide additional teacher training opportunities to ensure that the CLARA methodology is properly followed.

Classroom visits and role play sessions during NGO meetings that model appropriate facilitation techniques and clarify difficult elements of the CLARA methodology (e.g., policies and practices) should be considered.

Dedicate more time to teacher training with a focus on the methodology, its components, the use of the materials and the development of activities and actions.

□ *Challenge: Teachers are challenged to step back and act mainly as facilitators of the implementation of the CLARA methodology.*

We identified some ongoing confusion over the role of the teacher as "facilitator" in the CLARA process. Many educators were uncomfortable with the more "hands-off" role, and lacked the skills to effectively guide their students' inquiry and ensure group buy-in as the students worked towards action.

Recommendation: Use the series of handouts and activities developed under CLARA that were designed to highlight the differences between traditional teaching and facilitating student inquiry.

□ *Challenge: Two difficulties arise when we initiate students into the CLARA methodology utilizing a watershed as their "universe." One is the logistical difficulty of moving around the watershed collecting measurements; the second is the complexity of the watershed, which is sometimes difficult to conceptualize and assimilate.*

Recommendation: It is recommended that students begin to get acquainted with the CLARA methodology using a smaller “universe,” which may be analyzing the quality of water on the school grounds or other immediate area. Students develop a better understanding of the water quality problems when they start with a project close to home.

□ *Challenge: The CLARA website is not an end in itself, but a tool to help accomplish the goals stated under CLARA.*

Recommendation: The CLARA website has proven to be a great help to many organizations, but it cannot serve as the only means of communicating with others. The website fulfills its purpose in sharing information in a way that furthers CLARA’s goals and objectives. Participants in CLARA are also encouraged to use other ways of exchanging information, such as electronic mail, Yahoo Messenger, and FTP folders. All these different online tools have played a key role in the implementation of CLARA.

The CLARA workshops have played a key role in helping participants improve their computer and Internet skills. In some cases, however, this training has not been sufficient for the participants to feel comfortable using the Website. Specially, if the teachers don’t feel comfortable, they are not going to provide the necessary encouragement for the students to actively use it. We definitely recommend that more website and Internet training sessions be available for participants, especially for those who live in more remote or poor regions, where the Internet is not widely used.

Among all the electronic tools, the use of the online forum has been especially difficult. Initially, we tried to open a forum for a week. Soon we found out that this timeframe was not enough, especially for people who had difficulty accessing a computer because of the rural character of their location. For a later forum, we extended the participation period to two weeks and it worked better. Also, we found that it is essential that there be a strong moderator to keep participants focused. In general, it is an area where more training should be provided.

C. How to overcome in-country challenges in implementing the CLARA methodology

□ *Challenge: CLARA can work in and out of the classroom.*

One should take into account that in Panama, most of the official educational centers (public schools) have a very large student population. For this reason, there are morning and afternoon sessions. In contrast, private schools have one school day session, and most are very demanding as to providing class time. This made it possible for CLARA Panama to employ very diverse ways of operating. In some cases, activities were carried out within the class schedules and others outside of it.

Recommendation: Depending on the school work context, one can work in different ways, such as those listed here:

- Working outside of class hours has been the most common mechanism in schools that have two daily sessions or only morning sessions.
- Working before classes start is indicated in cases where classes are held in the afternoon. The youth can arrive a few hours before classes for activities.

- Working during class hours is a way used in very few high schools because, in most cases, the teachers do not want to lose class time. This has been very efficient with schools that have modern educational systems and in one group consisting of students in the 6th primary school year.
- In one high school, they have a special time for guided study and they have used those hours for CLARA tasks, mostly because the students who are part of the group have good grade averages.
- Another successful way of operating that works with very motivated youth is to work on Saturdays, which also requires very committed teachers.
- The final case is when field tours and activities are carried out during class time, but meetings are held after the school day is over.

□ *Challenge: Agreements and partnerships with educational center principals*

In Panama, CLARA's application in the educational centers involved a simple verbal commitment among the principals of the educational centers and the Parque Natural Metropolitano. Additionally, all activities were coordinated with the teachers responsible for the group. In some cases, in which the teachers adequately supported the group, it was not possible to exert pressure on them because of lack of commitment and communication with the principals. For that reason, the teachers did not respond to pressure from the Panama CLARA coordinator.

Recommendation: It is highly recommended that the school director and the NGO sign a written agreement so as to have an established commitment mechanism with the teacher and, in turn, a source of support for the latter once activities are developed. Moreover, it would also be recommended that the teacher and CLARA sign a written agreement so that there is another form for achieving a more formal commitment.

□ *Challenge: Very limited follow-up to the processes of each school*

Recommendation: Reduce the number of schools and increase the number of participants. In this case, 40 schools (in two years) were the projection. Change it to 20 so as to obtain quality results.

□ *Challenge: Public schools with a much lower rate of participation than private schools.*

Recommendation: Involve more private schools as a counterbalance to public schools, with the understanding that this is a way of reaching public schools with greater possibilities than can at some point be supported in a context of limited available resources.

□ *Challenge: Developing people's capacities to communicate through electronic means is a wide and new market for NGOs, teachers and students in the countries CLARA currently works in.* There is little or no knowledge of the online communications tools available to teachers and students. In rural communities, most teachers and students are not used to using Internet, mostly because they do not have the infrastructure to do it, and they have not had adequate training or experience using the Internet. Under these circumstances, training on the use of the CLARA website during a CLARA workshop is not enough to achieve the active participation of NGOs, teachers and students. In addition, the fact that the CLARA trainers do not feel

comfortable with the Internet themselves, does not help, since they tend to pay less attention to that part of the training, limiting the time and not communicating its importance.

Recommendation: Getting to the point where participants use the CLARA website and the Internet effectively is difficult and requires further training and a trainer who is fully familiar with the use of the Internet. It is necessary to establish an ongoing training process for the teacher or student, which must be replicated with the students and the tools must be available to the schools. In El Salvador, FUNDAMUNI staff have arranged “field trips” to local cybercafés, so that students without technology in their schools could participate in forums.

□ Challenge: Obstacles to effective use of online forums

Earth Force and CICEANA staff planned an online forum to facilitate the Cross Cultural Watershed Partnership in the fall of 2002. This forum proved difficult to access – many students and teachers were unable to register or participate. In addition, students and educators exhibited little interest in discussing cultural issues, instead preferring to focus on exchanging information about their local water quality problems and solutions.

Recommendation: Earth Force and AED staff worked with technicians at CICEANA to streamline the registration process for later online forums to provide easier access for teachers, students and NGO representatives. Earth Force staff recommended that, to enhance interest in participation, future online forums focus on exchanging information on pressing water quality issues and best practices in the classroom. The first CLARA poster contest was a great success, with beautiful and compelling entries from students in Mexico, El Salvador, Panama and Venezuela. These works of art can bring students together across borders in intercultural exchanges.

□ Challenge: Limited access to the Internet

Lack of access to the Internet in rural areas limited participation in, and the effectiveness of the online forum, and visits to the website.

Recommendation: Earth Force and AED staff worked with participating NGO staff to identify technology resources in their communities, from computer labs at local universities to nearby “cybercafés”. NGO representatives built relationships with these centers to enhance electronic access for local students.

□ Challenge: The students in many areas do not have basic information for progressing through the various steps of the methodology.

Recommendation:

- On occasion, the students become demoralized because of a lack of information, but this can be turned into a positive experience and the students can speak about the lack of information and the chances the youth have to help overcome the deficiencies.
- Seek to form partnerships with institutions such as the National Water Commission of Mexico or others responsible for water who can provide information or, where there are gaps, support the production of basic educational materials that explain the water cycle.
- Check the CLARA website. It has basic country-level informational materials or references.

❑ *Challenge: School attendance is periodically interrupted because of agricultural duties, and this interrupts follow-up of the process.*

Recommendation: Integrate urban schools and, with the rural schools, take the agricultural cycle very much into account in establishing when to move forward with all the students.

❑ *Challenge: Processes, training interrupted during end-of-school-year periods.*

Recommendation: Training should be scheduled no later than during the second month after the start of the school year.

❑ *Challenge: Incorporating local groups into CLARA*

Recommendation: Besides working with schools, CLARA can engage local volunteer groups or organizations that work with youth; for example, boy scouts, organized church youth groups, student volunteer groups from universities and technical schools.

❑ *Challenge: Engage the media:* Working with the communications media to promote CLARA and disseminate the methodology and results obtained by the youth has been a valuable resource. In El Salvador, Mexico and Panama, we have had valuable experiences to be continued by the CLARA partner NGOs.

In El Salvador and Mexico, we worked with the local mass media, especially television and radio, to disseminate and promote the work of the CLARA groups. This has produced positive results in the involvement and support of local actors and the educational community especially.

Recommendation: For the effects of involving the media more effectively, the El Salvador experience of inviting the press to be present at an analysis of water quality where it is happening and interview the youth to know about their experiences and ideas for contributing to solving the water quality problem that they have selected is without a doubt the most valuable lesson in replicating CLARA and any other project focused on promoting youth leadership and engaging the community in supporting the youth.

D. How to solve project logistical problems

❑ *Challenge: Shipping water monitoring kits:* There was significant initial difficulty in shipping LaMotte kits to Mexico directly from the United States. These difficulties were frustrating and expensive, and limited the effectiveness of the training for NGOs and teachers. We explored shipping via a Mexican distributor, but the associated fees were high, and the distributor was reluctant to release the kits to CICEANA without prompt payment.

Recommendation: For trainings and meetings in Years Two and Three, Earth Force and AED staff transported the kits and curricula in their personal luggage – the costs of flying with additional bags was significantly less than the cost of shipment.

□ *Challenge: Training workshop logistics.* Logistical preparations for trainings were frequently left to the last minute, resulting in significant distractions from the methodology and teacher support planning.

Recommendation: Earth Force and AED staff worked with the participating NGO representatives to dedicate more time to preparation and planning in the weeks prior to training. With these details taken care of, more time could be spent on reviewing the methodology and enhancing the local partner's ability to follow up with participating teachers.

"Outsourcing" as much of the logistics as possible for each workshop (e.g., meals, transportation, lodging) was also very helpful in freeing the CLARA coordinators of those responsibilities. At some sites, the local NGO staff has had to scramble around at the last minute procuring coffee, snacks, even toilet paper! In other sites, all of these amenities (even lodging) have been coordinated by a third party (e.g., CREDES in Patzcuaro, Mexico). This has helped the local partner concentrate on the methodologies and building good relationships with the participating teachers.

E. How to engage teachers and students

□ *Challenge: Teachers with too many commitments to develop CLARA and little willingness to participate.*

Recommendation:

- Define criteria for selecting the teacher whose commitment one wishes to obtain.
- The CLARA teacher must work with his/her section so as not to interfere with students and fellow teachers.
- Involve preferably two teachers per school, and ensure full support from the school administration.

□ *Challenge: Students are challenged to think and change to inquiry-based learning.* Youth participation is quite large and, for the most part, they are ready to work for the common good, even though the academic and cultural training of Mexican youth is focused on seeing the teacher as a figure who directs and accompanies the students in almost all the processes, such that if the students are given responsibility for the bulk of the program, it is difficult for them to become adequately involved and, in many cases, they opt to leave the program.

Recommendation: Supporting youth facilitators

Engage the first generation of trained youth in training other youth, becoming trainers themselves, in addition to guiding teachers that become involved in monitoring water quality particularly and speaking about their knowledge, experiences and personal growth.

□ *Challenge: The recruitment and renewal of leaders and teachers*

In CLARA-Panama, we have seen the situation in which the teachers who start working with the project abandon their support at times for various reasons. In some cases, the academic work load increases and they cannot continue supporting CLARA; in others, teachers leave the educational center because they find better employment. It has also happened that the teachers

are taking post-graduate or a master's program and, in this case, they cannot support the youth after the school day is over.

Recommendation: This situation is resolved through keeping at least two active teachers coordinating the CLARA groups. To achieve this, one must invite other teachers so that they know the project and become involved in the work with the group and see how the methodology works. At the same time, they can be given direct training on how the methodology works.

Another useful alternative is to keep the principal of the high school informed of the activities so that, if one begins to notice a teacher's inactivity or failure to meet his/her commitment, the principal can refer the group to another teacher. Another alternative for meeting the challenge of lack of teacher commitment is to invite other teachers to the training workshops scheduled in the country, even though others have already taken the workshop.

It is also necessary to apply the experience to youth who also can leave the group for various reasons. For this situation, it is desirable to keep a constant recruitment process going so that there will always be youth of various levels involved. For that reason, it is important to avoid having all the students be from the graduating class and, once the school year ends, there is no continuity.

□ *Challenge: Little management by teachers of the environmental issues, civil participation and planning.*

Recommendation: In addition to the CLARA training workshop, set up specific training on the components of CLARA and go into them more deeply.

□ *Challenge: Recognition and motivation*

There were three training workshops for CLARA implementation in Panama. In all of them, diplomas of participation bearing the signatures of the Director of the *Parque Natural Metropolitano*, the USAID/Panama Mission Director and the AED Education Vice-President were awarded. This was appropriate motivation for the teachers, but recognition of the course by the Office of Continuing Teacher Education of the Ministry of Education of Panama helped the participants compete and assisted them in pursuing better salary options.

Recommendation: Incentives need to be generated to keep teachers and students engaged. The incentives should motivate the participation of the students and teachers in the program. Incentives that increase the participation of teachers are very important. Teachers are usually very busy and do not have the time to get involved with CLARA. Facilitating their involvement in the program and providing stimulating incentives is almost a requirement for the program to succeed.

In practice, we have seen that the youth see themselves as being very happy and motivated to work when they receive some kind of acknowledgement for their activities. In many cases, simple congratulations are very motivating. In Panama, various policies and practices workshops have been scheduled, and all the participating youth received diplomas of participation, and since these diplomas were anticipated, happy faces were the result. Another

method of acknowledging the youth was a certificate of participation in CLARA for the year 2002. It was presented to them during the accomplishments fair that was held in the Environmental Education Center of the *Parque Natural Metropolitano*. In addition to getting visits guided by the park, it was an important incentive for the CLARA youth.

F. How to build the NGO institutional capacity to implement CLARA and ensure its sustainability

□ Challenge: Institutional capacity to implement CLARA

Implementing the CLARA methodology requires the CLARA technical coordinator to make great efforts to meet the various requirements of the member schools and the youth: training reinforcement; technical assistance in developing implementation plans in the CLARA schools; preparation and accompaniment for water quality monitoring; promotional and social mobilization activities, assistance in the formation of partnerships, production of reports and others. This set of requirements places great responsibility on the CLARA technical coordinator in the work context. However, the experience of the last few years in implementing CLARA has shown us that it is possible to implement CLARA in its three components, but that it is preferable to make some of the adjustments suggested here.

Recommendation:

- *One CLARA Educator/Coordinator per NGO can only involve a maximum of 25 schools.* The CLARA groups require technical assistance in the classroom, meaning that the students and their teachers also need frequent on-site visits. The level of technical assistance required, the time available in the school calendar and the distance between schools have been determining factors in arriving at the number of 25 schools to be served with the frequency and quality necessary to bring the CLARA groups to develop the methodology and obtain results in their interventions.

Twenty-five schools represent 62.5% of the 40 that one hoped would be served by the coordinator. The experience in the field shows us that in working with youth groups through their schools, it is necessary to adapt to their rhythm of learning and the possibilities of working in the school dynamic and under the conditions of the intervention area: school distances, travel facility, among others.

Additionally, at least two teachers should direct each CLARA group formed. This ensures that the absence of one will not impede the development of activities.

- *The key to real school/youth and community involvement lies in the right selection of a CLARA educator/coordinator for the NGO involved.* The coordinator/educator plays a key role in the development of the CLARA methodology. The mastery that one must have of this method is supplemented by the abilities that one seeks in their profile at the time of their selection.

Leadership abilities, the ability to communicate with youth and work in teams, and the ability to design educational resources are important abilities that, when joined to the

capacity to convey ideas, facilitate training processes and negotiate with strategic partners and potential donors make the CLARA coordinator the appropriate facilitator for successful implementation.

The CLARA experience has shown us that it is not always to the most professionally prepared that we must look, but rather those candidates who come closest to having the abilities and capacities mentioned above, and strengthen the technical aspects that we find.

- *Technical assistance is still required after the CLARA educator/coordinator has been trained in the CLARA methodology.* The CLARA educators/coordinators have received ongoing technical assistance for the application of the methodology in the field after their training. In practice, all coordinators requested technical assistance in the various CLARA implementation steps in both urban and rural educational communities.

The above is based on the level of technical assistance that was provided during the first two years of project implementation, and emphasizes the need to program resources so that the technical assistance can be provided adequately and in a timely fashion to new partners, as well as to strengthen and consolidate the capacities of those already involved.

□ *Challenge: Set milestones for the NGOs*

Setting goals and indicators for the NGOs to support follow-up in CLARA based on expected deliverables in each of the project components turns out in practice to be quite difficult for the NGOs to handle. However, goals and indicators are greatly helpful when developing reports on results and deliverables.

Recommendations:

Setting goals – commitments from the start and contributing to clearly establishing NGO commitments facilitates follow-up in project implementation and makes reporting to donors easier.

Incorporating the goals and indicators of each of the three CLARA components in the contract with NGO partners so as to meet them is contractually protected.

□ *Challenge: Implementation of CLARA exceeds the amount that was provided to the NGO*

CLARA provided twenty-five thousand dollars (\$25,000) to two of the nine organizations to implement CLARA during the three years of its period of performance. We estimated cost based on CLARA educator/coordinator fees and the cost of activity implementation. In practice, this amount limited some activities or the meeting of goals to a certain extent, above all, those relating to the number of CLARA schools.

Recommendations:

- Make efforts to increase CLARA funding. \$50,000 is estimated as being an adequate budget.

- Hire two people for the project: the coordinator and a technical specialist. The requirements of administrative work, although not intensive, require the coordinator's time, as well as the need to approach potential partners and donors, and follow up with them.
- Provide a budget for staff transportation, especially in those cases where CLARA is implemented in rural areas, as well as for organizing exchange and dissemination events.
- Provide support and logistical materials to the CLARA groups in a timely fashion to carry out promotional activities in the community.
- Acquire computer equipment and the inputs necessary for providing technical assistance to the groups and facilitating CLARA events.
- Purchase efficient Internet service, preferably high-speed, large-capacity cable.

□ *Challenge: Achieve CLARA sustainability*

Recommendations: The strategy followed to achieve CLARA sustainability was programmed to begin in the second implementation phase. However, experience indicates that it is advisable to start technical assistance in planning and fundraising from the beginning of the project.

Comparative Table
CLARA Work Plan in the Area of Technical Assistance and Fundraising

Major program activities	Work Plan (2000-2003)	Suggested Work Plan for Future CLARA Projects
Phase I		<ul style="list-style-type: none"> - Develop a fundraising & marketing strategy - Map out potential strategic partnerships & establish relationships - Identify institutional strengths, strategies & techniques to do fundraising - Provide training on the principles of fundraising & social marketing
Phase II	<ul style="list-style-type: none"> - Develop strategic partnerships 	<ul style="list-style-type: none"> - Seek new strategic partnerships & formalize collaboration - Identify private donors - Develop a proposal - Share experience, knowledge & techniques for fundraising with other members of CLARA - Receive training on a specific area of fundraising & marketing
Phase III	<ul style="list-style-type: none"> - Seek new strategic alliances & formalize collaborations - Develop a fundraising & marketing strategy - Identify institutional strengths, strategies & techniques to do fundraising - Share experience, knowledge & techniques for fundraising with other members of CLARA 	<ul style="list-style-type: none"> - Evaluate results stemming from the formation of strategic alliances - Continue to cultivate & seek new donors & write proposals - Share experience, knowledge & techniques for fundraising with other members of CLARA - Identify other areas of institutional need to be strengthened to better market & fundraise, & provide technical assistance in those areas - Reassess work plan & make necessary adjustments
Phase IV	<ul style="list-style-type: none"> - Evaluate results stemming from the formation of strategic alliances - Identify donors or private donors - Develop a proposal - Provide training on the principles of fundraising & social marketing 	<ul style="list-style-type: none"> - Evaluate overall results - Solidify established alliances & seek new commitments for the continuation of the project

In the case of CLARA, planning and fundraising activities generated the positive results presented in Chapters III and IV. However, considering that almost 20% of the donors had annual losses and that half the NGOs required training in planning and fundraising, we

recommend that this topic be dealt with from the start as part of overall project planning. The above comparative table presents some elements in the training on fundraising and strategic partnership building for which we suggest modification in any future implementation effort. The table also lists other activities that would be added under a new work plan, with the goal of strengthening the NGOs and thus ensuring the success of their fundraising and partnership formation efforts.

If we had incorporated planning and fundraising in CLARA from the start, we think that the NGOs would have been strengthened at the beginning of the project, placed greater emphasis on improving financial management, planned and achieved better fundraising, and planned for phasing out their dependence on USAID funding.

In addition, considering that fundraising is a discipline that also moves forward in a logical sequence of steps, as explained to us by PROCURA (the organization that provided training to CLARA NGOs in the final year of implementation), the NGOs involved in CLARA could have begun developing better techniques for establishing links with the identified donors, trying to renew the grant, and solidify them as a future project donor.

In the same way, there would have been better resource management and it would have been clearer to the NGOs that the donations received, sometimes small and in-kind, while only contributing to the annual fund¹, would pave the road to larger grants in the future.

□ Challenge: NGOs need to build broad, high-level partnerships from the start.

To guarantee a more efficient implementation of CLARA, it is necessary to involve from the beginning the local organizations and institutions that could play a support role or become potential donors.

Recommendations:

It is important to group individuals and governmental and non-governmental organizations at local, national and regional levels into partnerships with a broad focus based on ample participation. Because all of these actors play an important ad-hoc role in project implementation, these partnerships should be established as early as possible. The key is to be strategic and develop a map that enables a visualization of all potential partnership opportunities.

It is important to take the following aspects into consideration when developing partnerships:

- The partnership consolidation process is sometimes very slow and bureaucratic.
- There is not always adequate follow-up for economic resource management.
- The search for resources implies training, experience, and basic resources (time and logistics) that are not always available. Moreover, there are reduced possibilities for obtaining grants.
- The partnerships must be formalized into institutional agreements.

¹ The following are the purposes of the annual fund: 1) to provide an annual amount of funding repeatedly, both restricted and unrestricted; 2) to establish grant-making habits and patterns; 3) to establish a grant that leads to larger grants; and 4) to provide an ongoing list of important prospects.

- Some strategies for choosing partners are:
 - Mapping, proper identification, and screening.
 - Assemble a strategic mix of partners for specific activities.

ATTACHMENT 5

NGO

Commitment &

Support Letters

**for the continuation of CLARA beyond the life-term of
the contract AED/USAID**

CLARA FINAL REPORT



México, D. F, a 09 de agosto de 2003

Atziri Ibáñez:
Coordinator, Center for Environmental Strategies,
Academy for Educational Development,
P r e s e n t e,

El Centro de Información y Comunicación Ambiental de Norteamérica, A.C. (CICEANA), es una asociación civil sin fines de lucro. Nuestra misión es promover el desarrollo sustentable a través de la educación y la comunicación ambiental, poniendo al alcance de la sociedad, la información y los conocimientos necesarios para que adopten una actitud responsable e informada con respecto al ambiente.

Estamos conscientes de que en la actualidad, es indispensable tomar decisiones bien fundamentadas y ambientalmente éticas, para caminar desde un ambiente degradado hoy en día, hacia un medio sustentable para el mañana.

Por lo que estamos seguros de que CLARA en un programa excelente que genera acciones enfocadas al cuidado del recurso agua en las comunidades, a través del trabajo y liderazgo los jóvenes, quienes desarrollan sus capacidades de comunicación, análisis, toma de decisiones, organización y liderazgo.

CICEANA ha trabajado el componente de comunicación en CLARA teniendo experiencias enriquecedoras y sumamente satisfactorias, al brindar a los jóvenes una oportunidad de acercamiento y capacitación en el uso de herramientas electrónicas de comunicación e información. Por lo que consideramos al interior de nuestra institución que los conocimientos, las experiencias, y el gran potencial aun no explorado de este proyecto son motivos más que suficientes para apoyar la continuidad CLARA.

Cordialmente:
M en. C. Margie Simon de Ortiz
Directora General
Ciceana, A.C.



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29 de julio de 2003
 PNM-109/2003

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DEPARTAMENTO/DEPT.		TELEFONO/PHONE #	
FAX	001 202 8848997	FAX	232-5615

Licda. Atziri Ibáñez
 Coordinadora General
 Coalición para la Limpieza Activa del Recurso Agua (CLARA)
 Academia para el Desarrollo Educativo (AED)
 Washington, DC

Estimada Licenciada Ibáñez:

La presente lleva la finalidad de formalizar el interés del Parque Natural Metropolitano (PNM) en continuar llevando adelante el Proyecto CLARA más allá de agosto del 2003, que es la fecha de terminación formal. Se trata de un compromiso adquirido con la comunidad educativa en virtud de este exitoso proyecto, y que ha representado un gran esfuerzo que no debemos ni deseamos dejar perder.

Para lograr este objetivo, hemos desarrollado un plan de acción que puntualizamos a continuación:

1. Estamos en un agresivo proceso de consecución de fondos tendiente a mantener funcionando el proyecto con Ángel Tribaldos como Coordinador.
2. Estamos preparando y presentando propuestas a diferentes empresas nacionales y próximamente estaremos presentando una de mayor cuantía a la Fundación NATURA. Para estas propuestas, estamos utilizando como contrapartida los materiales que han quedado del año anterior y los equipos adquiridos con fondos del Proyecto CLARA.
3. Para dar continuidad al proyecto, en caso de ausencia de Ángel Tribaldos, contamos con el apoyo de Elva Denvers, actual Asistente Técnica, y estamos preparando a Dixia Aizpurúa en los detalles de avance y seguimiento del mismo. Dixia también conoce la metodología, ya que participó en el Primer Taller de Capacitación.
4. Estamos en capacidad de darle seguimiento a los colegios activos, brindarle apoyo técnico y orientarle en la consecución de fondos para sus proyectos, además de darle seguimiento a los fondos semilla asignados, al menos hasta la culminación del presente año escolar en diciembre próximo.

Adicionalmente, el Licenciado Tribaldos nos ha comentado sobre el interés de la coalición CLARA en darle continuidad al proyecto, conseguir fondos adicionales y apoyar las actividades en los diferentes países donde se lleva a cabo el mismo. En tal sentido, quedamos a su disposición para cualquier apoyo que se requiera.

Con atentos saludos,

Félix Wing Solís
 Director Ejecutivo

Roxana Segundo Tapia
 Directora Ejecutiva Adjunta

cc. Ángel Tribaldos, Coordinador CLARA





Atziri Ibanez
CLARA Coalition Coordinator
Academy for Educational Development
1825 Conneticut Avenue, NW
Washington, D.C. 20009

8/11/03

Dear Ms. Ibanez,

I am writing in support of the continued participation of COBIOTEC (Proyecto de Conservación y Desarrollo Regional para el Río Hondo y su área de influencia) in the CLARA program. Since Maria Luisa Villarreal Sonora, President of COBIOTEC, was named the Rio Hondo Riverkeeper in December of 2001, COBIOTEC has been a key partner to Waterkeeper Alliance and one of our most successful member organizations in Latin America.

As a Riverkeeper, Ms. Villarreal Sonora and the rest of the COBIOTEC team have been the eyes and the ears of the Rio Hondo. As Waterkeeper Alliance continues to develop additional member organizations throughout Latin America, we look to COBIOTEC as an international model for stewardship and grassroots activism.

Through the CLARA program, COBIOTEC has been able to share its message of stewardship and the protection of local water resources to the future guardians of those resources: our children. Waterkeeper Alliance firmly believes that every watershed around the world deserves the protection of a Riverkeeper or guardian, such as Ms. Villarreal Sonora. Programs such as CLARA are the natural conduit through which these guardians are created and their leadership fostered.

If you have any questions about Waterkeeper Alliance and its member organizations, please feel free to contact me at: 914-674-0622, ext. 205. Or, if you have any questions specifically regarding COBIOTEC and its participation in CLARA, please contact Blanca Azucena García Gual at: 52-983-83-24364.

Respectfully,

Sean Larkin
International Field Coordinator

cc. Maria Luisa Villarreal Sonora; Blanca Azucena Garcia Gual



71ª Avenida Norte No. 336,
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 Teléfonos: Area (503) 223-6403,
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 fundamuni@Integra.com.sv

FUNDAMUNI / PROCAP

San Salvador, 12 de agosto de 2003.

Atziri Ibáñez
 Academy for Educational Development (AED)
 1875 Connecticut Avenue, N.W.
 Washington, D.C. 20009-5721
 Presente.

Estimada Atziri:

Recibe de la Fundación de Apoyo a Municipios de El Salvador (FUNDAMUNI) un cordial saludo y nuestros sinceros deseos de éxitos en la gestión que tu institución realiza a nivel regional.

FUNDAMUNI está muy complacida del trabajo que se ha realizado con el proyecto CLARA, ya que ha sido una experiencia positiva trabajar con los centros escolares y jóvenes conscientes e interesados en mejorar la calidad del agua de las cuencas hidrográficas de sus comunidades, siendo ellos los líderes para monitorear y dar seguimiento a las acciones de protección de las mismas; asimismo ser entes generadores de conocimientos para multiplicar la experiencia.

FUNDAMUNI considera este programa como un medio para generar esa experiencia a otros municipios en los cuales trabajamos, ya que uno de nuestros grandes propósitos es facilitar procesos de desarrollo local integral con participación de la población, que contribuyan a mejorar las condiciones de vida de las familias.

En tal sentido, solicitamos a AED la posibilidad de continuar con la implementación de este programa para fortalecer las acciones ya iniciadas y ampliar la experiencia a un número mayor de comunidades.

Atentamente,


 Cecilia Gómez
 Subdirectora





Colegio de Biólogos del Sistema Tecnológico, A.C.

Ave. Juan José Siordia 297 esquina Emiliano Zapata.
Col. Leona Vicario. C.P 77013 Chetumal, Quintana Roo. México.
Tel / Fax 52 (983) 83 25543 email: coblotecac@prodigy.net.mx

Chetumal, Quintana Roo August 12th 2003.

OFICIO: PRES03 092

**ATZIRI IBÁÑEZ
CLARA COORDINATOR
ACADEMY FOR EDUCATIONAL DEVELOPMENT**

COBIOTEC, Colegio de Biólogos del Sistema Tecnológico, A.C., is implementing CLARA Quintana Roo program since May 2002. To date we have been able to train 90 teenagers in the GREEN methodology, which in turn are working in two urban and rural communities watershed ecosystems, linking their communities, lobbying support and organizing small local training events among other students and experience exchange among them.

However COBIOTEC worked with very scarce funds initially funded by AED from USAID, and as the program evolved we had small in kind, punctual support from other groups and with funds from our own associates. In the case of this program with little more than one year being in place in our region, and with the reduce support we have strived to help our young volunteers to proceed with their enthusiasm and their interest.

In this sense, to strengthen this proposal, which has served to model attitudes and behavior as self-esteem and leadership among CLARA teenagers we, hereby, extend our institutional support to consolidate, extend and lobby of resources and funds for the Coalición de la Limpieza Activa del Recurso Agua (CLARA), hoping this letter of support will help out in consolidating CLARA Program.

**María Luisa Villarreal Sonora
CHAIR
COBIOTEC, A.C.**



ATTACHMENT 6

Contact List

&

Description for each

NGO Representative Participating in CLARA

CLARA FINAL REPORT

CLARA's NGO

CENTRAL AMERICA		
NGO	Contacts Executive Director	Telephone / e-mail / country
Fundación para el Desarrollo de los Municipios de El Salvador, FUNDAMUNI	Guillermo Galván Bonilla	Tel: (503)298-5871 y 72 Fax:(503)298- 3831 email: fundamuni@integra.com.sv El Salvador
Parque Natural Metropolitano, PNM	Roxana Segundo	Tel: (507) 232-5552/5516 Fax: (507) 323-5615 email: pnaturalmetrop@hotmail.com Panamá
MEXICO		
NGO	Contacts Executive Director	Telephone / e-mail / country
CICEANA	Margie Simon de Ortiz	tels/fax: (5) 659 6024 / (5) 659 0266 / (5) 659 8355 e-mail: msimon@ciceana.org.mx Mexico, D.F
CESE	Javier Reyes Ruiz	Tel: 01 434 342 33 68 y 342 08 52 email: cesepatz@prodigy.net.mx Pátzcuaro, Michoacán, México
Cuerpos de Conservación Mexicanos, Penjamo	Eduardo Vargas G.	Tel: 01 477 7659025 email: cccecyteg@yahoo.com.mx Irapuato, Guanajuato,. México
Cuerpos de Conservación Mexicanos,Merida	Rubén Presuel	Tel: 52- 9- 999-25- 6604 Fax: 52-9-920-4328 email: rubenpresuel@yahoo.com Mérida, Yucatán, México
COBIOTEC	Maria Luisa Villarreal Sonora	Tel: 52 983 83 24364 email: cobiotecac@prodigy.net.mx Chetumal, Quintana Roo, México

FUNDAMUNI implements CLARA in El Salvador

The Foundation for the Development of Municipalities of El Salvador, FUNDAMUNI, CLARA – El Salvador, carried out its activities in the center part of the Bay of Jiquilisco's watershed, located in the Eastern zone of the country.

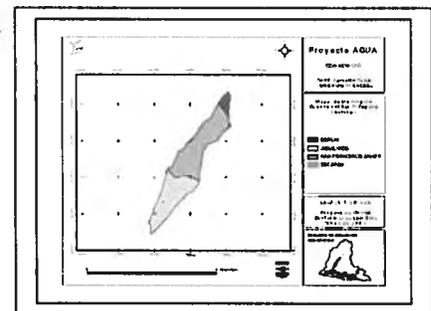


The Watershed of the Bay of Jiquilisco is a high-priority area of intervention on the part of the USAID Mission in El Salvador, as by its farming potential, as the levels of existing poverty in most of the municipalities that integrate it. On the other hand this Watershed, has been severely hit by the Mitch hurricane and by both earthquakes that happened in the first months of the year 2001.

It is in that context that CLARA is carrying out its activities, to contribute to the improvement of the quality of the water sources, fomenting more effective citizen actions to solve problems of the quality of water of the watershed communities.

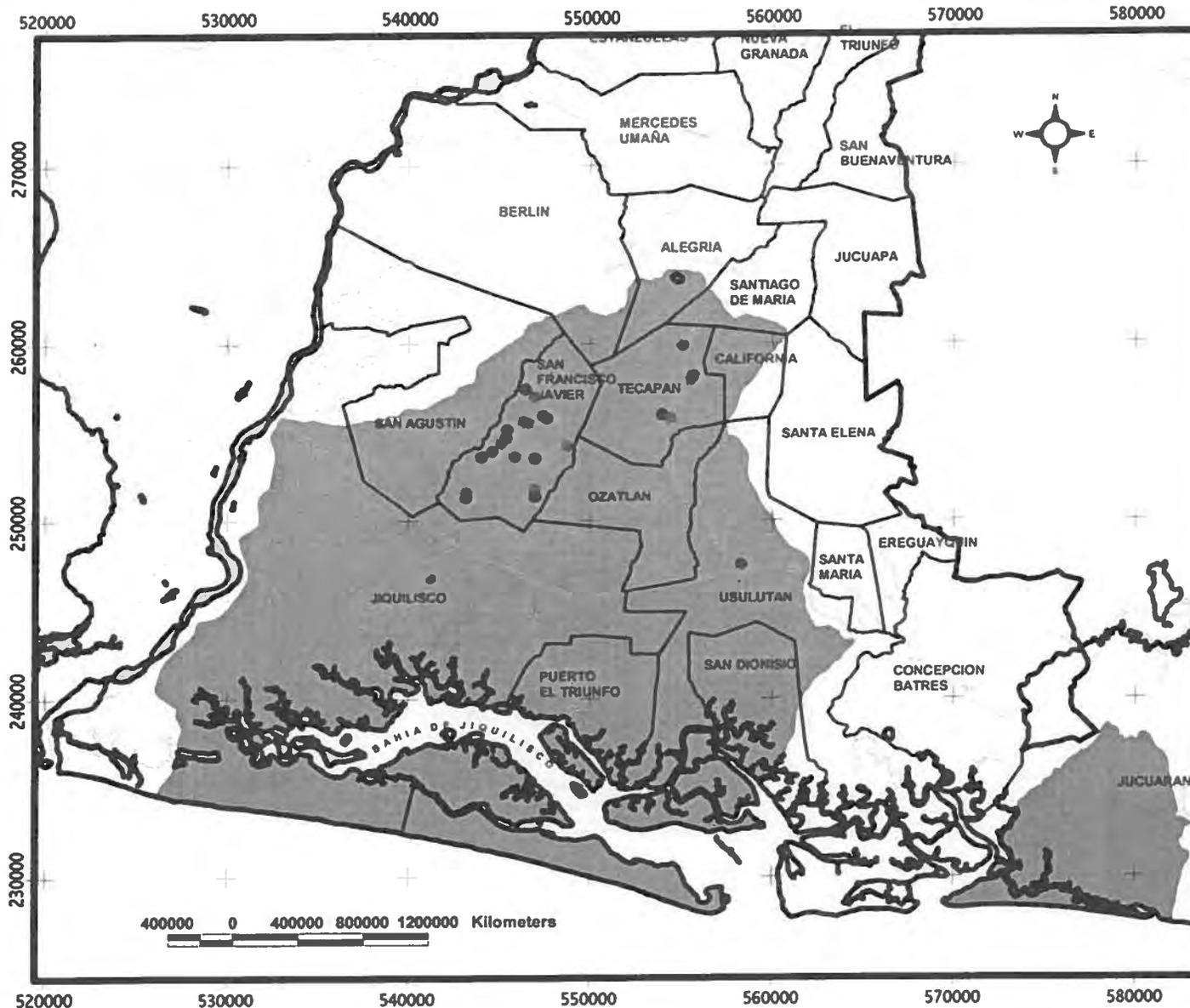
Fundación de Apoyo a Municipios

The Foundation to Support to Municipalities of El Salvador FUNDAMUNI, arose in the eighties, in order to support the local development through social participation. With the experience in participative processes FUNDAMUNI incursions in the scope of the water sector, in which has done an outstanding work for the sustainable management of the Watershed in the Eastern zone of El Salvador. FUNDAMUNI is a member of the partnership CARE, which executes the Project AGUA-USAID, in the center zone of the Bay of Jiquilisco's watershed, in the Department of Usulután.



The activities of the CLARA schools are led by CLARA educators and trained students, who are supported by Jaime Ascencio, El Salvador's CLARA Coordinator, and other FUNDAMUNI Technicians.

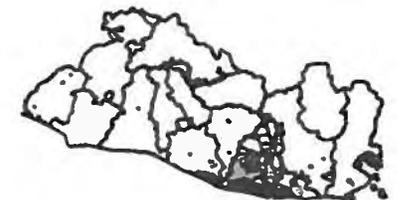
UBICACION DE CENTROS ESCOLRES CLARA AÑO 1



SIMBOLOGIA

-  Division Departamental de EL SALVADOR
-  DIVISION MUNICIPAL
-  CARRETARA
-  RED HIDRICA
-  FUENTES
-  CENTROS ESCOLARES
-  CUENCA DE REGION BAHIA DE JIQUILISCO

ESQUEMA DE UBICACION SIN ESCALA



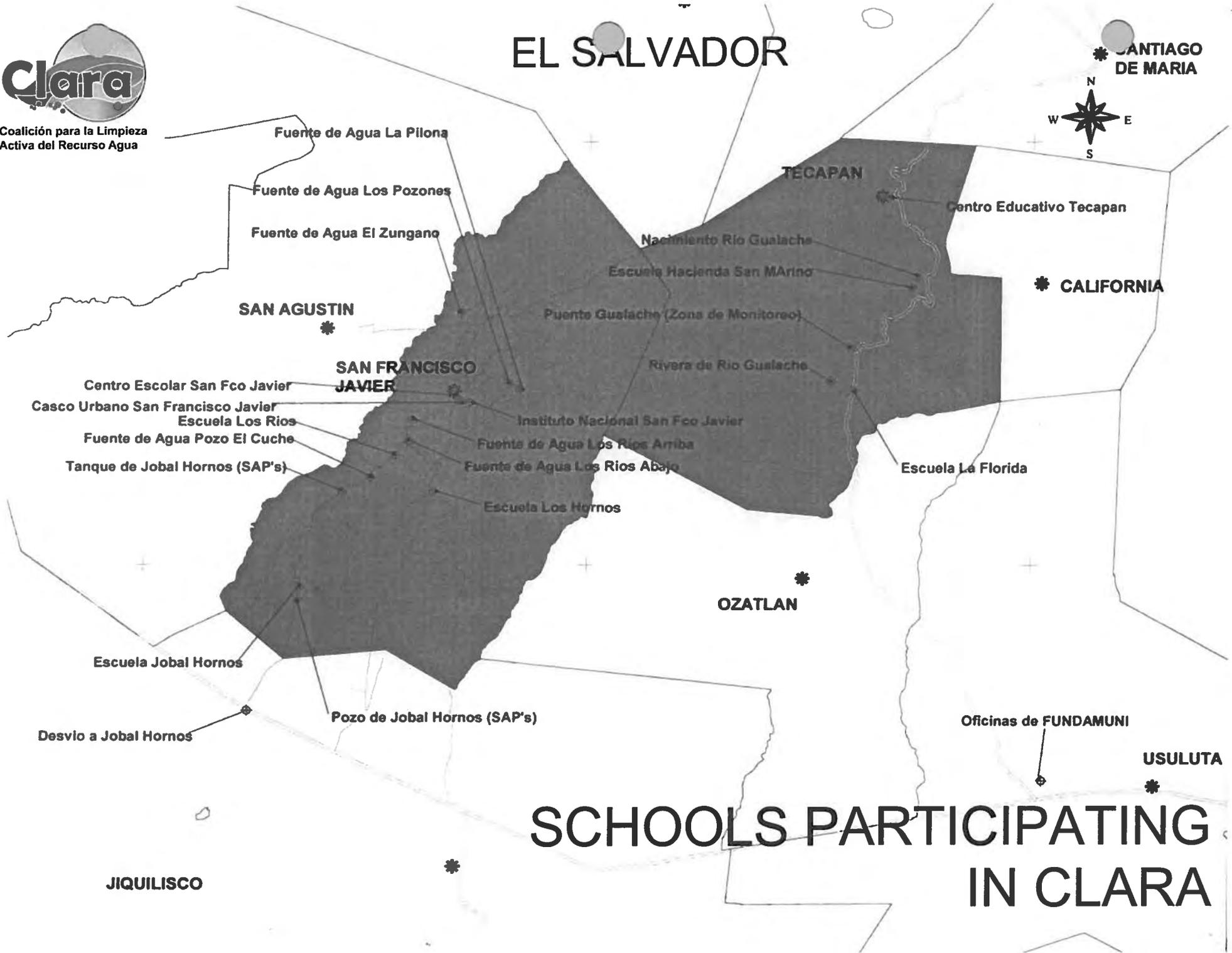
PROYECCION CONICA DE LAMBERT



Coalición para la Limpieza Activa del Recurso Agua

EL SALVADOR

SANTIAGO DE MARIA



Fuente de Agua La Pilona

Fuente de Agua Los Pozones

Fuente de Agua El Zungano

SAN AGUSTIN

SAN FRANCISCO JAVIER

Centro Escolar San Fco Javier

Casco Urbano San Francisco Javier

Escuela Los Rios

Fuente de Agua Pozo El Cucho

Tanque de Jobal Hornos (SAP's)

Instituto Nacional San Fco Javier

Fuente de Agua Los Rios Arriba

Fuente de Agua Los Rios Abajo

Escuela Los Hornos

Escuela Jobal Hornos

Desvio a Jobal Hornos

Pozo de Jobal Hornos (SAP's)

TECAPAN

Nacimiento Rio Gualache

Escuela Hacienda San Marino

Puente Gualache (Zona de Monitoreo)

Riviera de Rio Gualache

Centro Educativo Tecapan

CALIFORNIA

OZATLAN

Oficinas de FUNDAMUNI

USULUTA

JIQUILISCO

SCHOOLS PARTICIPATING IN CLARA

Metropolitan Natural Park implements CLARA in Panama

The Metropolitan Natural Park, MNP, is the organization partner who is implementing CLARA-Panama, carries out its activities in the Panama Canal watershed, located in the heart of country. The sustainable development of the channel's watershed is one of the main strategic objectives of the USAID Panama mission.

The channel's hydrographic watershed represents for the Republic of Panama one of the greater natural wealth; in the watershed, important natural forests are concentrated that contains impressive biodiversity resources, regulate the water's seasonal flow for the operation of the channel, the generation of electrical energy and the water supply for human consumption.

The CLARA educators and youngsters have in their majority the endorsement of the educative authorities, as much at the technical level as the logistic level. As well as the technical assistance of the Panama's CLARA Coordinator, Angel Tribaldos, and the team of technician of the Park, who have knowledge of the CLARA methodology.



Parque Natural Metropolitano

The Metropolitan Natural Park comprises the wooded cord that extends throughout the creek of the Panama Canal. Law established it in 1985 with intentions to preserve a natural area of the city of Panama that contributes to maintain the balance between the natural habitat and the urban one. And to protect the water of the Curundú River. The NMP is directed by a patronage, integrated by 3 governmental institutions and 5 NGO, co-administering the Park.

NMP has more than ten years developing environmental education projects with children and youth. Currently, it works with 13 schools in urban and rural communities of Arraiján, which is located in the eastern part of the Panama Canal Watershed (PCW). Some of developmental PNM's objectives plows to: protect the quality of the to water of the Curundú River, and to establish agreements to develop a monitoring program on the main sources of to water and wells of the PNM.

CHETUMAL, QUINTANA ROO

The NGO of CLARA in Chetumal is the RED MIRC (Manejo Integrado de Recursos Costeros, through the Colegio de Biólogos del Sistema Tecnológico, A.C. (COBIOTEC A.C), who are located in the Yucatán East Hydrological Region (Quintana Roo), in the Bahía de Chetumal and Río Hondo watershed.

The Red MIRC was established in 1997 and is focused towards the promotion and actions for the sustainable management of the coastal environment, its resources and the people who depend on them. The Red MIRC transmits to the scholastic community the knowledge, valuation and respect to the environmental characteristics, as well as the learning of the rational use of the natural resources.

The COBIOTEC A.C. is a nongovernmental and nonprofit organization (ONG) from Mexico, founded on February, 1998. COBIOTEC is in charge to fortification of the knowledge, the management, the use and the conservation of the natural resources, applying innovating and successful technologies and methodologies. These are transferable to the social and environmental context of the Yucatan Peninsula, involving the active participation of the communities, academic institutions, institutes of investigation and the government in the process.

PÁTZCUARO, MICHOACÁN

The NGO of CLARA in Pátzcuaro is the Centro de Estudios Sociales y Ecológicos, A.C. (CESE), which is located in the Lerma-Santiago Hydrological Region, in the Lake of Pátzcuaro-Cuitzeo and Lagoon of Yuriria watershed.

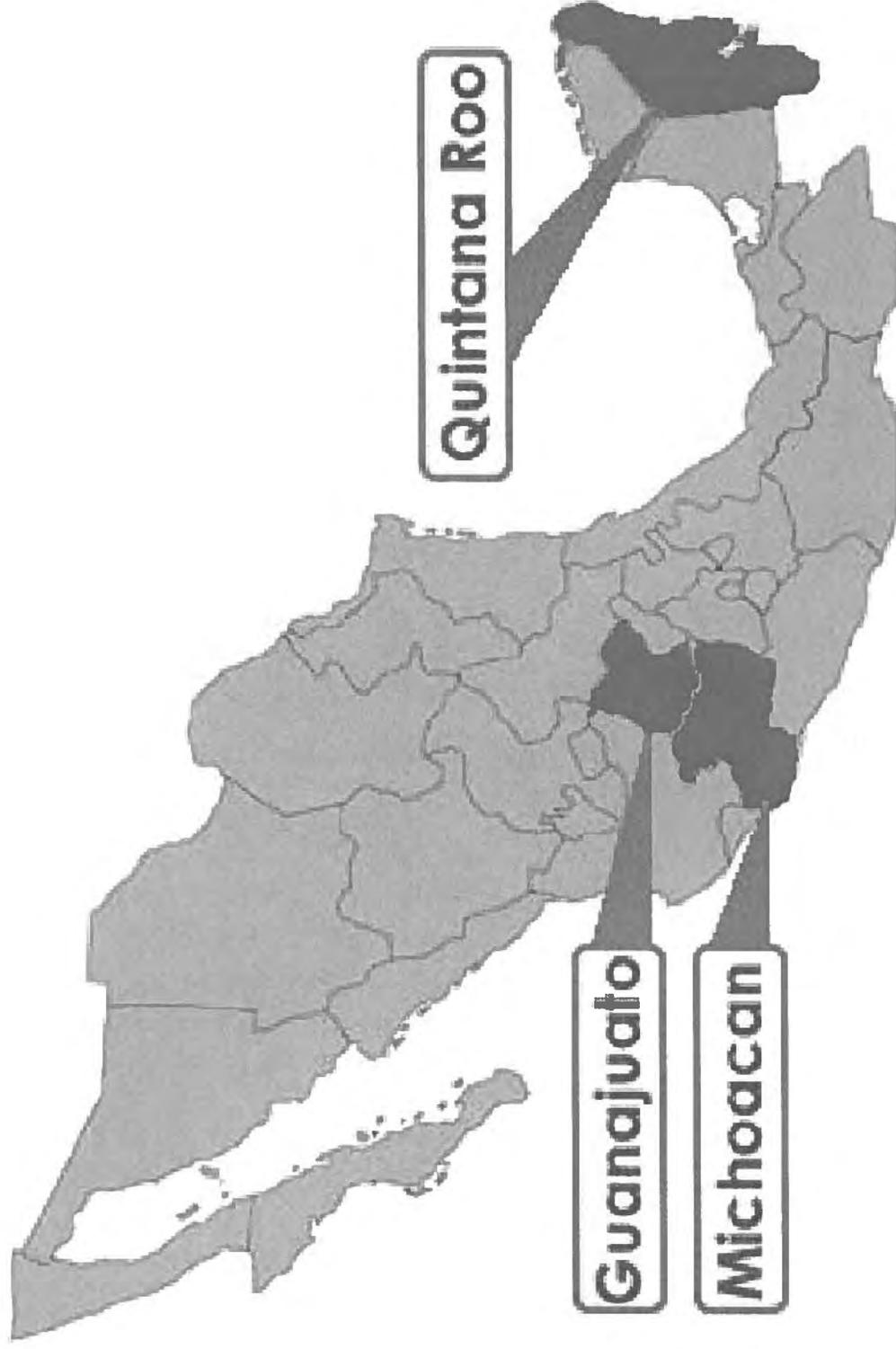
CESE is a civil organization, who develops projects of ecology and sustainable development in the Lake of Pátzcuaro watershed. This projects are focused in fishermen, farmers, artisans, women and students. CESE has contributed to elevate the perception and awareness among the community about the environmental problems of this watershed. El CESE has been traditionally an institution to that the students attend to obtain information about environmental topics of Pátzcuaro.

GUANAJUATO

The NGO of CLARA in Guanajuato is the Consejo Nacional de Cuerpos de Conservación Mexicanos A.C., through Cuerpos de Conservación Sierra de Pénjamo (CCSP) and the Colegios de Estudios Científicos y Tecnológicos del Estado de Guanajuato (CECyTEG), who are located in the Pánuco River Hydrological Region, in the Tamuín River and Moctezuma River watershed.

The CECyTEG is fomenting the environmental certification of the 24 campus that exist in the State of Guanajuato. As a part of this environmental certification the CECyTEG is invited all the campus to participate in a Program of Environmental Education for the use and protection of the water, the conservation of the microwatersheds and the restorations of spring in the zone where they are established. This program on environmental education is CLARA.

CLARA México



CLARA Michoacán

Participants in Uruapan, Michoacán:

Schools:
CETIS 27

**Escuela de Guardas Forestales /CONAFOR.
Escuela de Trabajo Social,
Colegio de Ciencias y Humanidades,
Universidad Don Vasco.**

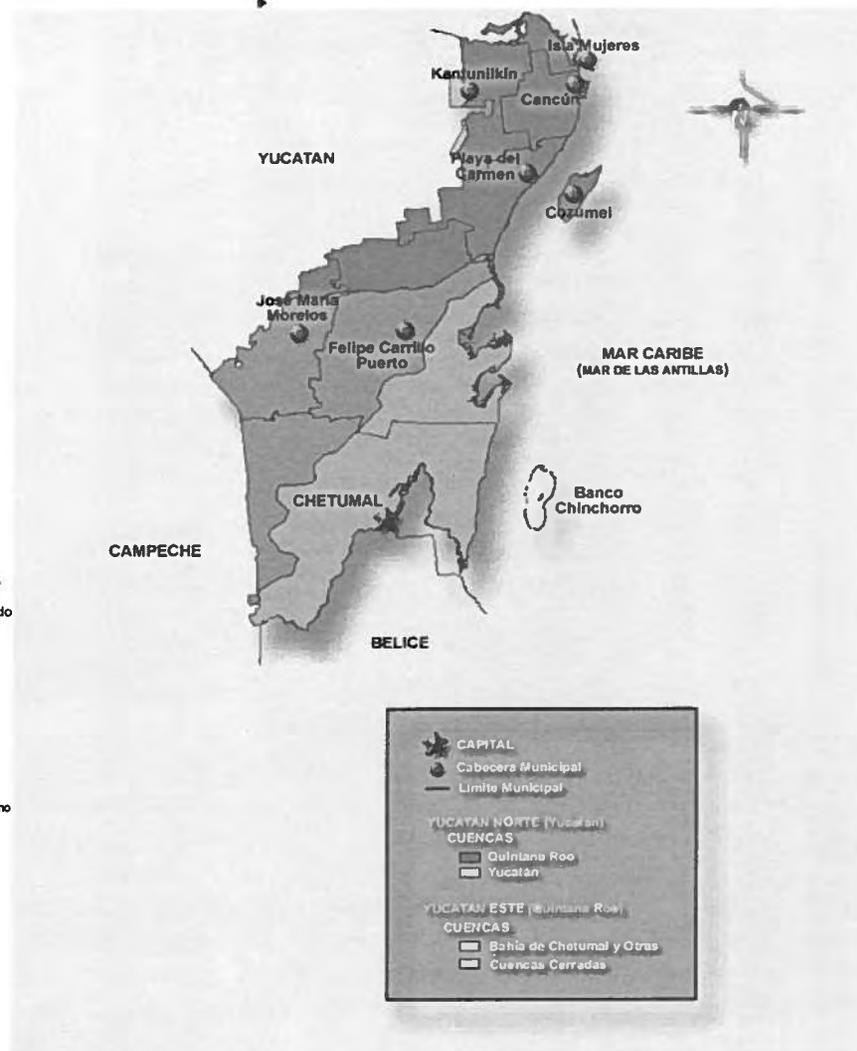


Near to Pátzcuaro :
**Centro de Estudios Científicos y Tecnológicos
del Estado de Michoacán (CECyTEM)**

**Plantel Caracuario
Plantel- San Lucas
Plantel- Senguio
Plantel- Puruandiro
Plantel- Panindicuario
Plantel- Epitacio Huerta**

**NGO in Uruapan:
Parque Nacional Barranca del Cupatitzio A.C.**

**NGO in Pátzcuaro:
Centro de Estudios Sociales y Ecológicos A.C.**



Fuente: <http://qroo.inegi.gob.mx/territorio/espanol>

CLARA Quintana Roo

NGO:

**Red MIRC:
Colegio de Biologos
de Sistema
Tecnológico
(COBIOTEC)
AMIGOS DEL
MANATI
AMIGOS DE SIAN
KA'AN**

Schools:

**CBTIS 214
Escuela Secundaria
Técnica (EST) N. 15
Instituto Tecnológico
de Chetumal (ITCH)
Universidad de
Quintana Roo
(UQROO)
Colegio de Bachilleres
de BACACAR
Centro de Estudios
Científicos y
Tecnológicos del
Estado (CECYTE-
CHETUMAL)**

CLARA Guanajuato



NGO:
**Consejo Nacional
de Cuerpos de
Conservación
Mexicanos A.C. a
través de Cuerpos
de Conservación
Sierra de Pénjamo
(CCSP)**

Schools:
**Centro de Estudios
Científicos y
Tecnológicos del
Estado de Guanajuato
(CECyTEG):
Plantel Coroneo
Plantel Pénjamo
Plantel Tierra Blanca
Plantel Cortázar
Plantel León San Juan
Bosco.**