

## CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

### I. BASIC DATA

**Organization Legal Name:** Institute for Tropical Ecology and Conservation

**Project Title** (as stated in the grant agreement): Promoting Environmental Education in the Schools of Bocas del Toro

**Implementation Partners for This Project:** Ministerio de Educación, Dirección Regional de Bocas del Toro, Instituto Panameño de Turismo, Centro de Educación Ambiental e Investigación Sierra de Huautla, México.

**Project Dates (as stated in the grant agreement):** June 1, 2003 – September 30, 2005

**Report Date:** January 10, 2006

1. Impresión del Manual de apoyo y del material didáctico	Junio-Julio 2005
2. Taller dirigido a las maestras de la región de Bocas del Toro: Boca del Drago, Colonia Santeña y Luis Flores	Julio-Agosto 2005
3. Reunión con ONGs de la región (ODESEN, ACADECHI, MOCELVA y CEASPA)	Agosto-Septiembre 2005
4. Distribución del material	Julio- Septiembre 2005
5. Fecha oficial de término	30 de septiembre de 2005

### II. OPENING REMARKS

Provide any opening remarks that may assist in the review of this report.

This project was initially created for school kids. It was targeted to schools of the region of Bocas del Toro but after assessing the future impact of the project it was decided to work in a long term project designing a manual for teachers who lived in other provinces. The final project, after a new scope was the delivery of the manuals and the implementation of two work shops given by ITEC's staff.

### III. NARRATIVE QUESTIONS

#### 1. What was the initial objective of this project?

ITEC's Environmental Education Program was created to cover a one-week period in the schools of the region. This corresponds to five sessions of about one hour each. Both the local school in Bocas del Toro and outlying regional schools on other islands were targeted.

**2. Did the objectives of your project change during implementation? If so, please explain why and how.**

The original objective was changed because since 2000, and especially last summer (2004), we worked with the teachers in Isla Colón (Boca del Drago, Colonia Santeña and Luis Flores). With the teachers at these schools, we tested the manual and the materials we have created. Their comments and suggestions were really helpful for the improvement of our materials.

We established our first contact with the Ministry of Education in this part of Panama, in Bocas del Toro town, with professor Flor Bustos, who coordinates all the schools in the region (region 1). This year we also coordinate the workshop for teachers of other schools and with NGOs that have their home in other Panamanian areas that help us delivering the school materials with the schools near or around their working area.

**3. How was your project successful in achieving the expected objectives?**

- 1) We deliver 50 sets of teaching materials that were created with the help of the teachers of the region.
- 2) We had a meeting with NGO's working in other Panamanian areas and also we gave two workshops on Environmental Education for teachers and one workshop on Ecotourism coordinated by Luis Murillo and one of ITEC's staff.

**4. Did your team experience any disappointments or failures during implementation? If so, please explain and comment on how the team addressed these disappointments and/or failures.**

It is always a problem to have so many changes on governmental offices. During the implementation of our project we had three different coordinators of the Ministry of Education office, so every year we lost time by having meetings with them. Fortunately, we keep the contact with the teachers which help a lot during the designing and the implementation of the manual.

**5. Describe any positive or negative lessons learned from this project that would be useful to share with other organizations interested in implementing a similar project.**

The Local Environmental Program at the beginning has done a remarkably good job with almost no funding through the volunteer efforts of many people. But obviously, any effort benefiting from actual outside funding would be short term, and therefore would represent a "project" within the program and not a program itself. That's why we change the scope of the project and our efforts were greatly enhanced by CEPF funding.

**6. Describe any follow-up activities related to this project.**

After the contact that we had with several NGO's working in the area and with the support of the CI office directed by Luis Murillo, this project with had the chance to start helping the development of different conservation efforts in the region and assess the

impact of the manual in the region. We plan to keep on giving workshops on Ecotourism based on the experience that one of the coordinators of ITECs environmental education project has in México.

**7. Please provide any additional information to assist CEPF in understanding any other aspects of your completed project.**

The Institute for Tropical Ecology and Conservation (ITEC) is a not-for-profit (501 (c) 3), education, and research and conservation organization registered in both the United States (DLN# 17053327009048) and the Republic of Panama (Resuelto # 221-PJ-108). ITEC has its home office in Gainesville, Florida, and operates the Bocas del Toro Biological Station on Isla Colon, Bocas del Toro Province, Republic of Panama. ITEC has academic agreements with several universities in the United States, a working relationship with STRI, and association with the City of Knowledge in Panama.

The purpose and goals of ITEC are to: 1) offer field ecology, geology and anthropology courses to university undergraduate and graduate students, 2) provide facilities for research in terrestrial, freshwater and marine ecosystems, 3) operate programs for the conservation of sea turtles, rain forests and other natural resources along the Caribbean coast of Panama and, 4) serve the community through conservation education.

ITEC's field station, the Bocas del Toro Biological Station, has been in operation for six years. During this time, ITEC has established a large infrastructure that not only benefits an international array of students (22 countries represented), but the local community as well. Our faculty and staff are also international, and have represented Canada, United States, Mexico, Panama, Brazil, and Scotland.

The local community benefits through ITEC's several conservation programs. Our Marine Turtle Program has been on-going for six years and focuses on the protection of sea turtles throughout the region. Over 100 volunteers per year, both international and local, benefit from this program and represent one of the largest conservation efforts in the region. Our Rain Forest Restoration Project seeks to restore degraded pasture to intact rain forest and focus primarily on the Boca del Drago area. This goal is accomplished by germinating native canopy tree species in our nursery and then transplanting them into pastures available for forest restoration. Finally, ITEC's Local Environmental Education Program works to teach basic ecological and conservation principles to local school children, and to establish in them a sound conservation ethic. This project will be described in more detail below. All ITEC conservation programs employ local people in a variety of capacities including piloting boats, construction, field work, cooking and guarding beaches from poachers.

#### ITEC Local Environmental Education Program

The primary objectives of environmental education are to create awareness, to sensitize, and to establish a sense of individual responsibility that benefits the conservation of nature and natural resources. One of the main difficulties that such educational efforts face is the lack of understanding by the local community concerning environmental-related issues. Thus, educating these communities about the relevance of their natural world and how it functions can result on a positive behavioral change. The best way to effect long-term change in attitudes is through educational efforts directed towards

children that live in impacted areas. Children between the 3rd and 5th grades are ideal focal points due to their great natural curiosity, receptiveness to new ideas, and capacity to learn new concepts.

The goals of ITEC' s Environmental Education Program are to: 1) transmit a respectful attitude towards nature and living creatures; 2) demonstrate that all living creatures, in each of their stages, have a right to exist; 3) promote a conservation ethic and attitude towards the use of natural resources; 4) teach children that the future of the planet, their environment, and the living creatures on earth are in their hands.

Since 1999 ITEC has been operating its Local Environmental Education Program. The program is centered in the Bocas del Toro Archipelago which is located on the Caribbean side of Panama near the Costa Rican border. This extensive insular region is composed of six large islands (5-15km in length) and hundreds of smaller islands and cays. ITEC's program includes both the local school in the town of Bocas del Toro, and 11 outlying regional schools including Boca del Drago, Colonia Santeña, Bluff Beach, Popa Island, Bastimentos, Bahía Honda, San Cristobal, Valle Escondido, Chiriquí, Solarte and Carenero.

Several ethnic groups are represented. The town of Bocas del Toro is approximately 70% Afro-Caribbean and 30% Hispanic. The village of Bastimentos is nearly 100% Afro-Caribbean. The remaining outlying villages are composed nearly entirely of indigenous Guaymi (Ngöbe Bugle) people.

Program activities include interactive hands-on projects, fun activities, exercises and field trips that emphasize human relationships to the environment. Examples of subjects addressed include the water cycle, where oxygen comes from, life cycles, why biodiversity is important and how humans fit into nature both in regard to our utilization of natural resources and our pollution. An integral part of ITEC' s Environmental Education Program is the involvement of the local community. Without local involvement, our ability to effect conservation in the area is greatly reduced. This is because it is primarily the local population that over-exploits the natural resources of the area such as the logging of trees for lumber, pasture or crop conversion, or in the taking of fish, lobster, crab or sea turtles. Community involvement activities have included beach and waterfront cleanups, the painting of trash barrels and tote bags with conservation slogans, field trips to turtle nesting beaches, reforestation projects, and various recycling projects.

ITEC' s Environmental Education Program was created to cover a one-week period in each school. This corresponds to five sessions of about one hour each. Both the local school in Bocas del Toro and outlying regional schools on other islands are targeted. In particular, it is the students in these outlying schools that are most important for us to reach. This is because these schools are almost wholly comprised of indigenous Ngöbe Bugle children, the parents of whom do the lion's share of over-exploitation. Teaching conservation ethics and land use alternatives to these children is imperative if we hope effect conservation in the future.

ITEC's Environmental Education team has designed a handbook which includes activities that can be used as instruction materials for teachers. Providing these materials to teachers represents an effective way to disseminate both the educational methods and conservation ethic we hope to relay to the children. The handbook designed for teachers includes a course on Environmental Education for elementary

schools in Bocas del Toro region

ITEC will work in conjunction with two Panamanian government sectors: the Ministry of Education in both Bocas del Toro Town and Panama City, and National Environment Authority (Autoridad Nacional del Ambiente - ANAM) at Bocas del Toro Town. . The teacher's course will be given in coordination with the regional Ministry of and will include a brochure that can be used as a guide. ITEC has also received advice and support from a Mexican Environmental Education and Research Center (Centro de Educación Ambiental e Investigación Sierra de Huautla - CEAMISH) in Cuernavaca Morelos, Mexico. ANAM in Bocas del Toro has been very helpful in the past with regard transportation to the remote schools and in advising and sharing ideas on environmental education activities. CEAMISH has provided material and advisements regarding the elaboration and development of the Environmental Education Program, as well as support in printing materials useful for the development of the Program.

The grant provided by CEPF given to ITEC was used to distribute funds to its Environmental Education Program as needed. All (100%) of the funds received were spent on the education program; none was used for administrative costs.

**VII. ADDITIONAL FUNDING**

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
Centre for Environmental Education and Research of Sierra de Huautla	A	\$ 800	Using computational equipment and human resources
Ministry of Education Panamá	A	-	facilities to develop workshops.

\*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- B Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)
- C Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)
- D Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

### VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

The project we finished will benefit different mainland areas and also small islands on the Bocas del Toro Archipelago in Panamá Republic. This area has a great need of Environmental Education work since it is one of the most important tourist areas in Panamá and are most seriously impacted by the develop of tourist facilities. There are protected areas throughout Bocas del Toro Province, but no specific educational efforts in local schools that instil knowledge, respect and concern for the environment. The education project that we finished this year will help protect these areas in the future by establishing a conservation ethic in children of this and other regions in Panamá.

### VIII. INFORMATION SHARING

CEPF aims to increase sharing of experiences, lessons learned and results among our grant recipients and the wider conservation and donor communities. One way we do this is by making the text of final project completion reports available on our Web site, [www.cepf.net](http://www.cepf.net), and by marketing these reports in our newsletter and other communications. Please indicate whether you would agree to publicly sharing your final project report with others in this way.

Yes  \_\_\_\_\_

No  \_\_\_\_\_

If yes, please also complete the following:

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