

**Cooperative Housing Foundation/
Local Environmental Policy and Program Initiative (CHF/LEPPI)**

Quarterly Report – Third Quarter FY2000

Contractor: Cooperative Housing Foundation (CHF)
Reporting Period: April 1 – June 30, 2000
Grant Number: Cooperative Agreement No. 596-00167-A-00-5128-00

This report describes the Local Environmental Policy and Program Initiative (CHF/LEPPI) activities carried out during the Third Quarter (April-June) 2000.

A. OVERVIEW

USAID extended the USAID-CHF Cooperative Agreement for an additional 15-months (July 1, 2000 – September 30, 2001). The approved budget for the extension is \$849,933.

1. Guatemala

- Construction of the wastewater pilot project (Phase III) in Colonia La Paz and Colonia Nuevo Amanecer, Ixcán, Guatemala was completed in June. This included additional construction in efforts to increase the volume of wastewater drainage. CHF/LEPPI will continue to support the local environmental steering committee, the mayor (Francisco Marco González), and the Municipal Board in the planning and design of a solid waste collection and disposal system for the city. No new construction activities are anticipated during the recently approved CHF/LEPPI project extension.
- CHF/LEPPI continues to support the local environmental steering committee of Puerto Barrios, Guatemala, in the maintenance and operation of the two wastewater treatment plants located in Colonia El Cangrejal, Rio Escondido. The local mayor appointed a Municipal Board member to be responsible for following-up on the different technical and administrative aspects related to the wastewater system and treatment plants.
- CHF/LEPPI staff met with the Director of the Sanitary Engineering Department of the University of San Carlos, Guatemala (ERIS) on June 6 to discuss their potential assistance in designing a monitoring and evaluation system for the CHF/LEPPI wastewater project on the Escondido River in Puertos Barrios, Guatemala. CHF/LEPPI will evaluate the economic and technical feasibility of ERIS's proposal to provide technical assistance on this project.
- U.S. Environmental Protection Agency (EPA) representative, Alberto Korgi, informed CHF/LEPPI that Atlanta journalists and CNN have expressed interest in visiting Puerto Barrios, Guatemala to report on the community's success in local environmental planning. Since there are still some minor aspects of the project that need to be concluded, CHF/LEPPI has recommended the Municipality and the local environmental steering committee develop, in coordination with the EPA, the local government and municipal officials, an appropriate inauguration ceremony and invite the local and international media to cover the event.

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

- On June 5, CHF/LEPPI signed an agreement with the Municipality of Antigua, Department of Sacatepequez, Guatemala and the local environmental steering committee to co-finance the implementation of a solid waste pilot project in the city. Under the terms of the agreement, CHF/LEPPI will provide \$20,000 for the construction of a Material Recovery Facility (MRF). The total budget for the project is an estimated \$97,000.

2. Panama

- Representatives from the Ministry of Health and National Environmental Authority (ANAM) inspected a farm to be the potential site for the planned solid waste pilot project on the island on Bocos del Toro. Members of the local environmental steering committee, Isabel Alendas and Luis Mou, and Peter Kent, owner of the farm, municipal authorities and local Ministry representatives accompanied the officials during the visit. They will inform CHF/LEPPI and the Municipality about the final inspection's results.
- On June 15, CHF/LEPPI consultants, Consultores Ecologicos Panameños (CEPSA) submitted an environmental feasibility study to the Municipality of Chilibre. The consulting firm is currently implementing an environmental education program in Chilibre that includes presentations and the distribution of solid waste recycling publications and posters in the local schools. Four billboards encouraging solid waste recycling have been installed in Chilibre.
- CHF/LEPPI and CEPSA assisted the communities of Limon, Nueva Providencia, Nuevo San Juan and Buena Vista, Panama prepare Local Environmental Action Plans (LEAP) during this quarter. The LEAPs are a direct result of the fourth Community Environmental Workshop held on May 31. The LEAPs document the conclusions and strategies resulting from the first stage of the project. These documents are very important as these communities start seeking additional economic and technical support from different funding sources to implement appropriate mitigation activities.

3. El Salvador

- Local steering committee members and CHF/LEPPI staff will deliver the solid waste design for an Integrated Solid Waste Management System (ISWMS) to the mayor and municipality of La Union, El Salvador on July 25. At the meeting, CHF/LEPPI will also discuss future project activities in La Union.
- On June 2, CHF/LEPPI staff, the Mayor of Usulután (Sergio Torres), and other municipal authorities met with the General Manager of the National Administration for Sewer and Aqueducts or *Administración Nacional de Acueductos y Alcantarillados* (ANANDA), Mario Orellana, to discuss the budget and other technical aspects of the wastewater pilot project for the Colonia Puerta del Sol, Usulután.
CHF/LEPPI will provide \$30,000 for construction materials. To implement the project, CHF/LEPPI, ANANDA, the Municipality of Usulután and an organized group of citizens from Colonia Puerta del Sol (ADESCO) will sign an agreement defining the responsibilities of each institution participating in the project.

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

4. Nicaragua

- On June 12, CHF/LEPPI staff met with the mayor of San Juan del Sur, Nicaragua (Gerardo Miranda) and representatives from the Nicaraguan Institute for Municipal Development (INIFOM) to discuss progress on the city's solid waste project. INIFOM presented updates on the rehabilitation of the local landfill, new perimeter fence and the construction of a MRF and a small bridge. Activities are scheduled to begin July 1.

B. CURRENT ACTIVITIES IN CHF/LEPPI COMMUNITIES

1. GUATEMALA

- **a. IXCÁN:** Construction of the wastewater pilot project (Phase III) in Colonia La Paz and Colonia Nuevo Amanecer, Ixcán, Guatemala was completed in June. This included additional construction to increase the volume of wastewater drainage. CHF/LEPPI will continue to support the local environmental steering committee, the mayor (Francisco Marco González), and the Municipal Board in the planning and design of a solid waste collection and disposal system for the city. No new construction activities are anticipated during the recently approved CHF/LEPPI project extension. The design for the wastewater system and the complementary aerobic treatment plant of Colonia Nuevo Amanecer were adjusted due to local topographic conditions. CHF/LEPPI will continue to support the local environmental steering committee, the Mayor, Mr. Francisco Marco González, and the Municipal Board in the planning and design of a solid waste collection and disposal system for the city. CHF/LEPPI continues the implementation of an environmental monitoring system for the local wastewater pilot projects that have a direct impact in the water quality of the Cantabal and Chixoy rivers. No new construction activities are anticipated during the recently approved CHF/LEPPI project extension.

b. PUERTO BARRIOS

Wastewater Treatment Plan System

EPA officials, Bruce Henry and Antonio Quiñonez, visited Puerto Barrios, Colonia El Cangrejal, Rio Escondido, on May 8-12. The purpose of this technical visit was to finish the assembly of the second treatment filter and revise/evaluate the residential wastewater collection system. The filter-treatment plants and the residential collection system are part of a wastewater pilot project implemented by CHF/LEPPI, the local environmental steering committee and the Municipality of Puerto Barrios with technical support from the EPA. The EPA team finished assembling and testing the system on May 11. The conclusion of this project was delayed due to problems in getting the appropriate media (stones) for the second filter. The dimensions required for the treatment unit are very specific and the volume required to fill the plant needed to be ordered by special request to a local quarry.

The EPA team and CHF/LEPPI held a workshop on May 11 to inform the mayor, the Municipality Board, municipal officials, residents and other interested citizens about the maintenance requirements of the treatment plants (filters) and other related operation aspects. During the meeting, the mayor informed the public that he appointed a member of the Board to be fully responsible of following-up on the different technical and administrative aspects related to the project.

The Director of the Sanitary Engineering Department of the University of San Carlos, Guatemala (ERIS), Pedro Saravia, accepted CHF/LEPPI and EPA's invitation to visit Puerto Barrios on May

CHF/LEPPI Quarterly Report - Third Quarter FY2000 (April to June 2000)

10-11 to evaluate the treatment plants and the residential collection system. On June 6, CHF/LEPPI staff and Saravia met in Guatemala City to discuss the different aspects of the required monitoring system and the evaluation of the wastewater plant's effluents into the Rio Escondido. Saravia informed CHF/LEPPI that the first test results indicate that the treatment plants are already reducing the level of contamination in the river. Saravia indicated that ERIS could send graduate students to Puerto Barrios and the Ixcán to visit and evaluate the wastewater systems and treatment plants financed by CHF/LEPPI and make any appropriate technical suggestions and/or recommendations. Saravia submitted the first draft of an agreement to be signed between CHF/LEPPI and the ERIS to fully implement this technical assistance. CHF/LEPPI will evaluate the economic feasibility of this technical proposal.

EPA representative, Alberto Korgi, informed CHF/LEPPI that Atlanta journalists and CNN have expressed interest in visiting Puerto Barrios, Guatemala to report on the community's success in local environmental planning. Since there are still some minor aspects of the project that need to be concluded, CHF/LEPPI has recommended the municipality and the local environmental steering committee develop, in coordination with the EPA, the local government and municipal officials, an appropriate inauguration ceremony and invite the local and international media to cover the event.

Solid Waste-Material Recovery Facility (MRF) Project

The local environmental steering committee continues to look for additional funding sources to finance the construction of the first phase of the new landfill for Puerto Barrios. The steering committee and the municipality have requested additional funding from CHF/LEPPI to finance the final landfill design and the complementary composting facilities. CHF/LEPPI is evaluating the request.

c. **ANTIGUA:** On June 5, CHF/LEPPI signed an agreement with the Municipality of Antigua, Department of Sacatepequez, Guatemala and the local environmental steering committee to co-finance the implementation of a solid waste pilot project in the city. Under the terms of the agreement, CHF/LEPPI will provide \$20,000 for the construction of a MRF. The total budget for the project is an estimated \$97,000. Abel Montenegro, General Manager of the Municipality and Mr. Victor Hugo del Pozo, Mayor of Antigua are very interested in the project as the city is without an adequate solid waste disposal-treatment system. A training workshop was held in Antigua on May 2. The main objective of the workshop was to present the CHF/LEPPI methodology and to discuss the benefits of a potential MFR, recycling and composting program and a community environmental education program. The mayor, members of the Municipal Board, representatives of the private sector, government officials and interested citizens attended the meeting.

A local environmental steering committee formed as a result of the meeting. The group will support the municipality in the execution of the solid waste project that includes not only the construction of a MRF, a recycling and composting programs but also trash collection, organic and inorganic waste separation, an environmental education program and the construction of a new landfill project. On May 26, CHF/LEPPI and municipal officials evaluated two areas in Finca Florencia, a farm owned by the municipality, and determined that both are suitable sites for the project. The municipality is receiving financial support from the General Planning Office (SEGEPLAN). SEGEPLAN has budgeted \$52,000 to support and co-finance the project.

CHF/LEPPI financed the master plans and design of a MRF, a recycling project, a composting

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

program and the Environmental Impact Assessment (EIA) for a macro project that includes the cities of Antigua, Alotenango, Jocotenango and Ciudad Vieja. The EIA for the project was presented to the Environmental National Commission (CONAMA) who will provide appropriate comments and suggestions at the earliest possible date. When approved, CHF/LEPPI will present the design and plans to the mayors of the above-mentioned communities so they can identify the appropriate funding sources for the project. The estimated cost of this macro-project is approximately \$2.0 million.

2. PANAMA

a. **BOCAS DEL TORO:** CHF/LEPPI continues to provide technical and logistic support in the implementation of the solid waste project on the Island of Bocas del Toro. The project includes the construction of a MRF, a composting pilot project and an environmental education program. On May 30, CHF/LEPPI inspected the piece of land donated by a private owner in Bocas del Toro for the construction of the MRF, a composting project and a small landfill. The site is located approximately seven (7) km from the city of Bocas del Toro. The Mayor of Bocas del Toro, Rogelio Nuque, members of the local environmental steering committee and local officials from the Ministry of Health and the National Environmental Authority or *Autoridad del Medio Ambiente* (ANAM) accompanied CHF/LEPPI during the visit. Prior to any construction activities, CHF/LEPPI and the Municipality will require technical approval from the Ministry of Health and ANAM in Panama City. In order to expedite the approval process, CHF/LEPPI provided air travel and per-diem for two officials from the Ministry of Health and the ANAM to the site. Members of the local environmental steering committee, Isabel Alventas and Luis Mou, and Peter Kent, owner of the farm, municipal authorities and local Ministry representatives accompanied the officials during the visit. They will inform CHF/LEPPI and the municipality about the final inspection's results.

b. **CHILIBRE:** On April 25, CHF/LEPPI met with members of the local environmental steering committee to discuss the status of the solid waste collection and disposal project, specifically related to the administration of the micro-enterprise (waste collection) and the project's technical support provided by CEPASA. CEPASA is currently implementing an environmental education program and a feasibility study for the micro-enterprise. They are also providing specific assistance in getting the appropriate site for the MRF, a solid waste transfer station and a composting project. CHF/LEPPI, USAID and members of the local environmental steering committee have requested additional support from the Inter oceanic Authority or *Autoridad Interoceanica* (ARI), ANAM and the Ministry of Health.

On April 27, CHF/LEPPI met with Lars Klassen, Mission Director/USAID Panama and other Mission officials to report on the latest activities performed in Chilibre and other communities in the Panama Canal watershed region. Mission officials expressed positive comments about progress on CHF/LEPPI's activities in Chilibre and other project sites in Panama. The major constraint in Chilibre continues to be the selection of the appropriate site for the waste facilities. Mr. Klassen offered his assistance in getting appropriate support from specific government agencies such as: ANAM, ARI, Ministry of Health, etc.

On May 31, CHF/LEPPI met with members of the local environmental steering committee, CEPASA officials and a local municipal representative (Vidal Garcia) to discuss the status of the solid waste collection and disposal project. Garcia informed CHF/LEPPI that he sent an official letter to ANAM requesting a specific site within the Soberania National Park for the project. ANAM's response to

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

such request was negative. Therefore, the issue regarding the adequate area for the MFR's construction continues to be the most important constraint in completing the solid waste management project in Chilibre.

On June 15, CHF/LEPPI consultants, CEPESA submitted an environmental feasibility study to the Municipality of Chilibre. The consulting firm is currently implementing an environmental education program in Chilibre that includes presentations and distribution of solid waste recycling publications and posters in the local schools. Four billboards encouraging solid waste recycling have been installed in Chilibre. CHF/LEPPI and CEPESA have also discussed the issue of new municipal ordinances. A meeting was held on June 1 between CHF/LEPPI, CEPESA and the municipality's legal advisor to discuss the issue and the format for such new municipal regulations. The municipality will provide CEPESA with the appropriate comments and suggestions on the matter.

On June 1, CHF/LEPPI met with Edna de Jaen of USAID to report on the latest activities performed in Chilibre and other communities in the Panama Canal watershed region.

c. CHF/CHF/LEPPI Expansion-Watershed Area: On April 27-28, the second and third Community Environmental Workshops were held in the communities of Limon, Nueva Providencia, Nuevo San Juan and Buena Vista. The fourth Community Environmental Workshop was held on May 31. In the meetings, the communities prioritized solid waste collection and disposal as their most pressing pollution problem. The communities also indicated that wastewater and air pollution were pressing problems.

As a direct result of the fourth Community Environmental Workshop, members of the local steering committees, in coordination with CHF/LEPPI and CEPESA, prepared Local Environmental Action Plans (LEAPs). The local steering committee, with support from CEPESA, will initiate the second phase of the project that includes the formation of a microenterprise, the construction of a MRF, and the implementation of recycling and composting programs.

3. HONDURAS

a. CHOLUTECA: During the quarter, the local environmental steering committee and CHF/LEPPI staff presented USAID/Honduras with the formal plans for a wastewater system and treatment plants designed for the eastern sector of the city. The estimated budget for system and treatment plants is \$1.0 million. The new system will reduce the discharge of untreated wastewater into the Sampile and Choluteca Rivers with a direct impact on the Golf of Fonseca, the only tri-boundary gulf in the region.

b. TRUJILLO: In coordination with USAID/Honduras, construction of the wastewater system and treatment plants for the city of Trujillo is expected to begin in early August. The estimated budget for the treatment plant and wastewater system is approximately \$1.4 million.

4. EL SALVADOR

a. LA UNION: On April 20, CHF/LEPPI consultant, Carlos Melendez, revised and evaluated the solid waste design and plans for the ISWMS for La Unión. CHF/LEPPI will meet with La Union's new mayor, the municipal board and members of the local environmental steering committee on July 25 to review the study and discuss future activities of CHF/LEPPI in the city. The Ministry for the Environment and Natural Resources must approve the

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

EIA for the solid waste collection and disposal site before the community can move forward with the project. This will require a soil test that CHF/LEPPI will coordinate with the new mayor.

b. USULUTAN

Solid Waste Project: Construction of the solid waste management and disposal project for the communities of Usulután, Puerto El Triunfo, Ireguayquin and Concepción Batres began in April. CHF/LEPPI provided the final plans and design for the project.

Wastewater and Treatment Plant Project:

On June 2, CHF/LEPPI staff, the Mayor of Usulután (Sergio Torres), and other municipal authorities met with the General Manager of ANDA, Mario Orellana, to discuss the budget and other technical aspects of the wastewater pilot project for the Colonia Puerta del Sol, Usulután. CHF/LEPPI will provide \$30,000 for construction materials. ANDA will manage the project's administration. The value of this technical supervision and other contributions is an estimated \$39,000. The Municipality of Usulután will contribute an estimated \$53,000 in non-skilled labor, skilled labor and materials. To implement the project, CHF/LEPPI, ANDA, the Municipality of Usulután and an organized group of citizens from Colonia Puerta del Sol (ADESCO) will sign an agreement defining the responsibilities of each participating institution participating.

5. COSTA RICA

PUERTO VIEJO-MANZANILLO: CHF/LEPPI continues to follow-up on the consolidation of the solid waste/recycling program in Puerto Viejo-Manzanillo. CHF/LEPPI is providing technical support to the local environmental steering committee in their search for funding to purchase a new collection truck and to acquire specific solid waste recycling equipment.

6. NICARAGUA

SAN JUAN DEL SUR: On June 12, CHF/LEPPI staff met with the mayor of San Juan del Sur, Nicaragua (Gerardo Miranda) and representatives from INIFOM to discuss progress on the city's solid waste project. INIFOM presented updates on the rehabilitation of the local landfill, new perimeter fence and the construction of a MRF and a small bridge. Activities are scheduled to begin July 1. INIFOM is currently looking for appropriate funding sources to finance an environmental education program in San Juan del Sur targeted at the local schools. The municipal board is in the process of approving municipal ordinances and resolutions to establish and regulate the city's solid waste management (collection and disposal).

C. MEETINGS:

1. CHF/LEPPI is preparing three case studies highlighting the success of the pilot projects in Puerto Barrios, Guatemala, Usulután, El Salvador and Chilibre, Panama. These formal publications serve to disseminate CHF/LEPPI's experiences and lessons learned during the project's implementation phase in the Central America.
2. On April 13-14, CHF/LEPPI hosted a national meeting in Managua, Nicaragua addressing solid waste management and disposal experiences throughout the country. The Minister of the Nicaraguan Ministry of Natural Resources (MARENA), the president of INIFOM, and the mayor of San Juan del Sur inaugurated the event. Attendees included: mayors from several communities in Nicaragua, solid waste management consultants, members of microenterprises for waste collection services, regional

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

experts in recycling and composting projects, representatives from recycling and solid waste management groups, landfill experts from MARENA and INIFOM, officials from financial institutions, representatives from organized citizens groups and NGO's, CHF/LEPPI and CHF/El Salvador staff. The workshop served as an opportunity for sharing experiences and lessons learned in the solid waste collection, management and appropriate disposal efforts in Nicaragua. Participants discussed viable options for solving the local environmental contamination problems and forming microenterprises. The local media covered the workshop and all the participants received a CHF/LEPPI participation certificate.

4. In coordination with the EPA, CHF/LEPPI hosted a study tour to Atlanta, Georgia during May 15-19 to observe practical examples of integrated solid waste and wastewater management systems. Eleven representatives of CHF/LEPPI assisted local environmental steering committees participated in the tour. The group visited the MRF, Gwinnett Clean and Beautiful, Inc., in Duluth, Georgia where they observed drop-off stations for residential newspaper, magazines, office paper, glass, plastics and metals. They also observed the receiving of commingled recyclables from residential waste collected by private companies and the separation of plastics, glass, aluminum, steel and tin cans and the compaction before shipment to the various markets. Cardboard and newspaper separation from residential waste was also observed. They visited a wastewater treatment system located in the Unicoi State Park in northeast Georgia. The visitors from Central America also visited the EPA-Region 4 main office in Atlanta and met with representatives of Atlanta's EPA Solid Waste Team providing assistance to Central America under the current interagency agreement with USAID. At the meeting, each of the Central American representatives made a brief presentation of their projects to the EPA officials and asked technical questions about their specific pilot projects.

On May 16-17, the group visited the Atlanta 2000 Waste Expo, the largest tradeshow in this industry that includes everything regarding mobile collection, containment and transportation of all types of wastes and recyclable materials.

5. CHF/LEPPI is organizing a third national meeting in Panama to be held on July 19 to highlight and discuss CHF/LEPPI's successes and lessons learned during the project's Phase I (training) and II (implementation). Municipal authorities, representatives of other donors (local and international), government officials, members of local and regional NGO's and the private sector will be in attendance.
6. The third regional CHF/LEPPI workshop will be held in San Salvador, El Salvador on July 26-27. The main purpose of the event is to present and share the many regional experiences of CHF/LEPPI in Central America.
7. Coordination meetings are held on a regular basis with USAID/G-CAP officials, to discuss CHF/LEPPI's current activities in the region.
8. Coordination meetings are held on a regular basis with partner entities and organizations participating in the PROARCA regional program: COMISION CENTROAMERICA DE AMBIENTE Y DESARROLLO (CCAD), PROARCA/COSTAS and PROARCA/CAPAS to discuss CHF/LEPPI's current activities in the region.

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

9. Information and coordination meetings are also held with other key personnel with environmental, private and government agencies, institutions and ministries in the region on a regular basis.

D. GENDER AND ETHNIC CONSIDERATIONS

Gender and Ethnic issues continue to be considered under the CHF/LEPPI project. The presence and active participation of indigenous groups and women in CHF/LEPPI's workshops and other project activities will continue to be encouraged.

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

E. ACTIVITIES PLANNED

Schedule of the activities planned for the months of July-August 2000.

COMMUNITY/COUNTRY	DATE	RESPONSIBLE STAFF
GUATEMALA CITY, GUATEMALA	July 3-7	Preparation and revision of case studies for current CHF/LEPPI pilot projects N. Gamboa, M. Bolaños
PANAMA CITY, PANAMA	July 19-20	National CHF/LEPPI meeting/conf. Solid Waste Management Alternatives & Experiences in Panama. N.Gamboa, A. Villalobos
USULUTAN, EL SALVADOR	July 25	Meeting with new mayor & local environmental steering committee to discuss follow-up actions. Solid Waste Management Project. A. Villalobos, N. Gamboa
SAN SALVADOR, EL SALVADOR	July 26-27	Regional CHF/LEPPI meeting/conf. Solid Waste Management Alternatives & Experiences in Central America. N. Gamboa, M. Bolaños A. Villalobos
PUERTO VIEJO- MANZANILLO COSTA RICA	August 2-4	To follow-up on the Solid Waste Management Project. A. Villalobos
PUERTO BARRIOS, GUATEMALA	August 2-4	To follow-up on the Solid Waste and wastewater Projects. To discuss new project activities (wastewater) N.Gamboa.
BUENA VISTA, LIMON, NUEVO SAN JUAN, NUEVA PROVIDENCIA, PANAMA	August 9-11	To follow-up on the Solid Waste Management Project. N. Gamboa

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

COMMUNITY/COUNTRY	DATE	RESPONSIBLE STAFF
SAN JUAN DEL SUR, NICARAGUA	August 9-11	To follow-up on the Solid Waste Management Project. A. Villalobos
TEGUCIGALPA, HONDURAS	August 26-27	To discuss new project activities (Wastewater and Solid Waste) M. Bolaños, A. Villalobos

F. CHF/LEPPI Indicators as June 30, 2000

ACTIVITIES	Achieved during reporting period	Cumulative	Goal for life of the Project
I. Outputs/Deliverables			
a. Further/technical support provided to communities to deal with Solid Waste and wastewater problems.	-	5	5
b. Municipalities prepared/implemented related municipal norms/ordinances to mitigate, lessen or avoid environmental contamination in key areas (urban, national parks, biological reserves, etc.)	-	4	5
c. 5 environmental monitoring systems for key pollutants designed and in operation.	1	3	5
d. 5 communities/municipalities obtained additional funding (loans/grants) from local or external sources, through well designed project proposals/studies.	-	2	5
e. National workshops/seminars (3) and regional conferences (2).	-	4	5
f. 3 case studies prepared and presented in regional/national conferences and workshops.	---	---	3

CHF/LEPPI Quarterly Report – Third Quarter FY2000 (April to June 2000)

g.	3 formal publications prepared and published.	---	---	3
II. CHF/LEPPI Expansion Panama				
a.	New municipalities/communities identified in Panama CHF/LEPPI expansion	---	4	4
b.	Community-based development of ISWM plans for four (4) corregimientos.	4	4	4
c.	Provide sustainable ISWM coverage to at least 75% of the population in the targeted corregimientos.	---	---	---
d.	Construction of transfer station	---	---	---
e.	Formation of microenterprise(s)	---	---	---
f.	Number of residents of the Inter-Oceanic region served according to ISWM plans.	---	---	---
III. Impact Indicators				
a.	Households benefited from CHF/LEPPI	5000	12,000	5,000
b.	People learn of CHF/LEPPI at workshops and other meetings	2000	7,000	5,000

12