

Monitoring Progress of the Environmental Cooperation Agenda in the CAFTA-DR Countries

FOURTH EVALUATION REPORT

Costa Rica Dominican Republic El Salvador Guatemala Honduras Nicaragua United States





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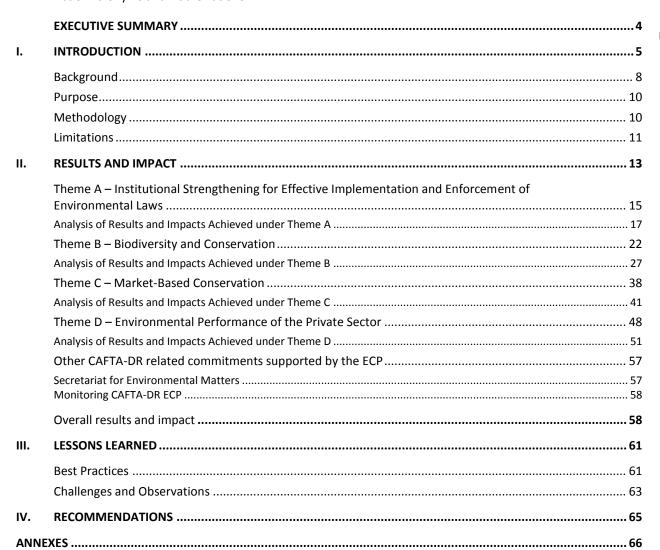
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LIST OF ACRONYMS AND ABBREVIATIONS

COSTA RICA DOMINICAN REPUBLIC

EL SALVADOR

GUATEMALA HONDURAS

NICARAGUA

UNITED STATES

ARCAS Association for the Rescue and Conservation of Wildlife – Guatemala (Asociación de

Rescate y Conservación de Vida Silvestre)

BCIE Central American Bank for Economic Integration (Banco Centroamericano de

Integración Económica)

CAFTA-DR Central America-Dominican Republic-United States Free Trade Agreement

CAWEN Central American Wildlife Enforcement Network (Red de Observancia y Aplicación de

la Normativa de Vida Silvestre de Centroamérica y República Dominicana)

CCAD Central American Commission on Environment and Development (Comisión

Centroamericana de Ambiente y Desarrollo)

CENADE Rural Development Action and Support Center – Nicaragua (Centro de Acción y

Apoyo al Desarrollo Rural)

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CPC Cleaner production center
CSOs Civil Society Organizations
DOI U.S. Department of the Interior

DOS/OES U.S. Department of State – Bureau of Oceans and International Environmental

Scientific Affairs

ECA Agreement among the Governments of Costa Rica, the Dominican Republic, El

Salvador, Guatemala, Honduras, Nicaragua, and the United States of America on

Environmental Cooperation Agreement

ECP Environmental Cooperation Program
EIA Environmental Impact Assessment

ELE USAID's Environmental and Labor Excellence Program for CAFTA-DR

EMS Environmental Management System

ENCTI National Strategy to Control Logging and the Illegal Transportation of Forest

Products – Honduras (Estrategia Nacional para el Control de la Tala y el Transporte

Ilegal de los Productos Forestales)

EPA U.S. Environmental Protection Agency

ESNACIFOR National School of Forestry – Honduras (Escuela Nacional de Ciencias Forestales)

FCD Friends for Conservation and Development (Belize)

FTA Free Trade Agreement

FUNDE National Foundation for Development – Nicaragua (Fundación Nacional para el

Desarrollo)

FUNZEL Zoological Foundation of El Salvador (Fundación Zoológica de El Salvador)

FY Fiscal Year

GFAS Global Federation of Animal Sanctuaries

ha Hectare

HED Higher Education for Development HSI Humane Society International

ICF National Institute of Forest Conservation and Development – Honduras (Instituto

Nacional de Conservación y Desarollo Forestal)

ICRAN International Coral Reef Action Network

ITAP International Technical Assistance Program (DOI)

LWR Lutheran World Relief

MAG Ministry of Agriculture and Livestock of Costa Rica (Ministerio de Agricultura y

Ganadería)

MARENA Ministry of Environment and Natural Resources of Nicaragua (Ministerio del

Ambiente y los Recursos Naturales)

MARN Ministry of Environment and Natural Resources of Guatemala (Ministerio de

Ambiente y Recursos Naturales)

MBR Maya Biosphere Reserve

MEA Multilateral Environmental Agreement

MEM Ministry of Energy and Mines of Guatemala (Ministerio de Energía y Minas)

MINAE Ministry of Environment, Energy and Seas of Costa Rica (Ministerio del Ambiente,

Energía y Mares)

NDF Non-detrimental finding

OAS Organization of American States

OAS-DSD Organization of American States – Department of Sustainable Development

RA Rainforest Alliance

SAN Sustainable Agriculture Network
SEM Secretariat for Environmental Matters
SERVIR Regional Visualization and Monitoring System

SINAC National System of Conservation Areas – Costa Rica (Sistema Nacional de Áreas de

Conservación)

SIPECIF National Forest Fire Prevention and Control System – Guatemala (Sistema Nacional

de Prevención y Control de Incendios Forestales)

SME Small and medium enterprise
TRAFFIC Wildlife Trade Monitoring Network

U.S. United States (of America)
USG United States Government

USAID United States Agency for International Development

US\$ U.S. dollar

USFS United States Forest Service

WCMC World Conservation Monitoring Centre

WCS Wildlife Conservation Society
WEC World Environment Center

WWF World Wildlife Fund





EXECUTIVE SUMMARY

Background and Overview

Since 2005, the United States has invested approximately US\$ 87.2 million to fund the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR) environmental cooperation. This funding is helping CAFTA-DR countries advance in the following four programmatic areas: (A) Institutional Strengthening for Effective Implementation and Enforcement of Environmental Laws; (B) Biodiversity and Conservation; (C) Market-based Conservation; and (D) Improved Private Sector Performance.

In support of these areas, the Environmental Cooperation Agreement (ECA) (Article IV) requires that the Environmental Cooperation Commission (ECC) be responsible for examining and evaluating the cooperation activities under the Agreement. The ECA highlights as well that the ECC must also seek and consider input from relevant international organizations and other stakeholders regarding how best to ensure that it is accurately monitoring progress.

Starting in 2009, the OAS-DSD has prepared independent evaluation reports to provide a general overview of the CAFTA-DR Environmental Cooperation Program (ECP), including success stories, case studies, challenges and recommendations witnessed from the beginning of the implementation of the Program, with a view to improve future environmental cooperation programming.

This Fourth Evaluation Report aims to go beyond the mere conduct of activities by implementing agencies. Following various modes of operations, it explores the strengthening of capacities of government and civil society stakeholders (e.g. CSOs, the private sector and the general public) to protect, improve and conserve the environment. To this end, the report underlines the impact of interventions regarding environmental legislation and policy development, economic and social development, and environmental protection. These essential, interdependent factors fuel sustainable development in the CAFTA-DR signatory countries.

Methodology

This fourth report provides an overarching perspective of all results achieved to date, by means of an impact or high-level results assessment, emphasizing in sustainable changes emerging from the ECP, in a bid to ensure that this monitoring report would focus on changes in the environmental regulatory framework, changes in the attitude and behavior of beneficiaries, and more generally the environmental and socio-economic benefits of environmental cooperation. This report's primary information source regarding progress in achieving ECP-expected results is a document review of narrative reports submitted by implementing agencies. The OAS-DSD has also developed a simple tool to capture high-level results in each theme within the ECP, using a new set of impact-level indicators from the current CAFTA-DR ECP monitoring framework. The OAS-DSD selected indicators through an iterative process and in consultation with CAFTA-DR points of contact and implementing agencies.

Limitations

In general, the process of documenting impacts rather than completed activities or short-term results is not an easy task. In the case of the CAFTA-DR ECP, this process has been particularly challenging due to the fact that this is a regional program with a significant number of implementing agencies participating in its implementation. Added to this is the fact that there was not a clear performance management framework in place before implementing agencies began their work in the region.

Results and Impact

Theme A: Institutional Strengthening for Effective Implementation and Enforcement of Environmental Laws

Under this Theme, the purpose is to strengthen environmental institutions, laws and policies, and to promote effective implementation and enforcement of these laws and policies, as well as the effective implementation of Multilateral Environmental Agreements (MEAs) and civil society engagement to ensure compliance with Free Trade Agreement's (FTA) obligations.

Implementing agencies have worked with CAFTA-DR countries to improved 150 existing laws and adopt 28 new laws and regulations related to wastewater, air pollution, and solid waste. As part of CAFTA-DR ECP, implementing agencies supported the organization of several training sessions and workshops with institutions and officers responsible for enforcement and compliance of the environmental legislation.

Through its outreach interventions, CAFTA-DR ECP disseminated information that helped governments, civil society organizations, private sector stakeholders and individuals acquire a culture geared towards environmental protection and compliance with environmental laws.

Theme B: Biodiversity and Conservation

The purpose of Theme B is to protect wildlife and its habitat for long-term economic and environmental development. Initiatives related to this theme seek to combat illegal trade in endangered species and promote sustainable management of forests, protected areas and other important ecosystems. Key focal areas include strengthening the scientific and institutional capacities of authorities in charge of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), training CITES implementation officials, building wildlife enforcement capacity and networks, supporting new or existing animal rescue centers, and preventing illegal logging.

Implementing agencies launched various initiatives to build and strengthen capacities and harmonize enforcement across the CAFTA-DR region. These initiatives include training government officials on CITES basic legal structures, implementation and enforcement; developing accessible, replicable training material; supporting the development of procedures and systems that increase the performance and effectiveness of CITES implementation; and developing tools to address limits on the implementation and enforcement of CITES. Other interventions focused on supporting wildlife rescue centers and strengthening regional collaboration and synergy.

With support from various partners, HSI, DOI, USFS and other implementing agencies conducted a number of regional, national, bi-national and tri-national workshops and capacity building activities addressed at a wide range of stakeholders. These activities dealt with a range of topics including transport regulations, rescue center best practices, animal handling, forest legislation, ecotourism, sustainable agricultural techniques, basic regulations and mechanisms for CITES implementation, best practices to improve implementation of the law and tools to manage CITES permits. Regional meetings of CITES officials and other relevant parties provided an efficient venue to share best practices, discuss national and regional priorities, identify capacity gaps, and provide opportunities for government officials within the region to engage in joint collaboration, and enhance government to government cooperation in CITES as a result.

Theme C: Market-based Conservation

The goal of Theme C is to implement a market-based conservation system. Initiatives related to this Theme focus on sustainable tourism, agriculture and forest products, as means to support economic





growth, sustainable natural resource management and environmental protection through ecological certification. The main expected result for Theme C is improved capacity to maintain the natural resource base and protect the environment to support sustained and sustainable economic growth.

To measure this result, OAS-DSD designed specific indicators that capture information on visible/measurable changes in agricultural practices and farm management, increased revenues for producers, and benefits for the environment derived from improved practices.

Projects linked to Theme C have yielded clearly tangible impacts, both for the population whose livelihoods come from the forest and plantations, and for the environment from which they get their living. The overall goal of the projects funded under this Theme has been to improve the livelihood of Central American producers by promoting and implementing organized, sustainable, and environmentally-friendly production systems that will create economic incentives for producers and enhance long-term environmental conservation and wildlife protection. RA worked with coffee, cacao, banana and pineapple producers to enhance the environmental and economic sustainability of their production through their organic and fair trade certification process. HSI worked with farmers who had abandoned cacao plantations or were having very limited yield, to enhance their production and highlight and protect important wildlife, including endangered species living in these productive areas.

Theme D: Improved Private Sector Performance.

The improvement of the private sector's environmental performance is to be achieved through cleaner production strategies, environmental management systems (EMSs), voluntary mechanisms, public-private associations, and by building stronger institutional and human resource capacity. Initiatives related to this goal focus on encouraging businesses to adopt clean production methods and EMS. Businesses which do so gain a competitive edge through reduced resource consumption and waste. Other initiatives related to Theme D focus on working with financial institutions, enterprises and cleaner production centers (CPCs) to increase capacity, develop voluntary mechanisms for cleaner production, and provide incentives and recognition to companies that use improved processes and technologies.

Enterprises that have awareness of, commitment to, and the capacity to undertake environmentally responsible action will use clean production technology, adopt eco-efficiency practices and use environment management systems. At this stage in CAFTA-DR ECP implementation, OAS-DSD is looking at the impacts generated by the adoption of these policies, incentives and the commitment demonstrated by the private sector to reduce its negative impact on the environment. Some field visits by the OAS-DSD team revealed a growing interest within universities and research centers for cleaner production methods. Researchers within these institutions were motivated by the desires to foster a more competitive private sector and to make a stronger contribution to the national efforts to contain or reduce greenhouse gas and pollutant emissions, the use of energy, water and raw materials, and the generation of solid waste and wastewater. As the research, dissemination of information and private sector participation are expanding, impacts from the contribution of CAFTA-DR ECP are becoming more tangible.

Lessons learned

Highlighted best practices that have yield clear impacts include the establishment of regional meetings of officials from CAFTA-DR countries; support to national inter-institutional thematic coordination mechanisms; the implementation of the Small Grants Program to promote public participation in environmental decision making; support to CITES authorities; creating synergies among the public and private sector; certification of crops; working with SMEs and promote the use of cleaner production practices and technologies to improve environmental performance and productivity, among others.

Challenges and Observations

The fact that the environmental agenda is not seen as a fundamental pillar of the countries' development agenda continues to be one of the main challenges in the implementation of the ECP. The economic and social agendas take priority. There is still a need to overcome challenges related to funding reduction and the allocation of funds. Issues with bureaucracy and lengthy approval processes are also highlighted, as well as the high turnover of staff in some ministries and other partner organizations which defeats the purpose of capacity building. The regional versus national implementation of programs debate is still valid, as well as the importance of political will for a successful implementation of the ECP.

Recommendations

As the ECP is focusing on those programs that have achieved greater success and are replicable, it should also allow for discussion on emerging environmental priorities in the region. A proactive outreach and communication strategy should be implemented from the early stages of the program to ensure visibility, share information, best practices and lessons learned, and reach a wide spectrum of stakeholders. The use of social media could assist in these tasks. It is important that the regional cooperation is complemented by a bilateral cooperation in order to create a greater impact on the cooperation or amplify the scope of action. Follow-up activities are crucial to realize long-term benefits and generate sustainable sector-wide changes.





I. INTRODUCTION

Background

On February 18th, 2005, the CAFTA-DR Parties¹ signed the ECA where they agreed to "cooperate to protect, improve and conserve the environment, including natural resources." They also came to an understanding that the objective of the ECA was to "establish a framework for such cooperation among the Parties." The ECA builds on previous environmental capacity building efforts in the region. Among its innovative features, the ECA includes provisions for establishing benchmarks to identify short-, medium-, and long-term goals for improving environmental protection in the region.

The success of the environmental cooperation depends on the ability of the Parties to successfully execute specific activities with measurable results within the ECA and its priorities using two modalities of cooperation: regional and bilateral. In particular, it depends on their ability to advance in the achievement of their long-term environmental goals in the four programmatic areas that have been established pursuant to ECA priorities (article V):

Programmatic areas	Priorities
Institutional Strengthening for Effective Implementation and Enforcement of Environmental Law	- Strengthening each Party's environmental management systems, including reinforcing institutional and legal frameworks and the capacity to develop, implement, administer and enforce environmental laws, regulations, standards and policies
	- Exchanging information on domestic implementation of multilateral environmental agreements that all the Parties have ratified
	- Promoting best practices leading to sustainable management of the environment
	- Building capacity to promote public participation in the process of environmental decision-making
	- Exchanging information and experiences among Parties wishing to perform environmental reviews, including reviews of trade agreements, at the national level
Biodiversity and Conservation	- Fostering partnerships to address current or emerging conservation and management issues, including personnel training and capacity building
	- Conserving and managing shared, migratory, and endangered species in international commercial trade and management of marine and terrestrial parks and other protected areas

¹ Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and the U.S.

Market Based Conservation	- Developing and promoting incentives and other flexible and voluntary mechanisms in order to encourage environmental protection, including the development of market-based initiatives and economic incentives for environmental management - Developing and promoting environmentally beneficial goods and services
Improved Private Sector Environmental Performance	- Developing and promoting incentives and other flexible and voluntary mechanisms in order to encourage environmental protection, including the development of market-based initiatives and economic incentives for environmental management - Facilitating technology development and transfer and training to promote the use, proper operation and maintenance of clean production technologies
Cross cutting	- Any other areas for environmental cooperation on which the Parties may agree



UNITED

Since 2005, the United States has invested approximately US\$ 87.2 million to fund environmental cooperation activities. This funding is helping CAFTA-DR countries to achieve the following long-term goals:

- Compliance with CAFTA-DR Environment Chapter (Chapter 17) obligations:
- ❖ To ensure that CAFTA-DR ECA Parties' environmental laws and policies provide for and encourage high levels of environmental protection;
- ❖ To effectively enforce their environmental laws;
- To ensure that judicial, quasi-judicial, or administrative proceedings are available to sanction or remedy violations of environmental laws;
 - Improved protection and conservation of the environment, including natural resources;
 - Transparency and public participation in environmental decision-making; and
 - An improved culture of environmental protection and compliance with environmental laws through, among other things, the promotion of economic opportunities, voluntary measures to enhance environmental performance, and job creation.

To support progress in these areas, the ECA (Article IV) requires that the Environmental Cooperation Commission (ECC), in addition to establishing priorities for cooperative activities, be responsible for examining and evaluating the cooperative activities under the Agreement. The ECA highlights as well that as the Commission periodically examines and evaluates cooperative programs, projects and activities, it shall seek and consider input *from relevant international organizations* and other relevant stakeholders,

² The Environmental Cooperation Commission has yet to be established. As of March 2014 all signatory countries but Costa Rica had notified regarding the completion of their internal requirements for the entry into force of the ECA. Article XII(1) of the ECA states that the Agreement shall enter into force thirty days after the OAS Secretariat notifies that all the instruments of ratification have been deposited by all the parties.



regarding how best to ensure progress through monitoring progress, and to comply with other commitments of the agreement, including establishing benchmarks or other types of performance measures to assist the ECC in its ability to examine and evaluate the progress of specific cooperative programs, projects and activities in meeting their intended goals; and to maintain procedural mechanism for the enforcement of environment laws.³

The Organization of American States through its Department of Sustainable Development (OAS-DSD) is assisting the ECC of the CAFTA-DR⁴ in evaluating if and how the activities carried out by the countries in the region are contributing towards the achievement of the priorities established by the parties. For this purpose, OAS-DSD has worked with stakeholders in developing an evaluation process based on key performance indicators.

Starting in 2009, the OAS-DSD has prepared independent evaluation reports to provide a general overview of the CAFTA-DR Environmental Cooperation Program (ECP), including success stories, case studies, challenges and recommendations witnessed from the beginning of the implementation of the Program, ⁵ with a view to improve future environmental cooperation programming.

In 2009, a first monitoring report submitted by OAS-DSD featured mainly qualitative information on results achieved. At the time, a monitoring system was still being developed for all activities being implemented under the CAFTA-DR ECP. A second report followed in 2010 that identified tangible progress, mainly at the output level, focusing on completed activities and identifying changes in capacity and knowledge. This second report compiled and triangulated quantitative data with qualitative analysis to highlight tangible progress towards the achievement of the expected results. The report also identified aspects in need of improvement to promote the adoption of laws, regulatory frameworks and capacity strengthening efforts. The report also noted that the need to report on outcomes created conflicting pressures. In 2011, a third monitoring report provided more in-depth information at the outcome level and drew a clearer picture of results achieved to date, with respect to improved capacity to manage environmental issues and generate socio-economic and environmental benefits in individual CAFTA-DR countries.

Purpose

This Fourth Evaluation Report aims to go beyond the mere conduct of activities by implementing agencies. Following various modes of operations, it explores the strengthening of capacities of government and civil society stakeholders (e.g. CSOs, the private sector and the general public) to protect, improve and conserve the environment. To this end, the report underlines the impact of interventions regarding environmental legislation and policy development, economic and social development, and environmental protection. These essential, interdependent factors fuel sustainable development in the CAFTA-DR signatory countries.

Methodology

Given that many projects are completed or nearing completion, the OAS-DSD is taking the opportunity, in this fourth report, to provide an overarching perspective of all results achieved to date, by means of an impact or high-level results assessment. Specifically, the OAS-DSD has looked at sustainable changes emerging from CAFTA-DR environmental cooperation, in a bid to ensure that this monitoring report would

³ To support this mechanism the parties designated the Secretariat for Environmental Matters to consider public submissions on environmental law enforcement.

⁴ Since the ECC has not yet been established, by default the OAS-DSD is assisting the CAFTA-DR signatory countries.

⁵ Cooperation efforts began in late 2005.

focus on changes in the environmental regulatory framework, changes in the attitude and behavior of beneficiaries, and more generally the environmental and socio-economic benefits of environmental cooperation. In line with this new focus, the OAS-DSD has moved away from aspects addressed in the first three monitoring reports, such as relevance and efficiency of CAFTA-DR ECP, to focus exclusively on program effectiveness and sustainability.

This report's primary information source regarding progress in achieving ECP-expected results is a document review of narrative reports submitted by implementing agencies. The OAS-DSD has also developed a simple tool to capture high-level results within each theme of the ECP, using a new set of impact-level indicators from the current CAFTA-DR ECP monitoring framework. OAS-DSD selected indicators through an iterative process and in consultation with CAFTA-DR points of contact and implementing agencies. In the future, the OAS-DSD intends not only to continue using its new impact indicators, but also to revise the entire CAFTA-DR ECP monitoring framework with a view to simplifying it and having implementers and points of contact share their opinions, as new projects and/or subsequent phases are approved in the coming years.

This report captures lessons learned, case studies and recommendations on the implementation process that could potentially guide the design and implementation of future environmental cooperation activities under CAFTA-DR ECP or other similar mechanisms. In addition, the report also provides a brief factual overview of accomplishments regarding other commitments in the CAFTA-DR ECP as they relate to the programmatic goals.

Limitations

In general, the process of documenting impacts rather than completed activities or short-term results is not an easy task. In the case of the CAFTA-DR ECP, this process has been particularly challenging due to the fact that this is a regional program with a significant number of implementing agencies participating in its implementation. Added to this is the fact that there was not a clear performance management framework in place before implementing agencies began their work in the region. Several other challenges in the process of documenting impacts include:

- Not all the implementing agencies used the impact-level reporting template prepared by the OAS-DSD. In those cases, the OAS-DSD had to rely solely on the quarterly narrative reports submitted by implementing agencies to extract relevant information.
- There was sometime a slight mismatch between the information provided by those agencies that used the reporting template, and the relevant indicators. Moreover, the data elements supplied by implementing agencies for specific indicators were not always comparable, as they did not always appear to be collected in a systematic fashion. Attempts to add up straight numbers supplied by the agencies proved to be somewhat misleading.
- A number of projects were still too new to demonstrate tangible changes with respect to environmental protection and socio-economic benefits for local communities and enterprises.
- Project design did not consider modalities or budget to report on impacts. This was particularly evident in projects that delivered training with little or no follow-up activity.
- At times, the scope of projects made it difficult to clearly attribute impact-level results to CAFTA-DR ECP projects alone. In most cases, the projects made a significant, but hard-to-assess contribution to achieving the desired impacts.





The OAS-DSD engagement occurred after the initial set of projects were designed. Consequently, to determine the impact of projects, OAS-DSD often had to interpret results reported by the agencies following their unique individual standards.⁶

Notwithstanding these limitations, this report provides an accurate picture of progress made in achieving the desired impact in a significant number of CAFTA-DR ECP projects.

 $^{^6}$ It should be noted that OAS-DSD did not expect implementing agencies to provide comprehensive data for indicators they did not specifically monitor in the lifetime of their projects.

II. RESULTS AND IMPACT

Through the ECP, CAFTA-DR countries are striving to enhance environmental law and policy enforcement, provide for and encourage protection and conservation of the environment, and promote a culture of environmental protection and compliance through such measures as public participation in environmental decision making, access to economic opportunities, and job creation. Interventions to achieve these results are structured around the goals of the ECP's four main themes.

The following two tables lists all the implementing agencies that have carried out activities being implemented under the four themes associated with CAFTA-DR ECP by coordinating agency, the Bureau of Oceans and International Environmental and Scientific Affairs of the U.S. Department of State (DOS/OES) and the United States Agency for International Development (USAID), respectively.

The tables are divided by themes (and sub-themes, if applicable) and the main areas of work under each theme (and sub-theme).

- Theme A Institutional Strengthening for Effective Implementation and Enforcement of Environmental Laws;
- Theme B Biodiversity and conservation;
- Theme C Market-based conservation;
- Theme D Improved Private Sector Environmental Performance.

Coordinating agency: DOS/OES		
Theme A. Institutional Strengthening for Effective Implementation and Enforcement of Environmental Laws		
Environmental Laws, Regulations, Policies and Procedures		
Environmental Impact Assessment (EIA)	DOI	
Wastewater Management		
Solid Waste Management		
Chemical and Hazardous Substances Management		
Air Quality Management		
Administrative Procedures for Filing Environmental		
Complaints		
Peer Reviews		
Environmental Law Enforcement, Governance, and Ca	apacity Building	
Enforcement Training, Tracking, and Resolution of		
Cases		
Strengthening Environmental Legal Education		
Fisheries Enforcement		
Public Participation and Transparency to Support Info	rmed Decision-Making	
Accessibility and Quality of Environmental	Helvetas, EPA, OAS/DSD	
Information	Environmental Hub in the Embassy in Costa Rica	
Public Involvement in Environmental Decision-		
Making		
Theme B. Biodiversity and Conservation		
Convention on International Trade in Endangered	DOI, TRAFFIC, WCS, HSI, ICRAN, FS, NOAA	
Species		
Forest, Protected Area, and Sensitive Ecosystem		
Management		
Ecoturism	Rainforest Alliance, HSI, TS	
Sustainable Agriculture and Forest Product		
Production		
Lobster Fisheries		







Theme C. Market-Based Conservation		
Ecoturism	Rainforest Alliance, HSI, TS	
Sustainable Agriculture and Forest Product		
Production		
Lobster Fisheries		
Theme D. Improved Private Sector Environmental Performance		
Policies and Incentives	WEC, E+CO	
Environmental Performance Capacity and		
Information		
Public-Private Partnerships and Voluntary]	
Agreements		

This section of the report reviews the sum of these efforts. For each theme, a table lists all relevant indicators for which information was supplied and then outlines progress made from baseline levels. An analysis of impacts and results follows. Where applicable, case studies and success stories are used to illustrate program achievements. A summary of key findings is found at the beginning of each section.

Theme A – Institutional Strengthening for Effective Implementation and Enforcement of Environmental Laws

Goal: To strengthen institutions for effective compliance and enforcement of environmental legislation

Under this Goal, the purpose is to strengthen environmental institutions, laws and policies, and to promote effective implementation and enforcement of these laws and policies, as well as the effective implementation of Multilateral Environmental Agreements (MEAs) and civil society engagement to ensure compliance with Free Trade Agreement's (FTA) obligations.



Single Entry Unit, Ministry of Environment and Natural Resources, Dominican Republic.

COSTA RICA
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REPUBLIC

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HONDURAS
NICARAGUA
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STATES

Goal A is divided into three sub-goals and 11 expected results. They are:

Sub-Goal A1 - To strengthen environmental legislation, regulations and environmental policies

- Strengthened capacities to prepare and revise environmental impact assessments and audits
- Improved wastewater management
- Improved solid waste management
- Improved management of chemicals and hazardous substances
- Improved air quality management
- Improved administrative procedures for the presentation of environmental complaints
- Greater enforcement and compliance of civil/penal laws in environmental responsibility

Sub-Goal A2 - To strengthen government institutions for the enforcement and effective compliance of environmental legislation

- Improved implementation and compliance of environmental law and case follow-up and resolution
- Improved rules, enforcement and compliance of fisheries' legislation

Sub-Goal A3 - Increased public participation and transparency to support informed decision-making

- Improved quality and greater accessibility of environmental information to the population
- Improved public participation in environmental decision-making

Key Findings

- More than 27,100 people trained in enforcement of environmental laws, public participation and cleaner production practices.
- A total of 150 laws and regulations were improved whereas 28 new laws were adopted to address issues like waste water, air pollution and solid waste.
- 4,500 people trained in public participation tools and mechanisms across all CAFTA-DR countries.



- Implementation of small grants program has benefited 8,180 people across all CAFTA-DR countries.
- There are early indications that community-level capacity strengthening efforts are effective. For example, Sabana Verde in Nicaragua filed an environmental grievance resulting in a favorable ruling from the Ministry of Environment.

To measure results OAS-DSD designed indicators to capture information on visible or measurable changes in environmental legislation, improved regulatory environmental frameworks, the introduction of environmental technology, capacity to enforce environmental legislation to prosecute and carry out sanctions, and the development of agreements and information systems to support sustainable natural resource management and conservation at the national and regional level. The review also examined changes in the engagement levels of civil society stakeholders, local authorities and communities in specific environmental issues and decision-making or policy-making processes.

Indicator [note 1]	Baseline	Progress [note 2]
Number and type of public institutions that have stronger capacity to enforce environmental legislation and preservation and to ensure effective stakeholder compliance	Clear baseline data from the beginning of the program is lacking.	To varying degrees, justice administration and regulatory frameworks for environmental law appeared to improve throughout the region as a result of CAFTA-DR ECP courses and workshops, legal compendiums and manuals, and efforts regarding the adoption of model regulations and laws governing wastewater, solid waste, and hazardous waste treatment. • CAFTA-DR ECP trained a total of 27,100 people.
Number of policies, laws, agreements or regulations promoting sustainable natural resource management and conservation that are refined, developed and/or implemented as a result of CAFTA-DR ECP assistance		Implementing agencies worked with CAFTA-DR countries to refine 150 existing laws and adopt 28 new laws and regulations addressing issues like waste water, air pollution and solid waste.
Type of environmental practices applied in the mining sector in CAFTA-DR countries	Clear baseline data from the beginning of the program is lacking.	Technical Environmental Impact Assessment (EIA) mining guidelines were produced for the mining sector. The final draft of the guidelines were published, but not yet disseminated. It is therefore too early to assess the effectiveness of such EIA guidelines.
		Costa Rican authorities were introduced to clean and environmental technological alternatives (e.g. iCON 150 gravimetric concentrator). As mining operations are only just beginning to use these technologies, it is too early to assess their effectiveness.
Number of public forums held to engage the public in environmental decision making and enforcement in CAFTA-DR countries		A strategic public outreach approach was implemented by local NGOs in each CAFTA-DR country, by means of a small grant program. This effectively led to increased engagement of civil society and local government stakeholders in specific environmental issues and policymaking processes. 130 workshops were carried out. 4,500 people were trained in public participation tools and methods in each CAFTA-DR country. 22,000 publications were delivered to each country's Ministry of Environment.

Notes:

- 1. OAS-DSD had developed eight indicators to assess the impact of environmental legislation and preservation. However, four of these indicators could not be addressed due to lack of supporting/substantiating information.
- 2. Due to the crosscutting nature of CAFTA-DR ECP, progress in law enforcement or regulations achieved by some implementing agencies is reported under Theme B.

Analysis of Results and Impacts Achieved under Theme A

Strengthened Environmental Legislation, Regulations and Policies



Government officials at the Workshop on Public Participation for Sustainable Development (Santo Domingo, Dominican Republic)

Implementing agencies have worked with CAFTA-DR countries to improve 150 existing laws and adopt 28 new laws and regulations related to wastewater, air pollution, and solid waste. According to USAID-CCAD reports, initiatives such as inspections (supported through the transparency initiative); audits (supported work on Environmental Impact Assessments); national and regional reference laboratories; and voluntary agreements (supported through the cleaner production component) reinforced the implementation of and solid waste wastewater regulatory frameworks. CAFTA-DR ECP helped countries better meet environmental obligations of the CAFTA-DR agreement by providing training and workshops to government officials, private sector

delegates and CSO representatives from the environment, agriculture, health, academic and industrial sectors. Training participants are now more knowledgeable in effective application of, and compliance with, environmental legislation. USAID-CCAD and EPA technical assistance was also directed at improving Environmental Impact Assessment (EIA) processes and environmental inspection/criminal enforcement techniques to the public and private sector. This contributed to a regional system of environmental compliance indicators and a system for registering and certifying environmental service providers. It also facilitated the adoption and application of cleaner production and voluntary agreements. In addition, the Regional Visualization and Monitoring System (SERVIR), a satellite-based program, was disseminated in the region, providing very useful data to mitigate natural disasters and threats, improve agricultural practices, and monitor air quality.



Electronic Record Consultation

To increase the value of solid waste, CCAD contribute to the promotion of the web-based commodity exchange for solid waste, BORSICCA (Industrial Waste Exchange for Central America and the Caribbean). CCAD and EPA provided technical assistance to control the use, storage and recycling of mercury in Costa Rica and Honduras.

Efforts from implementing agencies to provide technical assistance, deliver training and support regional meetings and workshops led to increased knowledge of environmental regulations and international resolutions, a more consensual approach to specific environmental issues, and improvements in environmental legislation and regulations in CAFTA-DR countries.





Strengthened Government Institution Capacities to Enforce Environmental Legislation and Ensure Effective Stakeholder Compliance

Environmental law enforcement requires skilled personnel and the commitment of government authorities and the private sector to work together. As part of CAFTA-DR ECP, implementing agencies supported the organization of several training sessions and workshops with institutions and officers responsible for environmental legislation and enforcement, protected area patrolling, illegal trade policing for exotic species, violation investigation, and offender prosecution and sentencing. USAID's Environmental and Labor Excellence Program for CAFTA-DR (ELE) prepared a regional legal compendium made available to all environmental prosecutors in each country, together with a compilation of environmental jurisprudence; critical information for judges when there are gaps or ambiguity in the legislation. Reports from USAID-CCAD and EPA suggest that, as a result of their efforts, prosecutors and judges are now better prepared to prosecute or adjudicate cases against polluters. As well, DOI reports that capacity building training and workshops on wildlife trade monitoring and enforcement have allowed government stakeholders and NGOs to play a positive role in wildlife trade monitoring and enforcement.

The development of technical EIA mining guidelines by USAID-CCAD and EPA promoted improvements in mining sector performance and decision-making efficiency. While reports claim these guidelines will help CAFTA-DR countries adopt efficient and effective practices regarding EIA processes and support the quality of EIA decision making, given the sensitivity associated with mining, it is too early to assess their effectiveness, nor these guidelines been implemented.

Special focus has been put on conveying best practices and providing clean and sustainable alternatives to reduce the severe environmental impact of using mercury in artisanal gold mining. The Costa Rican Directorate of Geology and Mines under the Ministry of Environment, Energy and Seas of Costa Rica (MINAE) was introduced and familiarized with the operation and use of the iCON 150 gravimetric concentrator. This device has been found to be a feasible future option for groups working in Abangares, the primary site of artisanal mining in Costa Rica.

Increased Public Participation and Transparency to Support Informed Decision Making

Public participation is an essential part of effective environmental decision making. Through its outreach interventions, CAFTA-DR ECP disseminated information that helped governments, civil society organizations, private sector stakeholders and individuals acquire a culture geared towards environmental protection and compliance with environmental laws. The program supported the production and dissemination of information in the media, such as paper-based and on-line publications (pamphlets, posters, newsletters, press releases, reports and assessments), videos and radio announcements. It also sponsored community meetings, workshops and specific training and capacity-building activities regarding the assessment and use of environmental information. In addition, outreach publications on institutional strengthening increased the degree of engagement in public participation. CAFTA-DR ECP organized a public forum that was instrumental in reinforcing the legitimacy and importance of local decision making processes.

⁷ Strengthening Public Participation Mechanisms for Sustainable Development and Economic Prosperity in the Hemisphere. Organization of American States. 2013; Guía de Acceso a la Información Pública (Nicaragua). MARENA. 2012; Guía Rápida para el Acceso Público a la Información Ambiental del Sector Recursos Naturales y Ambiente (Honduras). SERNA. 2012.

Success Story 1. Guatemala

In Guatemala, leaders from four municipalities in southern Peten (Melchor de Mencos, San Luis, Poptún, and Dolores, jointly referred to as the Commonwealth of Municipalities of Southern Petén, or MANMUNISURP), signed a formal agreement to work collaboratively. Together, they drafted a document called "Environmental Security Strategic Plan for the Southern Petén" to guide their activities. Moreover, two CSOs, Balam Guatemala and Friends for Conservation and Development (FCD), from Belize, joined forces to demonstrate the benefits of working with its counterparts across the border in Belize, to strengthen shared transboundary protected areas. As a result, MANMUNISURP has finalized and begun implementing a "Guatemala-Belize Bi-national Action Plan" to guide work, and has approved an "Environmental Security Strategy for the Maya Mountains-Chiquibul Biosphere Reserve (MMCBR)" that provides for joint patrols in critical MMCBR areas and for the placement of mobile control posts along primary trafficking routes. As a result, 224.12 cubic meters of timber (mostly rosewood), valued at approximately USD 300,500, were confiscated in February and October 2013. Other examples include community advisory groups developed along the Angue River, in El Salvador, to protect the ecosystem and the community along the river. As a result of capacity-building efforts, this community is now empowered and capable to continue work



Map of Guatemala – Belize Transboundary Protected Areas Image courtesy of U.S. Department of the Interior.

In its third cycle of small grants, Helvetas Guatemala⁸ awarded six small grants, including three that specifically targeted public participation in environmental decision making (see Table 1). Overall, these outreach activities benefited a total of 8,180⁹ people in the six CAFTA-DR countries. These individuals are now more knowledgeable about environmental legislation and public participation mechanisms and have become change agents within their communities, where they can influence others to improve environmental and sanitation conditions.

Table 1. Selected Small Grants Awarded by Helvetas Guatemala

Federación Nicaragüense de la Pesca, R.L – Nicaragua (2008-2013)		
Project title:	Promotion and Strengthening of Civil Society Participation in Protection of Fishery Natural Resource in the Island of Ometepeque	

This training workshop enabled fishermen to gain knowledge on: environmental and fishery legislation, including Nicaraguan legislation and international law (e.g. Chapter 17 of CAFTA-DR and ECA); mechanisms to promote and strengthen participation; and concepts to use fishery resources sustainably and preserve the environment by applying responsible fishing concepts. Fishermen also attended a workshop on fishing practices and clean production methods that promote responsible fishing. Fishing communities were trained on public participation and are now familiar with techniques and mechanisms to carry out advocacy and public participation.



⁸ Asociacion Suiza para la Cooperación Internacional, *Helvetas Guatemala 18th Quarterly Report*, January 1, 2013 to March 2013.

⁹ "Performance Measurement Framework (Regional Level) Cumulative Direct Beneficiaries for 3rd Cycle." Section V. *Helvetas Guatemala Quarterly Report.* January-March 2013. 43-44.



Miskitu Indian Mairin Asla Taknaka - Honduras

Project title:	Strengthening of Integrated Wastewater and Solid Waste Management through Public Participation in	
	Municipalities in the North Zone of Rio Platano Biosphere, La Mosquita	

This project promoted the public participation of women and members of the Miskito/Garifuna communities of the municipalities of Juan Francisco Bulnes and Brus Laguna, to address and resolve the problem of solid waste and wastewater in wetland ecosystems located in Bacalar and Brus, within the Rio Platano Biosphere. Capacity building efforts raised citizens' awareness of how they can now influence others to improve environmental and sanitation conditions within their communities. Indigenous organizations collaborated with local governments to formulate action plans, ordinances and public policies to protect wetlands in Palacios, Batalla and Brus Laguna.

National Foundation for Development (FUNDE) - El Salvador

Project title:	Strengthening the Civil Society of El Salvador for Public Participation and Social Auditing on Environment	
	Issues under CAFTA-DR	

This project strengthened the skills and knowledge of Salvadorian civil society organizations regarding integrated water resources management, to take advantage of public participation mechanisms established in Chapter 17 of the CAFTA-DR, and to create "influence zones" to promote the enforcement and establishment of regulations for good water resource management. The project featured the development of a public participation mechanism guide, i.e. a didactic and conceptual document providing a clear explanation of recommended procedures and mechanisms for advocacy and environmental activism. An indication of impact came after a press conference was held to promote the project, as two fishing associations approached FUNDE to get advice on legal situations affecting small-scale fisheries in the country.

Helvetas Guatemala reports that over 1,000 people¹⁰ participated in meetings on environmental management and decision making and that civil society organizations in target countries have improved their advocacy and activism as a result of knowledge and tools acquired through various training workshops. Furthermore, environmental committees have been set up in several communities in the wake of training sessions. A number of these committees have submitted environmental complaints, which suggests that people now know enough about legal procedures to file a grievance. The example of the Rural Development Action and Support Center (CENADE; see Success Story 2), a Guatemalan CSO involved in Nicaragua with support from OES and Helvetas, illustrates how access to knowledge, training, and institutional strengthening can enable communities and local government to participate in environmental decision making, applying Nicaragua's environmental laws, and working collaboratively to adopt cleaner production, enforce compliance and manage environment complaints. Through such action, populations have become increasingly empowered to improve environmental conditions within their communities.

In order to promote public participation in environmental decision making, EPA has been working in the development of public guides for access to environmental information; organizing a regional public participation workshop; and implementing a small grants program to provide outreach and education on strengthening environmental decision making. The quick guides for environmental information have been printed and delivered for all six CAFTA-DR countries. A total of 22,000 quick guides were delivered to the Ministry of Environment in each country. In addition, 2,000 copies as well as the electronic version were delivered to Peace Corps volunteers in Nicaragua, Guatemala, Dominican Republic, Costa Rica, and El Salvador. The public participation workshop has held May 2013 in San Salvador, El Salvador. The workshop included twelve NGOs, all six ministries of Environment from the CAFTA-DR region, OAS, USAID, EPA and Department of State. An informal public participation network was formed and hosted on Facebook.

Six small grants were awarded; four of the sub-grantees projects have been completed successfully which include: EcoEsfera (Honduras), Paso Pacifico (Nicaragua), Dominican Republic (Alianza ONG) and Partners for Democratic Change (El Salvador). The projects in Costa Rica (CEDARENA) and Guatemala (University of California-Riverside) are still ongoing.

¹⁰ Ibid. Improved Public Participation in Environmental Decision Making (table). 45.



STATES

Success Story 2. CENADE (Rural Development Action and Support Center)

<u>Nicaragua project title:</u> Capacity Building for Farmer Organizations and Local Governments in Public Administration and Application of the Country's Environmental Law

This project aimed to promote citizen participation and environmental conservation through increasing local organizations' knowledge of how environmental legislation gets adopted. The project also entailed implementing environmental legislation in municipal governments through voluntary measures that favor environmental conservation and recovery. Nineteen cooperatives benefitted from capacity-building efforts that helped them to understand Nicaragua's General Environmental and Natural Resources Law. These cooperatives were located in 15 communities and four municipalities of Nicaragua (Terrabona, Dario, Sebaco and Ticuantepe). Nearly 1,200 cooperative members improved their knowledge of environmental legislation and Chapter 17 public participation provisions. Capacity-building sessions also improved the management capacity of civil society organizations, to the point that they now demand action from state institutions to defend environmental rights. In some cases, cooperatives created environmental committees to monitor environmental issues and file grievances with local authorities. For example, the community of Sabana Verde complained to the Ministry of Environment that fumigation activities on a farm were having an adverse effect. Following an analysis and assessment of the case, the ministry ruled in favor of the community. This illustrates that capacity strengthening efforts were effective in empowering farmers to initiate and handle environmental complaint mechanisms. Nineteen cooperatives (representing 490 members) were trained in cleaner production, and now 43% of them have incorporated environmentally-friendly actions in their production. Moreover, farmers are now more vigilant in ensuring compliance with environmental legislation and applying cleaner production methods. The project also succeeded in strengthening local government procedures to address environmental complaints. Local authorities and citizens have jointly created five environmental proposals to improve their situation in each municipality and to encourage people to protect and conserve the environment. Such incentives are to be incorporated in municipal environmental management plans.

Outreach and public awareness projects dealing with biodiversity and endangered species conservation reached 800,000 people. These outreach efforts made environmental information more accessible through activities, press conferences, radio spots, dissemination of brochures and training material, and workshops on various topics (e.g. environmental laws; public participation and advocacy; energy efficiency; sanitation and waste; and water management and fisheries). These projects led civil society organizations to play an active part in compliance and enforcement of environmental decisions, through meetings with municipal authorities, mayors, ministries, NGOs, exchange trips, and municipal forums. This strategy proved most useful in the preparation of environmental initiatives (e.g. water and waste management projects), as beneficiaries already came to acknowledge the importance of issues and take a more open-minded stance on changing their traditional ways of dealing with environmental issues.

OAS - Department of Sustainable Development

¹¹ Statistic quoted in a document summarizing CAFTA-DR activities in 2013.



Theme B - Biodiversity and Conservation

Goal: To protect wildlife and their habitat for long-term economic and environmental development

Goal B is divided into three expected results. They are:

- Improved implementation and enforcement of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)
- Improved protection of forests, protected areas and fragile ecosystems management
- Improved conservation of marine turtles

Key Findings

- Development of guidelines, methodologies and tools to improve the skills of CITES and fisheries authorities to formulate non-detrimental findings (NDFs).
- Development of an interactive training CD that includes a curriculum on the administrative, legal
 and technical aspects of CITES to improve the knowledge of CITES authorities from CAFTA-DR
 countries.
- Support given to CITES Authorities in CAFTA-DR countries has strengthened the management and coordination of these authorities.
- Training of 425 officials from law enforcement agencies (attorney generals, judges, police and armed forces) on best practices to implement wildlife regulations in the operational framework of the Central American Wildlife Enforcement Network (CAWEN).
- New laws and regulations were adopted to foster biodiversity protection, including legislation in Costa Rica, El Salvador and Honduras.
- An additional US\$ 1 million was leveraged in the region for natural and archeological resource conservation.
- Review of process to update CITES regulations in El Salvador, Honduras and Costa Rica.
- The rescue centers program had a positive effect on nearly 8,800 animals from over 150 species.
- Nearly 100 agents involved in the processing of timber violations.
- In the Dominican Republic, 3,400 articles made of sea turtles were seized, and 285 pieces of jewelry and other turtle products were confiscated.
- As a result of CAFTA-DR ECP, 1.3 million ha of biological significance were under improved natural resource management.
- Over 11 million people were reached by outreach campaigns to raise public awareness on biodiversity and endangered species conservation.
- More than 34,000 people including government officials were trained in natural resource management, biodiversity conservation and endangered species protection.

The purpose of Theme B is to protect wildlife and its habitat for long-term economic and environmental development. Initiatives related to this theme seek to combat illegal trade in endangered species and promote sustainable management of forests, protected areas and other important ecosystems. Key focal areas include strengthening the scientific and institutional capacities of authorities in charge of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), training CITES implementation officials, building wildlife enforcement capacity and networks, supporting new or existing animal rescue centers, and preventing illegal logging. Results and impacts associated with Theme B are divided in two broad categories:



Poison arrow frog. Image courtesy of DOI

- Improved implementation and enforcement of CITES;
- Improved management of forest resources and protected areas for wildlife and habitat protection.

To measure these results, OAS-DSD designed indicators to capture information on visible or measurable changes in the capacity of CITES management, scientific and enforcement authorities to protect forests and wildlife, improve management of sensitive ecosystems, and carry out inspection and seizure operations. Such changes were in turn expected to lead to positive changes in attitude of the population and in the adoption of

practices and mechanisms by authorities in charge of biodiversity management to better protect wildlife and better collaborate in the fight against illegal trade.

Indicator [note 1]	Baseline	Progress [note 2]
Number of new or improved tools used by public agencies in charge of enforcing CITES to enhance wildlife protection	wed tools used by agencies in charge ording CITES to ce wildlife material in an accessible format for use by government personnel • CITES offices lack basic	 Assistance by means of: A detailed visual and taxonomic identification guide for tillandsia in Guatemala and an illustrated manual of species at risk in El Salvador; Development of a guide to identify iguanas genus Ctenosaura, including species included of CITES appendix II. Development of a CD -interactive course that contains administrative, legal and technical aspects of the implementation of CITES and a number of tools and virtual exercises to improve understanding and learning of the CITES authorities and their partners. Two (2) regional training workshops were implemented with the CD and 7 national workshops in CAFTA-DR countries to develop a pool of trainers. An economic valuation study of CITES species in Central America and the Dominican Republic. A study was conducted to analyze the behavior of trade in CITES species in the region, know the volume of export trade, species and products with high commercial demand and major markets, likewise an economic assessment of trade in CITES species for the 2003-2012 period was performed.
		A taxonomic identification guide for forest species, including CITES species, was developed.
	 An interactive training CD on animal handling was developed, including field guides and reference to CITES regulations. 20 national animal handling training activities were delivered with the interactive CD. One activity featured a component on how to handle the chain of evidence. 7 of those trainings were done for training of trainers to ensure sustainability of the 	





Indicator [note 1]	Baseline	Progress [note 2]
		 program. Four issue-specific trainings were delivered to review transport regulations, rescue center best practices, and coordination mechanisms with the CITES Secretariat.
		 In Guatemala, an on-line course on how to establish and maintain a social license was delivered. Support to wildlife enforcement operations resulted in several inspection and seizure operations involving articles made of sea turtles, parrots, iguanas and wood (mahogany and cocobolo).
Number of electronic systems to efficiently and effectively support CITES implementation		Three web-based management systems for CITES permit have been developed in Nicaragua, Honduras and Costa Rica.
Number and type of coordination mechanisms developed and used by CAFTA-DR governments to enhance animal protection and well-being	Misalignment between regional legislation and current CITES standards (prior to CAFTA-DR)	A formal partnership with the CITES Secretariat (headquarters in Geneva) to develop long-term and high-level collaboration was established. As a result: El Salvador achieved CITES Level 1 category. The CITES secretariat participates in legal counseling and oversight to the processes for the updating and revision of CITES regulations in Nicaragua, Honduras and Costa Rica. Coordination with CITES secretariat regarding training and exchange of experiences on non-detriment findings for extraction in CAFTA-DR countries. The Government of El Salvador approved the 2010-2020 Marine Turtle Action Plan.
		Joint efforts with rescue centers and government agencies from CAFTA-DR countries led to the creation of a rescue center network to exchange all types of relevant information, including sustainability practices.
Number and type of new CITES endangered wildlife protection standards adopted by borders/customs management institutions	Regional legislation not always updated to current CITES standards Basic government structure and legislative requirements as per CITES not always present	 In 2012, assistance was provided to Nicaragua to update Decree 8-98 Regulations and Procedures for CITES implementation. Costa Rica: legal assistance to the CITES authority for Costa Rica was provided to develop an executive order indicating which CITES resolutions were applicable to Costa Rica. With this executive order, CITES resolutions are now binding and mandatory. Legal assistance was provided to Honduran authorities to update the regulations for CITES implementation, approved by Executive Decree. Together with the authorities of Nicaragua and Costa Rica, the binational operational manual was updated to combat illegal trafficking and control trade in species.
Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of CAFTA-DR ECP	Little existing data on the number of hectares targeted by the program that could affect wildlife and communities positively	1.3 million ha of biological significance were under improved natural resource management as a result of CAFTA-DR ECP.
Number of people having derived increased economic benefits from sustainable natural resource management and conservation as a result of CAFTA-DR ECP	Lack of integration between communities in protected areas and government resources assigned to law enforcement (prior to CAFTA-DR) Deficient community representation and voice in decisions affecting protected areas and surrounding	Qualitative information on hand underlined the following: • Enhanced communication lines and coordination among communities and other stakeholders in protected areas led to: - The development of National Protected Area Law Enforcement Strategy for the Maya Biosphere Reserve (MBR) in Guatemala; - Additional leverage in the form of US\$ 1 million in congressionally-appropriated funds for natural and archeological resource conservation in MBR in FY 2010. • Enhanced community participation in environmental decision making resulted in:

Indicator [note 1]	Baseline	Progress [note 2]
	communities (prior to CAFTA-DR)	 A commitment from the Government of Guatemala to increase financial support to the National Forest Fire Prevention and Control System (SIPECIF); The transfer of technical and political decisions to local actors in the Petén Region. Strengthening of the Mirador-Rio Azul Roundtable consensusbuilding and information-sharing forum promoted model management practices from Northeastern MBR.
Number of government	0	305 Government of Honduras representatives enhanced their
representatives in CAFTA-DR countries who apply improved methodologies to combat illegal logging		 knowledge of systems and methodologies used to prevent and combat illegal logging. 98 agents strengthened their skills to process timber violations.
Number of policies and regulations promoting the well-being of animal life within the CAFTA-DR region	Lack of dynamic animal welfare legislation, or lack of legislation altogether (prior to CAFTA-DR) No enforcement of existing animal welfare legislation, where applicable (prior to CAFTA-DR)	 Work supporting wildlife issues was conductive in developing growing interest in environmental conservation and protection in the CAFTA-DR region: Costa Rica passed new wildlife legislation by popular initiative in 2013. El Salvador passed legislation banning circus animals, by means of a reform of its Law on the Conservation of Wildlife. Nicaragua passed new animal welfare legislation in 2010. New regulations for animal welfare are being drafted by the Honduran Association for the Protection of Animals and their Environment (AHPRA), to be implemented in municipalities throughout the country.
Number and percentage of animals that could be released from rescue centers/Mortality rate within rescue centers	Limited number of animals that could be rehabilitated and released (prior to CAFTA-DR) due to overpopulation and lack of appropriate protocols in rescue centers	 In Guatemala, adapted protocols, staff training, provision of materials and infrastructure improvements combined to increase the flow of wildlife rehabilitation and the number of animals received, rehabilitated and released. Protocols are being officialized by the government. The release of animals increased from 113 to 236 (2007-2012). Also in Guatemala, improvements carried out by the Association for the Rescue and Conservation of Wildlife (ARCAS) helped to curb the increase in the number of animals received yearly. This number grew from 701 in 2009, to 932 in 2010. Nicaragua: creation of quarantine enclosures, clinic and receiving area, to initiate work in rescue center specific infrastructure. Protocols strengthened quarantine processes and administrative separation of zoo and rescue center, as well as strengthened rehab and release processes. El Salvador: creation of border quarantine center to place confiscated animals that often come from other countries. Successfully relocated animals back to Nicaragua through government/rescue center collaboration. Protocols developed are being officialized by the government. Honduras: creation of rescue center infrastructure and temporary holding facilities- First official rescue centers in the country. Protocols developed for rescue center and temporary holding facility are being officialized by the government. Costa Rica: improved equipment for rescue center, allowing for improved care of animals received into the rescue center.
Number and type of animal species positively impacted by the program	N/A	A total of 8,756 animals from over 150 species were positively affected.





Indicator [note 1]	Baseline	Progress [note 2]
Number and type of public institutions that have stronger capacity to enforce environmental legislation and preservation and to ensure effective stakeholder compliance	Limited number of government officials sufficiently trained in CITES regulations and implementation High turnover among trained government officials High proportion of newlyappointed staff in CITES-related offices and positions	Improved capacity of CITES stakeholders and law enforcement officials to conduct investigations, prepare fines and confiscate goods at customs through training in CAFTA-DR countries. • 425 participants from wildlife compliance, enforcement, and judicial agencies from CAFTA-DR countries attended workshops on best practices to implement wildlife inspection and enforcement organized by the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN).
	No specific action was taken to develop an information management tool to control timber within Honduras (prior to CAFTA-DR)	A South-South exchange between the Governments of Peru, Brazil, and Honduras was supported to review a computerized registration, administration and forestry control system and provide suggestions on how to move forward.
		Training of 73 representatives from various organizations, including the Honduran National Police Force, the Honduran Army, Honduras Customs Services, the Secretariat for Public Works and Transportation of Honduras, forestry technicians from the National Institute of Forest Conservation and Development (ICF) and the National School of Forestry (ESNACIFOR), as well as timber industry professionals, to recognize 20 to 30 of the most common illegally-traded tropical wood species in the region.
Number and type of gaps identified in environmental legislation, regulation and policies that were addressed to support effective compliance and enforcement of environmental legislation and preservation	Gaps detected and recorded with respect to sanctioning of illegal logging, but non-enforcement of sanctions due to limited knowledge of legal processes on the part of authorities	USFS supported training to review steps associated with the legal processes to file and carry out sanctions for trespassers and others involved in illegal timber trade.
Number of public forums held to engage the public in environmental decision making and enforcement in CAFTA-DR countries		Three regional workshops were organized to improve the capacities of CAFTA-DR countries to develop guidelines and use methodologies and tools to formulate non-detrimental findings (NDFs). Nov 2011 in Dominican Republic; Sep 2013 in El Salvador; March 2014 in Guatemala.
		In 2011 a conference was held in Honduras to share experiences, tools and methods for managing illegal logging and deforestation from across the Americas.
Number and type of environmental and economic benefits gained from the use of market- based instruments		Economic benefits: Tourism generated approximately US\$ 12,000 (640 tourists visited the Chacocente area in 2011). Tourism created 21 employment opportunities (tourism cooperative). Environmental benefits: Nearly 40,000 plantation and forest trees were planted as a result of interventions. 35 km of land and water conservation works were established.
Number of farmers (or farms) who use improved cacao/coffee/banana/pin eapple production methods that benefit the environment	0	208 farmers were trained to become trainers on how to use improved farm management and production practices with 122 new, improved farming practice plans.
Number of hectares in which improved	0	163.75 ha of forested area in Nicaragua.

Indicator [note 1]	Baseline	Progress [note 2]
technologies or management practices are used as a result of CAFTA-DR ECP		

^{1.} Some of these indicators were originally developed for Theme A or Theme C; see note 2.

Analysis of Results and Impacts Achieved under Theme B

Improved Implementation and Enforcement of CITES

Implementing agencies launched various initiatives to build and strengthen capacities and harmonize enforcement across the CAFTA-DR region. These initiatives include training government officials on CITES basic implementation legal structures, enforcement; developing accessible, replicable training material; supporting the development of procedures and systems that increase the performance and effectiveness of CITES implementation; and developing tools to address limits on the implementation and enforcement of CITES. Other interventions



Capacity building workshop for CITES and fisheries authorities in the region.

Photo courtesy of DOI

focused on supporting wildlife rescue centers and strengthening regional collaboration and synergy.

Implementing agency support aimed at strengthening or developing regulatory and legal instruments triggered increased interest for CITES in CAFTA-DR countries, leading to enactment of wildlife legislation to toughen enforcement throughout the region. Thus, Costa Rica passed new wildlife legislation by popular initiative in 2013, whereas El Salvador passed legislation banning circus animals through a reform of its Law on the Conservation of Wildlife, and Nicaragua passed new animal welfare legislation in 2010. Moreover, new regulations for animal welfare are now being drafted by the Honduran Association for the Protection of Animals and their Environment (AHPRA), for implementation in municipalities throughout Honduras.

Support from implementing agencies contributed to the development or enhancement of instruments to improve the CITES regulation framework. These interventions strengthened national and regional awareness, as well as the implementation and enforcement of CITES. The International Technical Assistance Program of the U.S. Department of the Interior (DOI-ITAP) established a formal partnership with the CITES Secretariat (headquarters in Geneva) and the Government of El Salvador to improve the CITES legal framework and help the country reach Category 1 status for national CITES legislation



^{2.} In some cases, due to the crosscutting nature of CAFTA-DR ECP, this table reports progress in law enforcement or regulations that would normally be reported under Theme A, as well as progress in market-based conservation that would normally be reported under Theme C.

¹² Ley de Conservación de Vida Silvestre 7317; http://colegiobiologos.com/wp-content/uploads/2012/10/LEY_Vida_silvestre_7317.pdf.

 $^{^{13} \} http://www.asamblea.gob.sv/eparlamento/indice-legislativo/buscador-de-documentos-legislativos/ley-de-conservacion-de-vida-silvestre.$

 $^{^{14} \} http://legislacion.asamblea.gob.ni/normaweb.nsf/3133c0d121ea3897062568a1005e0f89/cf820e2a63b1b690062578b00074ec1b?OpenDocument.$



compliance.¹⁵ A process for updating the regulatory framework was initiated in Nicaragua, Honduras and Costa Rica. DOI supported the development of the 2010-2020 Marine Turtle Action Plan for El Salvador, which was approved by the government and launched at a public event that generated significant press coverage on the Friday before Holy Week, traditionally a peak period for the consumption of marine turtle eggs. To date DOI has contributed to the updating and modernization of CITES regulations in Honduras, El Salvador, Nicaragua and Costa Rica where regulations relevant to standards and procedures for exporting, importing and re-exporting CITES species and the definition of enforcement structures and defining the enforcement authorities of CITES are the basis of the regulations.

Skills Development

With support from various partners, HSI, DOI, USFS and other implementing agencies conducted a number of regional, national, bi-national and tri-national workshops and capacity building activities addressed at a wide range of stakeholders. These activities dealt with a range of topics including transport regulations, rescue center best practices, animal handling, forest legislation, ecotourism, ¹⁶ sustainable agricultural techniques, ¹⁷ best practices for implementation of wildlife legislation, including CITES, fines, trade regulations related to CITES, coordination mechanisms for CITES implementation:

- Three regional workshops were held to improve the capacities of CAFTA-DR countries to undertake and plan CITES non-detrimental findings (NDFs) in Central America and the Dominican Republic, and also to brief participants on CITES NDF resolutions adopted at the latest Conference of the Parties, on tools and methodologies developed to improve the formulation of NDFs, and on the sharing of successful NDFs developed in other countries. These workshops brought together experts from CITES scientific and administrative authorities and national fisheries agencies in Costa Rica, El Salvador, Guatemala and Honduras, 18 as well as representatives from the Organization of the Fishing and Aquaculture Sectors of the Central American Isthmus (OSPESCA). On site, delegates discussed and planned the conduct of a followup regional CITES NDF development workshop focusing on a proposal to have shark species listed as CITES Appendix I, 19 that was held in March 2014 in Guatemala City. The workshop in El Salvador also provided a good opportunity for countries to showcase their progress in implementing CITES and to share their concerns over the process. DOI-ITAP successfully leveraged funds to support the participation of two CITES scientific authorities, from Colombia and Ecuador respectively, to broaden the other participants' experience and know-how in NDF formulation.
- A CITES coordination meeting was held in Nicaragua during which an NGO delegated by the Government of Belize made a presentation on the proposal to list rosewood at the 2013 CITES Conference of the Parties in Bangkok.

¹⁵ In 2012, with support from CAFTA-DR ECP, El Salvador successfully met all requirements to be upgraded from CITES Category 2 to Category 1 status (regarding national legislation to implement CITES). Formal approval was subsequently granted at the CITES Conference of the Parties.

¹⁶ USFS developed three manuals to support ecotourism, respectively named the "Cetacean Observation Handbook," the "Turtle Observation Handbook" and the "Manual for Community Ecotourism Tour Guides."

¹⁷ Development of training material on Silvo Pastoral Systems, Solid Waste focusing on the development of Organic Fertilizers, Biological Control (Integrated Pest and Disease Management Soil and Water Conservation, Water Resource Management, Marketing, Gender, Crop Management, Establishment and Management of Plantations, Management and Development of Coffee with shade.

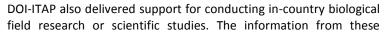
¹⁸ Experts from Panama also participated in the meeting.

¹⁹ CITES protected species "listed" in Appendices I, II and III include: species threatened with extinction (Appendix I); species not necessarily threatened with extinction, but for which trade must be controlled to avoid utilization that would jeopardize their survival (Appendix II); and species that are protected in at least one country and for which that country has requested trade control assistance from other CITES parties.

- A web-based curriculum and interactive CITES training course²⁰ was organized to give CITES authorities, customs officers, police forces and other officials from CAFTA-DR countries a chance to enhance their knowledge and skills regarding operational and legal aspects of CITES implementation.
- DOI-ITAP led a total of eight national-level courses to train 177 CITES authorities, customs officers, police forces and other officials in CAFTA-DR countries.
- DOI in coordination with the Secretariat of the CAWEN (2011-2012 Nicaragua and Costa Rica 2013) held seven national workshops with 425 participants from compliance and enforcement agencies and judicial from CAFTA-DR countries. The workshops provided knowledge on best practices for implementation and enforcement of wildlife, success stories on implementation of the law which contributed to the planning of joint national training activities planning in countries joint operations spearheaded by CAWEN' focal points.
- In 2013, DOI supported the development in Guatemala of an on-line course called "Establishing and Maintaining a Social License" directed at government officials from the Ministry of Environment and Natural Resources (MARN) and the Ministry of Energy and Mines (MEM).²¹ Training covered the basic aspects of obtaining, maintaining and improving a social license.²²

Each session presented real-life success stories in South America and Mexico involving the acquisition and operation of a social license.

■ Ten national, bi-national and tri-national trainings were carried out on animal handling, and six trainings for instructors were held to facilitate replication efforts. All in all, over 600 people received training to develop their animal handling skills in the CAFTA-DR region. This could enhance national and local capacity to implement and enforce CITES, contribute to positive attitude changes regarding the protection of wildlife, and increase the likelihood of across-the-board collaboration from government authorities, civil society stakeholders and NGOs in the fight against illegal trade.



studies was used to inform decision makers, thus furthering the conservation and enhancement of CITES species in protected areas. For example, DOI-ITAP coordinated with UNEP's World Conservation Monitoring Centre (WCMC) to compile, analyze and

report on CITES trade data from Central America and the Dominican Republic, spanning over a period of 10 years. This study will feature an assessment of trade participants and primary Central American species of flora and fauna involved, as well as a preliminary analysis of the economic value of CITES trade in the region.²³ Also, for 2011-2012, DOI provided technical assistance to the conduct of a diagnostic study of



Billboard promoting Conservation of Wildlife Photo courtesy of HSI



²⁰ This course is available on CD and flash drive. As it does not require Internet connectivity, the material can be used in government offices all over a country, which makes the course easily replicable.

²¹ The workshop was delivered by EduMine.

²² There is often considerable complexity involved in gaining and maintaining a social license. However, if properly prepared and supported, the challenges created by such circumstance can usually be overcome.

²³ This study was completed, presented, and published on the WCMC web site in March 2014. See http://citescentroamerica.unep-wcmc.org/wordpress/spanish/



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tillandsia, a major source of income in Guatemala, and worked with Honduras to conduct and finalize a study that recommended the monitoring of psittacines (parrots) in the Mosquitia area of Honduras. Such studies helped CITES authorities get a better grasp of the type of resources they need to manage and facilitate interventions to protect native flora and wild species. Furthermore, USFS developed a taxonomic identification guide for various forest species, including CITES species. These materials helped promote knowledge sharing among CAFTA-DR countries and facilitated replication of training throughout the region.

Over time, DOI-ITAP support to CITES implementation and enforcement led to consolidated wildlife enforcement operations and to the building of multidisciplinary inter-agency teams comprising representatives of stakeholders like the Head Environmental Prosecutor's Office, the Vice-Ministry of



Seizure of parrots by government officials of El Salvador. Photo coutesy of DOI

Marine and Coastal Resources, the Fishing Council, or provincial-level governments, among others. Such collaborations led to the deployment of joint inspection and seizure operations. For example, in the Dominican Republic, inter-agency teams seized 3,400 articles made of sea turtle, following an inspection conducted in hundreds of stores located in six different provinces. Similarly, ongoing inter-agency seizure activities led to the confiscation of 285 pieces of jewelry and other turtle products. Moreover, efforts invested by DOI in El Salvador, Honduras and Nicaragua to build capacity and provide technical assistance to CITES management and scientific authorities to develop collaboration mechanisms led to the signature, in 2010, of a Wildlife Seizure Cooperation Agreement that clarifies roles and responsibilities and promotes cooperation in the fight

against illegal trade. As a result of such inter-country collaboration between CITES authorities, an illegal shipment of parrots transiting from Nicaragua to El Salvador via Honduras was recently seized and repatriated.

The strengthening of CITES implementation and enforcement capacities within national and regional institutions led to an increase in the number of government officials trained in relevant CITES regulations. By means of courses delivered throughout the CAFTA-DR region, stakeholders had a chance to develop their skills with regard to investigations, confiscations and fine issuance at customs. In addition, regional workshops addressed at environmental and customs officers improved the participants' knowledge of CITES regulations and species identification, as well as their animal handling skills and ability to control trade governed by multilateral environmental agreements.

CITES capacity building workshops and joint wildlife enforcement/inspection operation planning meetings gave government officials from various agencies a solid working knowledge of CITES at the global and country level. Participants from wildlife compliance, enforcement, and judicial agencies as well as custom officials benefited from instruction on wildlife inspection and enforcement as well as general information regarding CITES monitoring and enforcement. CITES monitoring and enforcement officials from a variety of compliance, enforcement, and judicial government agencies, including judges, are now better acquainted with procedures to carry out wildlife inspections and implement CITES laws and regulations.

Coordination Efforts, Collaboration Mechanisms and Regional Meetings

Regional meetings of CITES officials and other relevant parties provided an efficient venue to share best practices, discuss national and regional priorities, identify capacity gaps, and provide opportunities for

government officials within the region to engage in joint collaboration, and enhance government to government cooperation in CITES as a result. Such meetings also provided a forum for member countries to present proposals of regional importance at the Conference of the Parties, which is CITES' supreme decision-making body. For instance, in 2012, to encourage the sustainable use of species, DOI-ITAP convened CITES and other government officials to discuss regional support for the rosewood and shark proposals introduced by countries at the 2013 CITES Conference of the Parties in Bangkok, Thailand. Both proposals were adopted, and feedback from U.S. and Central American and Dominican officials who attended the conference suggests a growing cohesiveness in votes taken within the region.

Recognizing the need for better national and regional coordination to confront the growing illegal wildlife trade, DOI-ITAP worked with a wide variety of government and non-government entities and supported the establishment Central American Wildlife of the Enforcement Network (CAWEN), a regional inter-agency mechanism. CAWEN was instrumental in building significant political support to confront illegal wildlife trade by facilitating government-to-government coordination, promoting the participation of attorney generals from the region and representatives from the Central American Commission on Environment and Development (CCAD), Interpol, the United States Fish and Wildlife Service, the Wildlife Trade Monitoring Network (TRAFFIC) and other stakeholders in the network. This led to the development of a consensus on priorities to be addressed through



Juan Carlos Vasquez, Officer, CITES Secretariat during CAWEN Network Meeting in San Jose, Costa Rica. Photo courtesy of DOI

collaboration, and the elaboration of a CAWEN roadmap for workshops and training.²⁴ For instance, in 2011, with DOI support, the Head Environmental Prosecutor from each CAFTA-DR country organized a national wildlife enforcement workshop addressed at prosecutors, solicitors, judges, customs officials, CITES authorities, and police forces. This workshop led participants to recognize issues and make a commitment to improve information sharing, and organize coordination meetings to improve wildlife enforcement in their country. The six national wildlife enforcement workshops held in the region confirmed that environmental prosecutors and/or solicitors are essential actors to conduct activities that involve other enforcement agencies. In 2012, DOI provided support for a workshop to identify best practices for wildlife law enforcement. DOI also sponsored the participation of two prosecutors from Costa Rica and Nicaragua to attend the IV Latin American Congress of Public Ministries held in Quito, Ecuador. Participation in this event provided an opportunity to share the Central American experience of establishing and operationalizing CAWEN, which motivated participants from other parts of Latin America to include the topic of wildlife in their regional structures.

The second meeting of CAWEN, in 2012, brought together representatives from Costa Rica, the Dominican Republic, Guatemala, Honduras, Nicaragua and Panama as well as local, regional and international experts to lead presentations and facilitate exchanges on coordination between coastal-maritime authorities and



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²⁴ http://www.sica.int/busqueda/Noticias.aspx?IDItem=63080&IDCat=3&IdEnt=2&Idm=1&IdmStyle=1;

http://www.estrategiaynegocios.net/2011/09/26/ca-y-ee-uu-definen-combate-a-delitos-contra-la-vida-silvestre/; http://www.fao.org/agronoticias/agro-

noticias/detalle/es/?dyna_fef[backuri]=21176&dyna_fef[uid]=90359;

http://www.elnuevodiario.com.ni/nacionales/115009;

http://www.laprensa.com.ni/2011/09/26/ambito/74789;

http://www.diariolibre.com/noticias/2011/09/26/i306831_index.html;

http://noticias.masver de digital.com/2011/reunion-cumbre-para-combatir-el-trafico-ilegal-de-fauna-encentroamerica.



onshore authorities regarding wildlife law enforcement and investigation of wildlife crime. Such regional meetings also offer the opportunity to plan joint regional operations to improve enforcement approaches and identify issues in need of attention regarding national operations as well as coordination mechanisms.

Development of Systems to Increase CITES Management and Efficiency

In Honduras, existing information systems were improved to expand CITES management and increase efficiency. This was done by adding a function in the basic electronic CITES permit verification system to scan permits into a database, for access at all ports of entry or exit. Because of this new function, officials at ports, when presented with a CITES permit, can now consult the database to ensure the permit is valid and unaltered. Testimonies from CITES and customs officials confirm that this improvement led to a significant increase in the detection of fraudulent and altered CITES import and export permits. ²⁵

In 2011, the support provided to Government of Nicaragua was used to develop an automated, web-based system to manage CITES permits, create a CITES web page on the Ministry of Environment and Natural Resources of Nicaragua (MARENA) website with information for the public, draft a user's manual for the new system, and train MARENA personnel on how to use the new system. A web-based application system was developed in Costa Rica that allows members of the public to apply for CITES permits on-line. The system is user-friendly and contains features that help reduce user error. It creates a database that can generate a variety of reports, including mandatory annual CITES reports submitted to the CITES Secretariat and UNEP'S World Conservation Monitoring Centre (WCMC). The system is also set up to use electronic signatures and electronic permits, thus eliminating the need for hard copies in the future.

In 2012-2013, DOI-ITAP focused on assisting countries in developing national level wildlife enforcement networks to increase communication and collaboration among agencies involved in wildlife enforcement within a country. This was achieved by providing an opportunity to discuss the duties and areas of responsibility of each agency, and by building capacities across agencies. The various CITES and CAWEN capacity building workshops have also enhanced communications between the CITES Administrative, CITES Scientific Authorities, and marine authorities within each country by providing them the opportunity to meet, discuss, and interact.

The provision of basic equipment and support for software development to conduct automated CITES duties to Costa Rica and Nicaragua facilitated the day-to-day operations of CITES management authorities and enabled the setting of a server to support the automated CITES permits system in Costa Rica, allowing the central CITES office to connect with regional offices of the National System of Conservation Areas (SINAC) throughout the country, leading to greater efficiency. Automated systems also increase accuracy and efficiency in government offices by allowing countries to submit more timely, accurate CITES annual reports and increase customer service and facilitate the legal trade of wildlife by giving on-line access to CITES permit applicants.

Enhancement of Wildlife Rescue Centers

Wildlife rescue centers are an important step towards CITES compliance and are vital to the well-being of animal caught up in the illegal wildlife trade. The consolidation of rescue centers' operations by HSI was adapted to each CAFTA-DR country's specific situation and training needs related to protection of endangered wildlife and illegal trade. HSI supported initiatives to engage multiple stakeholders (e.g. government officials, national police forces, and customs officers) to improve animal welfare through animal handling training, and training protocols. Support to improve animal care included the development of training protocols adapted to each center's location and needs, and in some cases the

 $^{^{25}}$ www.hondudiario.com/content/cites-en-honduras-implementa-sistema-de-gesti%C3%B3n-de-informaci%C3%B3n-para-exportadores.

purchase of materials and support for infrastructure to build new centers. HSI technical assistance reinforced rescue centers' procedures primarily for rehabilitation and quarantine procedures, with the development of generic protocols and, in some cases, the provision of equipment for animal care support. For example, in El Salvador, La Union Quarantine Center was built with the support of the Ministry of Environment. This facility includes three enclosures for reptiles, three for birds, and two for mammals. Given the proximity of the Nicaragua border and the decline of wildlife, La Union Quarantine Center plays a key role in establishing a quarantine area for animals coming from other countries and provides an opportunity to relocate animals, especially to Nicaragua. In Honduras, the construction of the rescue center was finalized in December 2013; and work in the temporary holding facility has initiated. The rescue center will be launched at the end of 2014. Also, the Universidad Nacional de Agricultura is building a complete rescue center. Additionally, the set of protocols was also developed.

The Dominican Republic was not included in work carried out with rescue centers, as it did not have viable rescue center partners. However, as part of a region-wide initiative, HSI created a Spanish-language interactive animal handling curriculum CD and field guide and trained border officials, customs agents, national police forces and government representatives to replicate future training. The animal handling CD is an ideal tool for border posts and jobs with a high-level of turnover, as it can be left at the post, is fully interactive, and comes with a pocket-size booklet. In the Dominican Republic, where poachers raid the nests of hispaniola parrots, this product has been extremely helpful in teaching how to care for young confiscated birds.



Capacity building workshop on animal handling. *Photo courtesy of HSI*

HSI also developed generic rescue center protocols that governments can now utilize to improve existing rescue centers or use as requirements to establish new rescue centers. Several animal handling protocols and training programs were developed for rescue centers, and these benefited the entire region. Training and protocol topics include animal intake, rehabilitation, emergency and evacuation, quarantine release, and euthanasia. HSI continues to coordinate with governments in the region to obtain official seals of approval for the generic protocols.

In Guatemala, a quarantine training protocol developed for the rescue center managed by the Association for the Rescue and Conservation of Wildlife (ARCAS) reduced the average staying period of animals in the quarantine

area. Building a new mammal quarantine area, along with improvements in the animal intake protocol and euthanasia protocol, helped operations at the rescue center to be more efficient, and contributed to an increase in the rescue center's overall capacity. HSI worked with ARCAS in Guatemala City to implement infrastructure improvements that will help them receive animals for a brief period of time. Given the size of the country, a temporary holding facility was put in place to increase the Government of Guatemala's capacity to deal with confiscated wildlife in Guatemala City. Protocols were developed for the temporary holding facility, with a focus on placing animals after they have been confiscated, since its purpose is to provide immediate medical care before transferring animals to their appropriate final destination. In addition, funding was provided to increase the rescue center's capacity through a refurbished electrical grid and new access to the internet.

Other rescue centers that received funding include:

The Zoological Foundation of El Salvador (FUNZEL), for equipment for wildlife handling;





- Antigua Exotic in Guatemala, for enclosures and equipment necessary for animal care;
- Las Pumas in Costa Rica, for work on their educational material and technical assistance on their quarantine area;
- La Marina rescue center in Costa Rica, which received technical assistance for its quarantine area.

As a result of technical assistance and adaptive support provided to enhance services provided by rescue centers, two facilities received certification from the Global Federation of Animal Sanctuaries (GFAS): the Zoo Ave Rescue Center in Costa Rica, and the ARCAS Rescue Center in Guatemala; and verification for the Fazoonic Rescue Center in Nicaragua. Other rescue centers are in the process of being certified as well. Through CAFTA-DR ECP interventions, 8,756 animals were positively impacted by protective measures and/or rehabilitation services, and more than 150 species benefited from the services of wildlife rescue centers. Some of the more common species were:

- Howler monkeys Allouatta palliatta and Allouatta pigra (Guatemala);
- Jaguars Panthera onca;
- Margays Leopardus pardalis;
- Yellow-naped amazons Amazona auropalliata;
- Scarlet macaws *Ara macao*;
- Great green macaws Ara ambiguus and Ara militaris;
- Rhinoceros iguanas Cyclura cornuta (Dominican Republic);
- Beaded lizards Heloderma horridum charlesbogerti;
- American crocodiles Crocodylus acutus;
- Hawksbill turtles Eretmochelys imbricate;
- White-faced monkeys Cebus capucinus;
- Hispaniolan amazons Amazona ventralis (endemic in the Dominican Republic);
- Rainbow-billed toucans Ramphastos sulfuratus;
- Green iguanas Iguana;
- Boas Boa constrictor.

Improved Protection of the Forests, Protected Areas, and the Management of Sensitive Ecosystems

As a result of CAFTA-DR ECP support, 1.3 million ha of biological significance were under improved natural resource management. Over 1,581,771 people were reached by specific outreach campaigns in protected areas, and 33 workshops were organized in conjunction with DOI to address alternatives to poaching wildlife in rural communities and support alternative livelihoods. Over 1,107 people were trained in ecotourism and protected area management.



View of Miraflor-Moropotente protected area (Esteli, Nicaragua)

In spite of these efforts, finding accurate information on the number of people who derived economic sustainable benefits from management alternative livelihood practices remains a challenge. Nevertheless, one of the most impressive results of CAFTA-DR ECP has been to engage community stakeholders in environmental decision making through the acquisition of proper knowledge, with the active collaboration of local NGOs engaged in education and outreach activities regarding endangered species. Several workshops on laws and enforcement mechanisms, species protection and turtle hatcheries (to name a few themes) were organized to empower communities and provide them with quality information, enabling them to

voice their opinions and pro-actively participate in government decision making affecting protected areas in their communities and surroundings.

DOI led on-site consultations with selected law enforcement officials in Guatemala, the Dominican Republic, El Salvador and Honduras. It also delivered cross-sectorial enforcement workshops and field training on priority issues. These efforts strengthened protection and law enforcement capacities among all levels of stakeholders. For example, workshops in Guatemala focused on search and rescue work, first aid assistance, patrolling, reporting, map and compass utilization, evidence handling, and best practices for inter-agency and cross-sectorial collaboration and coordination. Such capacity-building sessions were not only offered to park and community guards, but were also open to senior government officials and participants from 30 local communities, forestry concessions and NGOs. The workshops helped establish and improve communication lines between stakeholders and led to the development of the National Protected Area Law Enforcement Strategy with Government of Guatemala counterparts, including indicators to be used to measure progress (see Success Story 2).

In the Department of Estelí, Nicaragua, USFS implemented a project to restore farming by establishing a sustainable agro-forestry system, based on new conservation practices. The project covered a total of 2,057.14 ha of land, which is far more than initially planned. The project further entailed the plantation of 39,694 ha of fruit and forest, 218,820 ha of coffee, and 13,000 ha of musaceae. It enhanced the capacities of producers to improve yields through conservation agriculture and the integration of environmentally-friendly practices. The success achieved with this agroforestry project led to its replication in another protected area called Tepesomoto-La Pataste.





Success Story 3. Developing Integrated Community-Government Law Enforcement

DOI's multiyear interventions consolidated mechanisms to ensure sustainable management and conservation resulted in a comprehensive "Law Enforcement and Governance Strategy and Action Plan" for Guatemala's Maya Biosphere Reserve (MBR), with supporting monitoring indicators to measure implementation processes in the country. Manuals and protocols were designed to collect environmental crime data while on patrol, analyze and categorize this information, and use self-protective measures while patrolling in conflict zones. Moreover, strategic law enforcement posts were built in the Maya Biosphere Reserve (MBR), and law enforcement patrols were equipped to perform their work. Support from DOI helped the Government of Guatemala strengthen the Mirador-Rio Azul Roundtable, a consensus-building and information-sharing forum geared towards the promoting of model management practices in Northeastern MBR.

Through the process, Fundación Balam, a local Guatemalan NGO, was strengthened to perform outreach and education. It was later selected by the Government of Guatemala to represent all NGOs on the recently-established Petén Security Workgroup, which is modeled after the successful Mirador-Rio Azul Roundtable. Community representatives were trained as tour guides in an effort to initiate the transition from a resource extraction economy to a tourism/resource protection economy in MBR. In 2009, DOI-ITAP supported Balam and the Wildlife Conservation Society (WCS), two local NGOs, to encourage community participation in environmental decision making, which resulted in a Government of Guatemala commitment to increase financial support to the National Forest Fire Prevention and Control System (SIPECIF) and to transfer technical and political decisions to local actors in the Petén Region. DOI-ITAP and local communities, in partnership with WCS, completed a biological monitoring of jaguars (Guatemala's CITES flagship species) through camera trapping surveys in the Mirador and Tikal sites. These surveys were conducted with the support of local community members from Carmelita and Uaxactún who were hired and trained as technicians, and who oversaw the installation, maintenance and monitoring of cameras. These successes and DOI-ITAP's positive reputation in MBR, achieved in part under CAFTA-DR ECP, helped the agency leverage an additional USD 1 million in congressionally-appropriated funds for natural and archeological resource conservation in the Reserve in FY 2010.

In late 2010, with DOI support, WCS completed the Jaguar Biological Monitoring Report. The study developed baseline data for jaguar density in parts of the MBR estimated an abundance of between 0.9 and 1.99 jaguar per 100 square kilometers in the study area. WCS designated the MBR a Type 1 Jaguar Conservation Unit, which is the classification given to leading jaguar conservation areas. With DOI support, WCS published a document in late 2010 on mitigating the potential impacts of tourism on jaguar populations living around ancient Mayan archaeological sites in Guatemala.

Illegal logging has a devastating impact on some of the world's most valuable remaining forests and on populations who rely on the resources that forests provide. The focus of USFS's technical assistance has been to prevent illegal logging, processing and trade of illegal timber in Honduras by strengthening the capacities of legal forest management entities and providing more control and monitoring of legal forest management. This support not only fostered discussions and coordination among key actors on the topic of illegal logging, but also allowed the sharing of strategies, tools and systems used in other countries. It also generated public awareness and knowledge on Honduras' National Strategy to Control Logging and the Illegal Transportation of Forest Products (ENCTI). In 2011, USFS and the National Institute of Forest Conservation and Development (ICF) held a conference to share experiences, tools and methods for managing illegal logging and deforestation. This event facilitated information sharing on existing systems/programs implemented in other countries (e.g. Guatemala and Brazil) and brought together national and international experts and a variety of actors from the forestry, environmental, judicial and legal and law enforcement sectors in Honduras. Participants discussed some of the main problems contributing to illegal logging, including the lack of coordination among agencies, distrust in law enforcement, and disconnect between rural and indigenous communities. By means of USFS training sessions, 305 Government of Honduras representatives improved their knowledge of systems and methodologies to combat illegal logging, and 98 agents were trained to process timber violations.

In 2012, USFS convened a meeting with international donors involved in the prevention of illegal logging to ensure that key actors in Honduras such as the German International Cooperation Agency (PROTEB project), Socodevi (Canada), the European Union and USAID-CCAD (ProParque project) would oversee

different aspects of ENCTI. This meeting was conducive in building collaboration between the Rainforest Alliance (RA) in Guatemala, the USAID-CCAD ProParque project and USFS regarding the development of a carbon baseline for the Eastern part of Honduras. This baseline will not only yield information on carbon, but also provide a map of images to detect areas of deforestation and illegal logging. Moreover, the Government of Taiwan has committed to provide Rapid Eye images of the Rio Platano Biosphere. These images will be essential to detect deforestation and forest degradation.

Other CAFTA-DR ECP interventions facilitated the exchange of existing information and reference material to combat illegal logging. For instance, participants from different government

Agroforestry system
Courtesy of Rainforest Alliance

institutions had an opportunity to share and learn from Peru and Brazil's experience in implementing a national information and control system, and to review the preliminary results from the use of an integrated information application to combat illegal logging. The material collected during these exchanges was beneficial for Honduras, which is currently working on the design of a similar system for its forest sector.

Officials from the Government of Honduras and from the timber industry were trained to recognize 20 to 30 of the most common illegally-traded tropical wood species in the region. As a result of this training initiative, members of police forces, the army, customs services, the Secretariat for Public Works and Transportation, forestry technicians from ICF and ESNACIFOR, and professionals from the timber industry are now able to identify illegally-traded tropical woods, and so can now act to stop illegal trade activity. Overall, seventeen government agencies and NGOs gained an enhanced knowledge of the implementation of ENCTI.

By streamlining the legal process and enforcement (sanctions) associated with the trade of illegal timber, CAFTA-DR ECP contributed to the enforcement of environmental laws in this area. Prior to this, illegal logging activities were sometimes detected and filed, but fines and sanctions could not always be applied because the authorities were not fully aware of legal processes to prosecute crimes and carry out sanctions. USFS supported training activities to review the steps involved in the legal process for investigating, filing and prosecuting crimes and for carrying out sanctions against those involved in illegal timber trade. Training recipients (i.e. judges, prosecutors, customs agents, police forces and foresters) had a chance to review specific case studies dealing with actual environmental crimes and to examine legal processes and sanctions that should have been applied according to law. These sessions increased the enforcement authorities' knowledge of environmental laws and clarified the steps and procedures to file and carry out sanctions. Training also made authorities more aware of the importance of research and data collection to combat illegal logging, and the importance of prosecuting environmental crimes. This resulted in a commitment to develop a plan for the Rio Platano Biosphere Reserve, involving coordination and consensus building among various government agencies.

Finally, in addition to environmental benefits associated with the certification process proposed by RA and HSI and with improved farming and forested area management practices proposed by the latter and USFS, CAFTA-DR ECP biodiversity and conservation interventions generated economic benefits as well. For





instance, in Nicaragua, USFS worked with rural populations to enhance revenues originating from sustainably-managed plantations and to develop the tourist potential of biodiverse high-value areas and turtle nesting refuges around the Chacocente region. As a result, USFS helped create employment opportunities for 21 people engaged in tourism activities, which earned about US\$ 12,000 which they could use to support their families.

Theme C – Market-Based Conservation

Goal: To implement a conservation system based on the market Under this goal, the focus is on the implementation of a market-based conservation system mainly on sustainable tourism, agriculture and forest products as a means to support economic growth, sustainable natural resource management and environmental protection through ecological certification.

Goal C has one expected result:

Improved management and conservation of the environment through: ecotourism, the production of crops favorable to the environment, and the commercialization of products and forest practices with ecological certification.



Capacity Building Association of Small Producers of Talamanca, Costa Rica

Key Findings

- During 2012, 375,000 metric tons of coffee, representing 4.5% of global production in the CAFTA-DR region, was grown on RA-certified farms.
- Over 20,500 farms growing bananas, coffee and cacao in CAFTA-DR countries were certified as of October 2013.
- Organic production processes benefited an average of 192 species living in cacao production areas, including highly endangered species.
- In 2013, improved management practices benefited nearly 200,000 ha of land used for coffee, cacao and banana plantations in CAFTA-DR countries. This includes 44,745 ha of high biological significance, up 52% from the baseline.
- Over 1,700 students in 31 schools were made aware of market-based conservation issues, especially in cacao farms. A total of 613 children and producers signed a pledge committing to protect biodiversity on cacao farms.
- The vast majority of farmers selling coffee with the RA-certified seal earned an average premium of 8-12 cents per pound of coffee.
- On average, 73% of RA-certified coffee growers received higher prices for their coffee, and 69% had better access to markets.
- RA-certified coffee, bananas and cacao grown in CAFTA-DR countries achieved a retail value of US\$ 2.5 billion, representing sales of 46,300 metric tons of certified coffee and cacao.
- The average value of loans for certified producers was US\$ 5,562, compared to US\$ 3,311 for noncertified producers.
- 2,115 new companies registered in Marketplace, and 652 new companies signed licensing agreements to use the RA-certified seal.

The goal of Theme C is to implement a market-based conservation system. Initiatives related to this Theme focus on sustainable tourism, agriculture and forest products, as means to support economic growth, sustainable natural resource management and environmental protection through ecological certification. The main expected result for Theme C is improved capacity to maintain the natural resource base and protect the environment to support sustained and sustainable economic growth.

To measure this result, OAS-DSD designed specific indicators that capture information on visible/measurable changes in agricultural practices and farm management, increased revenues for producers, and benefits for the environment derived from improved practices.

Under this Theme, the following implementing agencies reported at the impact level:

Indicator	Baseline	Progress [note 1]			
Percentage of change in sales of certified agricultural/forest products (disaggregated by product type and country)	Combined retail value of RA-certified [note 2] coffee, bananas and cacao estimated at US\$ 1.2 billion in 2007 Sales of certified coffee and cacao in CAFTA-DR countries totaling 15,330 metric tons in 2009	 In 2012, the combined retail value of RA-certified coffee, bananas and cacao was an estimated US\$ 2.5 billion. In 2011, sales of certified coffee and cacao in CAFTA-DR countries totaled 46,300 metric tons. Leading companies like McDonald's USA and McDonald's Canada, Caribou Coffee, Second Cup, Green Mountain Coffee and Nespresso have incorporated into their supplies significant quantities of coffee beans grown on RA-certified farms. This rapid growth in sustainable sourcing is contributing to major environmental, social and economic improvements for coffee growing communities around the world. In 2012, 375,000 metric tons of coffee, representing 4.5% of global production in the CAFTA-DR region, were grown on RA-certified farms, a 45% increase over 2011. 			
	100% of producers farmed conventional cacao at regular prices, and hoped to transition to organic (at the time CAFTA-DR began)	All producers benefiting from CAFTA-DR ECP started to produce organic cacao using different production techniques. At the end of the first grant, producers had increased the amount of cacao produced by 33%.			
Average price per certified good/Percentage of change in income of farmers who sell certified products (disaggregated by product type and country)	Not available (This indicator was not tracked by implementing agencies, as it was not part of the global monitoring framework. Therefore it is impossible to identify a tangible percentage of increase and compare average numbers between certified and noncertified products) The price at which producers sold their cacao over the last year of	 The vast majority of farmers selling coffee with the RAcertified seal earned an average premium of 8-12 cents per pound, which is one of the highest rates among major certification seals. In addition, producers received other economic benefits such as access to larger markets, which helped them secure the money they need to continue investing in certification. Producers also improved crop productivity, enjoyed social benefits on the farm and in their homes, had better access to education and training, gained the recognition of other producers in the community, and reaped environmental benefits like soil and water conservation. Costs and benefits of certification were evaluated on 197 farms in Brazil, Colombia, El Salvador, Guatemala and Peru. 75% of RA-certified coffee farms surveyed experienced greater efficiency and returns due to better farm management, whereas 73% received higher prices for their coffee and 69% had better access to markets. 95% of the total number of producers (400) received an increase in price. Among them: 			
	FY 07 funding (2009)	 30 producers received an increase in price of 13%; 200 producers received an increase in price of 25%; 150 producers received an increase in price of 30-35%. 			
Number of enterprises which received environmental certifications/recognition	4,806 certified farms growing bananas, coffee and cacao in CAFTA-DR countries in 2008	As of October 2013, there were 20,086 certified farms growing bananas, coffee and cacao in CAFTA-DR countries, as a result of CAFTA-DR ECP.			





Indicator	Baseline	Progress [note 1]				
during the program	0	400 cacao farms got certified				
performance period	0	CAFTA-DR ECP helped fruit and vegetable farmers obtain certification from Global-Gap and Davis Fresh. Nine fields of organized farmers were certified covering different products. Certification of the farmers' production gave them new trading opportunities in regional and international markets.				
Number and type of environmental and economic benefits gained from the use of market-based instruments	Not available	Socio-economic benefits: In 2013, in-depth surveys of 110 smallholder coffee and cacao producers were conducted in Colombia and Peru, 63 of which were RA-certified. 90% of certified producers tracked revenue and expense metrics for their farms, compared to only 30% of non-certified producers. The average dollar value of loans to certified producers was US\$ 5,562, compared to US\$ 3,311 for non-certified producers.				
		A 2009 study of social impacts published by Social Accountability International indicates that compared to noncertified farms, certified farms performed better in the areas of fair contracts, child and adolescent labor, remuneration, forced and bonded labor, occupational safety and health, housing and community relations. Environmental benefits: Farmers who earned the RA-certified seal were required to protect shade trees, plant native species, maintain wildlife corridors and conserve their natural resources. They reduced their reliance on pesticides in favor of biological and natural alternatives, and they were prohibited from using any banned pesticides.				
	Little economic or environmental benefit in pursuing cacao production (prior to the cacao program in the framework of the CAFTA-DR ECP)	 Economic benefits: Organic production yielded an increase in price per kilo. The cacao program also offered an increase in the amount of cacao produced by using disease-resistant clones and introducing them into plantations. The program also focused on improving drying and fermentation processes, which in turn gave higher quality (better tasting) cacao. Planting of shade trees (fruit and forest trees) provided economic alternatives (selling wood or fruit) for producers, without having to sacrifice cacao quality. Environmental benefits: Organic cacao production caused less environmental harm to wooded areas where cacao is produced. An average of 192 species living in cacao production areas benefited from organic production processes. 15,750 native forest and fruit trees were planted for shadegrown crops, strengthened ecosystems and animal habitats. Producers and technicians were trained in wildlife and habitat protection, and in the environmental and economic benefits derived from these methods. 				
Number of farmers (or farms) that use improved cacao/coffee/banana/pineap ple production methods which benefit the environment	0	450 producers used improved methods, including planting of additional shade trees (fruit and forest trees), utilization of organic fertilizers, and consistent pruning practices to improve overall ecosystem health and minimize disease. 13 technicians were trained in wildlife and habitat protection. They later replicated this training for producers, explaining the environmental and economic benefits of protecting wildlife. 21 technicians and leaders were trained in native forest and fruit tree production.				

Indicator	Baseline	Progress [note 1]		
Type of improved practices in cacao/coffee/banana/ pineapple production methods used by farmers	Pineapple removed and burned by farmers in Costa Rica after the second harvest Application of paraquat-based products to manage "stable fly" The pineapple caterpillar is a major challenge faced by Costa Rican pineapple producers; usually controlled with a highlytoxic pesticide called Carbaryl.	The baseline treatment was approved by the Ministry of Agriculture, but failed to meet the SAN Standard. As an alternative, RA technicians provided training on the application of green manure during the fallow period to maintain and improve soil fertility. A series of alternatives to Carbaryl were developed.		
	Several cacao farms left unattended by producers, who picked whatever cacao was produced without concern for improving the quality of the farms' environment. Farmers were not investing in their cacao farms, many of which were abandoned, yielding little cacao or poor quality, disease-ridden produce.	 400 producers improved growing practices, including the use of micro-grafting of superior cacao clones, resulting in better yields and fewer disease-infested crops. 180 participants, including technicians who later replicated training with producers, were instructed on improved post-harvest practices, including fermentation and drying processes. 60 participants, including technicians who later replicated training with producers, were taught how to rehabilitee old trees through micro-grafting. 6,000 improved cacao trees were planted, grafted and donated to 400 producers. 		
	Not available	CAFTA-DR ECP helped local producers in the region to reduce their pesticide toxicological risk, optimize water use for irrigation, and improve their food safety practices.		
Number of people who derived economic benefits from sustainable natural resource management and conservation as a result of	4,806 farmers grew certified bananas, coffee and cacao in CAFTA-DR countries in 2008, receiving increased economic benefits	As of December 2012, 6,912 farmers were growing certified bananas, coffee and cacao in CAFTA-DR countries, with increased economic benefits.		
CAFTA-DR ECP	Very little cacao grown by producers involved in the program produced Cacao grown at traditional prices and with quality issues	400 producers received increased economic benefits (better prices, better yields) as a result of their participation in the program.		
	0	600 (530 men, 70 women)		
Number of hectares on which improved technologies or management practices are used as a result	104,129 ha under improved management practices in the CAFTA-DR focal area in 2008	In October 2013, 187,898 ha were under improved management practices in the CAFTA-DR focal area, a 90% increase from the baseline. This includes 44,745 ha of high biological significance, up 52% from the baseline.		
of CAFTA-DR ECP	Several cacao farms and surrounding areas abandoned, as cacao production had become non-economically viable	 561 ha of cacao were under improved production practices. The project benefited an additional 1,483 ha of forested areas surrounding cacao-producing areas. Farmers protected these areas to comply with certification requirements. 		
	0	625 ha		



- 1. Due to the crosscutting nature of CAFTA DR ECP, progress in market-based conservation achieved by some implementing agencies is reported under Theme B.
- 2. In this table, "RA-certified" refers to the "Rainforest Alliance Certified" designation, which is a registered trademark.

Analysis of Results and Impacts Achieved under Theme C

Projects linked to Theme C have yielded clearly tangible impacts, both for the population whose livelihoods come from the forest and plantations, and for the environment from which they get their living. The overall goal of the projects funded under this Theme has been to improve the livelihood of





Central American producers by promoting and implementing organized, sustainable, and environmentally-friendly production systems that will create economic incentives for producers and enhance long-term environmental conservation and wildlife protection. RA worked with coffee, cacao, banana and pineapple producers to enhance the environmental and economic sustainability of their production through their organic and fair trade certification process. HSI worked with farmers who had abandoned cacao plantations or were having very limited yield, to enhance their production and highlight and protect important wildlife, including endangered species living in these productive areas.

Institutional Strengthening and Sustainability

At the impact level, OAS-DSD assessed existing mechanisms to support the sustainability of benefits gained by producers. The primary market-based conservation tools to achieve this were product certification and enhancements in the organizational capacity of producers' cooperatives. The latter were trained to take on leadership roles, both in the certification process and in working with buyers.

In this regard, RA met or exceeded the vast majority of its targets. It far exceeded its targets for the number of farms achieving RA certification and the number of people trained as a result of CAFTA-DR's ECP. Overall, since 2007, 20,500 Central American farmers have been certified for their production, either with the RA certification (around 20,000) or HSI (400). Additionally, RA built capacities among 7,000 farmers to achieve or maintain certification for economic, environmental and social best management practices as codified in the Sustainable Agriculture Network (SAN) standard, which is a strong indication of its potential to maintain results. Under HSI leadership, BioLatina in Nicaragua and EcoLogica in Costa Rica handled the organic certification process for the People in Community Action Cacao Cooperative (PAC)



Training for cacao farmers

and the Association of Small Producers of Talamanca (APPTA) respectively.

Two other innovations impacted RA's work in the region during the project period. First, SAN opened up its certification system, so that other certification bodies could become accredited to grant certificates. Continued growth requires bringing in other certification bodies, which facilitates scaling-up and introduces healthy competition. The body established by RA (Sustainable Farm Certification Ltd.) underwent the same accreditation process and was duly accredited by an independent body in 2012. Second, RA introduced a new financial system designed to increase

its own sustainability as an organization. The participation royalty is charged on traded certified products and generates funding for several cost centers, including the traceability system, which facilitates the tracking of certified products through the supply chain and enables producers to collect premiums for sustainable goods. The traceability system also facilitates the development of an electronic marketplace, making it easier for buyers to source sustainable materials. It also facilitates market development, communications and monitoring and evaluation. Since the project's inception, 2,115 new companies registered in Marketplace (a growth of 172%), and 652 new companies signed Licensing Agreements to use the RA-certified²⁶ seal (381% growth). These figures indicate a tremendous increase in the demand for sustainably-produced goods. The information gathered so far shows that the vast majority of certified producers have been able to sell their harvests to the most demanding companies.

Implementing agencies also supported the development of institutions in charge of overseeing the production of certified crops. For instance, HSI advised the Ministry of Agriculture and Livestock of Costa

²⁶ In this report, "RA-certified" refers to the "Rainforest Alliance Certified" designation, which is a registered trademark.

Rica (MAG) on the creation of a National Chamber of Premium Cacao in Costa Rica (CANACACAO). CANACACAO is responsible for uniting the different organizations involved in cacao production, and lobbying for Costa Rica to join the International Cacao Organization, thereby increasing the national prominence of cacao production. This new organisation brings together representatives of all stakeholders in cacao production, including producers, ministries, industries and NGOs.



Cacao plants

LWR launched a project in 2012 focused on the cacao value chain. LWR is working with credible and solid partners including BioLatina, Root Capital, The Hershey Company, ECOM Atlantic, Ritter Sport, and the Central American Bank for Economic Integration (BCIE) at the regional level; as well as the relevant local actors in the cacao sectors of El Salvador, Honduras and Nicaragua. The project aims to promote the use of good cacao production and commercialization practices and strategies amongst small producers. As local cacao organizations are central to spreading this type of knowledge, the project focused on strengthening these institutions. The project planned and coordinated technical assistance for certification processes with BioLatina and FLO-CERT in Honduras, including the implementation of internal control and traceability systems in cacao production. The project worked with national cacao roundtables in Nicaragua, Honduras, and El Salvador to coordinate activities in target cacao growing areas and to organize cacao forums in each

country. A cacao quality contest was held in Nicaragua, bringing together 276 people including representatives of growers' organizations, experts, support agencies, and chocolate processors. Twelve growers' organizations submitted cacao samples to the competition, and these showed a noticeable improvement in the quality of cacao, attributed to the technical assistance they had received from the project.

Economic Benefits

Certification helps the growers of various crops, including coffee and cacao, to receive better prices for their crop. Although there is no obligation for the buyers to pay a premium according to the Sustainable Agriculture Standard, in practice market forces lead them to do so. For instance, cacao pricing is determined as a result of quality (fermenting) and organic or transition to organic certification. The price paid per kilo or pound of each crop before and after certification has not been recorded systematically, but RA confirmed that on average 73% of farmers receive higher prices for their coffee and 69% have better access to markets, with an over 100% increase in sales volume of certified coffee in the region



Cacao plants

through greater market demand. HSI states that 87% of its beneficiaries (350) received between 25 to 35% higher prices for their cacao production. For example, Ritter Sport of Germany continued to purchase cacao from the PAC-Bocay region in Nicaragua, resulting in higher sales prices (approximately 10 to 35% more) for the producers in HSI's PAC program. It is important to consider the market price fluctuations since 2008, which have been important for some crops like coffee (see Chart 1).²⁷

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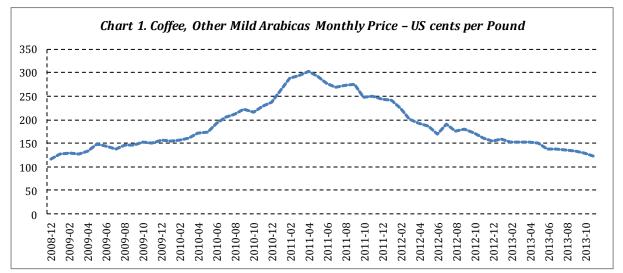
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²⁷ Source: http://www.indexmundi.com.



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Although in 2013 international prices have declined sharply, demand for certified coffee continues to rise everywhere. While certification costs are high, its main benefits of market stability and quality standards offset the investment. Because certified coffee is generally of higher quality than uncertified coffee, certified production acts as a buffer between the international prices and the farmers. This is very important, since it is the producers, rather than the consumers, who tend to feel fluctuations in coffee prices strongly. Maintaining and ensuring production quality is their main strategy in negotiating to maintain prices. Certification programs provide incentives and secure access to market.

The interest in certification continues to rise for all major certifiable crops. Over the past four years, RA have assessed that about 7,000 producers growing certified bananas, coffee and cacao in CAFTA-DR countries received higher prices for their produce thanks to certification. At the end of June 2013, RA had certified over 600,000 tons of pineapples in Costa Rica, compared to 170,000 tons in January 2012. Masteroast has committed to the development of a plan to triple its procurement of RA-certified coffee from 120,000 tons to 360,000 tons. Cacao supplies for Hershey and Mars supplies fell short of demand by 19,000 tons in the last crop year. Certified cacao sells for about US\$ 200 per metric ton more than uncertified beans, but Mars does not intend to raise the prices of its products, which include M&Ms and Snickers bars. Instead, the company is hoping that the higher prices will encourage cacao farmers to increase production.

Case Study 1. Prospects for Cacao Production

Cacao in Central America has great potential to improve the livelihoods of marginalized small producers and their families while contributing to environmental protection and conservation. Cacao is one of the most viable cash crop alternatives for families in poor areas as it requires few purchased inputs, can be grown on small plots of land with little hired labor, and allows producers to diversify production and income as part of an agroforestry system when intercropped with timber or other tree crops. Cacao is an important alternative as climate change makes coffee production in some areas less viable. Furthermore, cacao is a cash crop that promotes reforestation of land cleared for pastures or annual crops.

Mars, which buys about 10% of the global supply of cacao beans, said it plans to buy 90,000 metric tons of certified cacao this year, double what it purchased last year. The company said it will spend USD 30 million a year for the next decade on cacao that is certified by third-party auditors and on-the-ground research and production improvement programs for farmers. Hershey, the maker of its eponymous chocolate bars and Kit Kat bars, said that it would produce chocolate made only from certified cacao beans by 2020. That follows similar measures from Mars and from Barry Callebaut AG, which buys around a quarter of the global cacao output to make chocolate products for food manufacturers.

Sources: Progress Report: Pathways to Prosperity in the Cacao Value Chain. Lutheran World Relief. October 30, 2013; Progress Report: Strengthening Existing Sustainable Agriculture Initiatives in the CAFTA-DR Region to Meet Growing Market Demands for Rainforest Alliance Certified Farm Goods. 1st July through 30th September 2012

HSI worked closely with APPTA, PAC and the CACAONICA private development project to access genetically enhanced cacao clones that have been engineered to better resist the Monilia disease. These clones are used in the micro-grafting process to increase old trees' production ability, and to get an earlier crop and better yield from new trees. These clones had less than a 15% incidence of Monilia, for a production of 1000 kilos, where others suffer losses of up to 50% due to the disease. Producers who use the clones enjoy increased production per hectare and therefore, higher incomes.

Besides helping producers to get paid more for their produce, RA has managed to reduce the producers' costs for certification. In 2010, the NGO discontinued the annual fee paid by producers and began charging some of the costs for managing the certification program to those who buy crops from certified farms. It began with coffee, was extended to tea and cacao, and will eventually cover all certified crops. The SAN group certification procedures are a milestone that contributed to the inclusion of small producers, it greatly reduces costs previously borne by producers, which are now embedded in the supply chain. Further, the required Internal Control Systems give groups improved management efficiencies.

Environmental Benefits

The certification process proposed by RA and HSI has yielded several environmental benefits. For instance, certified producers are required to stop using twelve common chemical products, while instead using diverse and mutually beneficial crops and plants within their plantations. This favors biodiversity and a healthy environment for both the local population and wildlife. Soil fertility is enhanced, and the presence of contaminants in the soil, surface water and underground water is reduced. This preserves the health of producers and their families, increases the cover of native species, and helps both to maintain wildlife corridors and to conserve natural resources.

Case Study 4 is an article featured on the Fresh Fruit Portal that discusses the positive impact of certification on health and social issues.



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Case Study 2. Weather lends a hand to Guatemalan bananas in 2012

Agrofruit corporate director Bernardo Roehrs told www.freshfruitportal.com that the banana crop could be 5-10% larger year-on-year if favorable conditions continued. The executive said in addition to trying to empower the company's 5,700 employees, it also sought to improve the lives of communities and had achieved Global G.A.P. and RA certifications. "Certifications today include stricter social components; we have some programs for the wives of our workers, rural people, and these programs involve teaching them better nutrition and hygiene practices for their children. A lot of our people get sick because they give contaminated water to their kids, and they don't know the water is contaminated; so you have to teach them how to filter the water, and provide training so they can care for their children to be healthier and growing at a normal rate. A lot of the people in rural areas use firewood to cook with open fires inside the home, without a chimney to let the smoke out, so we provide stoves." In addition to this work, Agrofruit works with communities to show them how to lobby the government for resources, such as clean drinking water, roads and schools.

Source: Progress Report: Strengthening Existing Sustainable Agriculture Initiatives in the CAFTA-DR Region to Meet Growing Market Demands for Rainforest Alliance Certified Farm Goods. 1st July through 30th September 2012 (Quarter Sixteen).

Case Study 3. Climate Friendly Agriculture

The SAN Climate Module was launched in 2011 and since then, more than 260 coffee producers in Guatemala, Honduras, El Salvador and Costa Rica have implemented its principles for climate-friendly agriculture. El Platanillo Farm, San Rafael Pie de la Cuesta, San Marcos in Guatemala, was the first farm to implement practices for mitigation and adaptation to climate change and obtain Climate Module verification in 2011.

It documented the following improvements: a savings of 38,327 liters of fuel per year in the wet milling process; reduced carbon dioxide emissions to the atmosphere by an amount equivalent to the fuel consumption of 49 vehicles for a year; and, savings of 15,080,173 liters of water per year. We are currently working with Chiquita and Dole to apply climate friendly agriculture practices to their banana and pineapple supply chains.

Source: CAFTA-DR reporting template developed by OAS-DSD 2013.

Over 20,000 cacao and other types of trees were planted in Nicaragua and Costa Rica under the HSI project. Over 192 species of plants and animals present in cacao farms, including endangered animals such as tapirs, monkeys and a wide array of birds are benefiting from the new environmentally friendly cacao production techniques.

Because prices are more stable for certified production, producers are less likely to abandon their plantations or clear forested areas to cultivate other crops. These activities are a major factor leading to forest cover loss in the region. Thanks to the projects funded by CAFTA-DR's ECP, the amount of cultivated land in the CAFTA-DR focal area that benefited from improved management practices went from 120,000 ha in 2008 to close to 190,000 ha in 2013. This land was mainly devoted to coffee, cacao and banana production.

Environmental Education and Change of Mentality

A very important element of Theme C has been changing the mentality within communities involved with plantations, farming and wood production. A change of mentality is needed along all the supply chain, from the producers, the intermediates and the final consumers, including the public which can both make informed choices and pressure government to foster market-based conservation.

HSI held environmental educational workshops in Bocay and San Carlos, Nicaragua and Talamanca, Costa Rica. These workshops engaged communities to protect the biodiversity around cacao farms. This involves a change in perspective, as cacao producers often consider local animals as pests, since they can eat the growing cacao. HSI reached 1,700 students in 31 schools in both countries with adapted awareness material. A total of 613 children and producers signed a pledge committing to protect biodiversity in cacao farms. Some 74 teachers were tasked with continuing to teach environment protection to the children, promoting community awareness and action for environmental protection.

RA also promoted the benefits of certification on all actors along the supply chain. In 2011, the scope of the initial certification project was expanded to include a study tour. This allowed CAFTA-DR producers to learn about marketing from farmers in countries participating in the Pathways to Prosperity in the Americas Initiative. This expanded project reinforced the institutional linkages and allowed Colombian coffee producers to share their best practices with Central American coffee producers. Colombia has a long history of innovation in the coffee production industry. Participating Central American coffee farmers learnt about the importance of a strong institutional framework at the national level, crop management, quality control and competitiveness. The participants demonstrated a strong commitment to natural resource conservation and a willingness to implement best management practices and improve technology to promote efficiency and better productivity:

"[...] We made comparisons about the ways coffee is produced and traded in our country and in Colombia and we realized the importance of government support, that in our country is small or absent. Colombia embraced coffee production as a



Coffee grower Photo courtesy of RA

national strategy and promoted public private collaboration. The [RA] certification program is adding value on top of Colombian differentiation because the country has built its own brand. We should be lobbying in our country to get vertical and horizontal integration in the coffee sector under the auspices of sustainable production and trade."

—Prospero Trejos (Manager Cooperative Ciudad Barrios, San Miquel, El Salvador)

"We are promoting sustainable agriculture and we have only [RA] certified and organic producers. [...] Through coffee differentiation we are making a difference and setting an example for young generations. We are proudly producing coffee and pushing change in the current mindset. We feel that coffee is a uniting element in Latin America and we should work together to define the sustainability model."

 Roberto Piñeda and Alvaro Barbosa (small coffee growers, co-founders of the Specialty Coffee Association Fusagasuga, Cundinamarca, Colombia).





Theme D – Environmental Performance of the Private Sector

Goal: To improve the environmental performance of the private sector



Visit to the Neoalimentaria Company, Guatemala.

Under this goal, the purpose is to promote the adoption of clean production methods and environmental management systems to improve a company's competitive advantage by reducing resource consumption and waste. Also, to work with financial institutions, enterprises and cleaner production centers to increase capacity, develop voluntary mechanisms for cleaner production and to provide incentives and recognition for companies using improved processes and technologies.

Key Findings

- CAFTA-DR ECP supported over 714 companies in cleaner production technologies.
- Nearly US\$ 3 million in savings was generated since 2007.
- The program has generated US\$ 2.25 million in investments since 2007.
- Over 15,000 tons of greenhouse gas have been saved yearly as a result of CAFTA-DR ECP.
- Eleven universities have committed themselves to including cleaner production and EMS modules in undergraduate, graduate, and free courses to be delivered by more than 400 teachers.
- Nearly 100 professors, students and other stakeholders trained in cleaner production.
- Energy savings due to this program totaled 927,053 kWh a year.
- Water savings totaled 9,348,504 gallons a year.
- Solid waste reductions totaled 155 tons a year.
- Wastewater reductions totaled 1,329,504 gallons a year.
- Energy is the primary area for investments and savings by SMEs.

The improvement of the private sector's environmental performance is to be achieved through cleaner production strategies, environmental management systems (EMSs), voluntary mechanisms, public-private associations, and by building stronger institutional and human resource capacity. Initiatives related to this goal focus on encouraging businesses to adopt clean production methods and EMS. Businesses which do so gain a competitive edge through reduced resource consumption and waste. Other initiatives related to Theme D focus on working with financial institutions, enterprises and cleaner production centers (CPCs) to increase capacity, develop voluntary mechanisms for cleaner production, and provide incentives and recognition to companies that use improved processes and technologies.

The main expected results for Theme D are:

- Improved trade policies and incentives related to environmental issues;
- Greater private sector commitment to environmentally responsible behavior.

The first result captures what can be done on the "incentive" side of the process: policies can be developed and adopted, issue-based committees can be formed and incentives can be developed and implemented. The second result is directly focused on the behavior of enterprises. Enterprises that have awareness of, commitment to, and the capacity to undertake environmentally responsible action will use clean production technology, adopt eco-efficiency practices and use environment management systems. At this stage in CAFTA-DR ECP implementation, OAS-DSD is looking at the impacts generated by the adoption of these policies, incentives and the commitment demonstrated by the private sector to



The Neoalimentaria Company from Guatemala participated in the project "Business alliances for compliance with trade and environment standards"

reduce its negative impact on the environment. Some field visits by the OAS-DSD team revealed a growing interest within universities and research centers for cleaner production methods. Researchers within these institutions were motivated by the desires to foster a more competitive private sector and to make a stronger contribution to the national efforts to contain or reduce greenhouse gas and pollutant emissions, the use of energy, water and raw materials, and the generation of solid waste and wastewater. As the research, dissemination of information and private sector participation are expanding, impacts from the contribution of CAFTA-DR ECP are becoming more tangible.

OAS-DSD designed a set of impact indicators specific to this theme. Some indicators are designed to capture relevant observable or measurable changes within agricultural/industry practices and business management. Other indicators within this set capture economic benefits (i.e. increased revenues for producers and business owners) and environmental benefits associated with these improved practices.

Under this theme, the following implementing agencies reported at the impact level:

Indicator	Baseline (reference year: 2008)	Progress							
•	Theme/issue: Enhanced adoption of clean production methods and environmental management systems to improve the competitive edge achieved by companies, through reduced resource consumption and waste								
Number and percentage of small and medium enterprises (SMEs) that have adopted new technologies or practices to respond to environmental standards	Not available	CAFTA-DR ECP provided assistance to over 640 companies in cleaner production technologies that promote energy and water conservation and reductions in waste, raw material use and emissions. Small businesses and some medium businesses—small hotels, cattle and pig farmers, tire and battery recycling operations, to name a few—benefited from the highly positive impact that cleaner production and environmental management system (EMS) programs had on their operations and immediate environment.							
	Not available	 A total of 22 SMEs participated, i.e. eight in El Salvador, seven in Costa Rica and seven in Nicaragua. Guatemala-El Salvador project: In early 2013, A follow-up project to monitor changes and advances at companies participating in a project executed during the 2008-2010 period was conducted. Of the original 35 SMEs, 21 companies participated in this process and provided data on their implementation and performance improvements, as of 							



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Indicator	Baseline (reference year: 2008)	Progress				
		March 2013. • Honduras project: 12 SMEs are participating.				
Type of technologies or practices adopted and implemented in SMEs and in the industry to respond to environmental standards	Not available	Work with participating SMEs was focused on: • Energy and water consumption reduction strategies; • Waste material reduction and contamination prevention; • Re-use of organic waste and energy generation from biomass; • Implementation of EMSs; • Environmental and climatological monitoring and data analysis.				
		174 action plans (technologies and/or practices) that had been recommended thanks to the CAFTA-DR ECP were adopted since the end of the original project, and an additional 11 generated by the companies themselves were also adopted. The action plans implemented since the beginning of the project include reductions in: • Solid and liquid inputs; • Solid products (result of manufacturing); • Water usage; • Wastewater and solid waste; • Electric and thermal energy; • Air emissions.				
Change in SMEs' energy use [measured in kW]	Not available	Energy savings of 927,053 kWh/year.				
Change in SMEs' water usage [measured in gallons]	Not available	Water savings of 9,348,504 gallons/year.				
Change in SMEs' generation of waste/pollution [measured in tons]	Not available	Solid waste reductions of 155 tons/year.				
Change in SMEs' generation of wastewater [measured in gallons]	Not available	Wastewater reductions of 1,329,504 gallons/year.				
Change in SMEs' greenhouse	Not available	Greenhouse gas (CO ₂) savings of 13,000 tons/year.				
gas emissions [measured in tons of CO ₂]	Not available	Greenhouse gas (CO ₂) savings of 2,034 tons/year.				
Ratio of cost savings (per year) through the adoption of cleaner production practices and technologies to	Not available	 By 2011, 36 participating companies had invested approximately US\$ 1,358,000 to implement different measures recommended in audits, obtaining economic benefits of US\$ 1,800,000. 33% profitability ratio between savings and investments. 				
total investments realized by SMEs (after one, two and three years) Perception of key	Not available	 Savings so far: U\$\$ 1,195,318 (by Dec. 2013). Investment made: U\$\$ 880,596 (by Dec. 2013). 36% profitability ratio between savings and investments. 				
stakeholders on the environmental and economic benefits stemming from the use of cleaner production techniques	Not available	 Discussions held with key stakeholders in Costa Rica revealed that cleaner production is one of the most rewarding work areas under CAFTA-DR ECP. Since 2007, for 69 businesses supported throughout the program, energy turned out to be the area in which companies have both invested and saved the most, although materials are the most profitable environmental area, with shorter periods for return on investment. The private sector is showing a fast-growing interest in implementing cleaner production practices, because adopting such practices leads to tangible environmental and economic benefits. Universities and research centers such as the Tecnológico de Costa Rica are teaching cleaner production practices to their students and encouraging students to choose cleaner production as their thesis subjects, leading to more research in this area. Students are placed in SMEs where they perform environmental audits, identify recommendations and support their implementation. 				

Indicator	Baseline (reference year: 2008)	Progress						
	Theme/issue: Increased capacity of financial institutions, enterprises and clean production centers to develop voluntary mechanism for cleaner production and provide incentives and recognition for companies that use improved processes and technologies							
Number of policies/ regulations/incentives that promote the use of cleaner production practices		 Participating companies were asked what their motivations were in implementing recommended measures in the project. Eight choices were provided, including "other" to let respondents include overlooked items. Respondents were also allowed to select multiple options and classify them by order of relevance. The main driver to implement measures was "lower production cost (25%)", followed by "higher quality products (16%)", "increased productivity (15%)", "financial incentives (14%)" and "improved client/customers relationships (11%)". These categories accounted for 81% of all answers. The remaining categories, "comply with state regulations/laws/standards", "development of new products", "pressure from customers" and "other," turned out to be minor drivers (6% or less). 						
Number of SMEs that successfully accessed bank loans or private equity as a result of CAFTA-DR ECP assistance		In most cases where SMEs required investments to purchase equipment to improve their operations, they used internal funds instead of bank loans to make their purchases.						
Number of enterprises which received environmental certifications/recognition during the program performance period		Local partners provided project recognition to participating SMEs for their active work and achievements.						



Analysis of Results and Impacts Achieved under Theme D

Environmental and Economic Benefits

The data collected for the indicators, as shown above, reveals sizable environmental and economic benefits resulting from the use of cleaner production practices and technologies. WEC and USAID/ELE achieved these results in large part through training SMEs on cleaner production and energy efficiency. To provide this training, they drew on their connections with local technical experts and local and international companies.

Some examples of efforts to adopt energy efficiency measures include the Azucarera del Norte sugar cane processing plant in Honduras. This plant has reduced its cost of energy by insulating the pipes that transport the hot water it uses to make sugar. The Arbol de Fuego hotel in El Salvador returned to profitability by replacing high energy light bulbs with energy efficient ones and by reducing water consumption. In Guatemala, CAFTA-DR ECP supports companies that prevent waste materials from contaminating the environment. One such company is EZ Home, which recycles used tires; another is Acumuladores Iberia, which recycles lead from batteries. A hog farm in Costa Rica is using methane from manure to reduce its energy costs and to prevent water contamination. The EMS implemented by the FERQUIDO fertilizer company in the Dominican Republic has almost eliminated its need to discard unused chemicals, thereby increasing its profit margin, reducing contamination and satisfying its clients. Melon and pineapple growers are using agro-related climatological monitoring stations to collect data (precipitation, leaf and soil humidity, etc.) that help farmers practice precision agriculture and reduce the use of pesticides, herbicides, and water consumption. These examples indicate how the program has promoted the application of science and technology in ways that have permitted businesses to improve their profitability while also protecting the environment.



Cleaner production projects were implemented in Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica. WEC trained selected SMEs locally to assist them in developing action plans to sustainably improve their manufacturing operations and environmental performance. WEC has worked with fewer enterprises than USAID/ELE but the examples that could be highlighted are just about the same in terms of environmental and economic benefits. Since the end of the project, many of these activities have continued. Some of the most noteworthy achievements arising from the project include:



Cleaner Production Project, Costa Rica. Photo courtesy of WEC

- Almost all participating SMEs undertook measures related to the recovery of materials and subsequent developments of by-products/products, mainly due to their high profitability rate (i.e. high economic benefits with little or no investment required);
- Several companies were able to make changes resulting in considerable volume of savings/recovery in their water consumption and wastewater production. Extra savings were generated due to the double impact of recovering materials while not having to use as much water in the cleaning process of these same materials;
- Reductions in air emissions were due mainly to the decline in energy consumption derived from energy efficiency measures. In addition, there were also process and materials recommendations from the action plans that contributed to emissions reductions;
- Waste reduction was higher than projected. This is because some materials, instead of being discarded, were instead retrieved and returned to the production process;
- Another issue worth noting is that, although several companies initially insisted on working on energy issues due to their direct impact on costs, they found that the greater economic and environmental potential was instead in their production processes. A common misconception is that the greatest opportunity for savings lie in reducing energy consumption, but this is only true for companies that have already optimized their processes. Small companies tend to have less sophisticated production processes that depend largely on human labour.

An environmental analysis determined that companies are concerned about optimizing the use of costly resources such as materials, energy and fuel. This finding also shows that companies are less willing or able to invest in areas such as improving water efficiency, where the potential financial savings is lower. Participating companies were surveyed and asked which direct benefits (out of a list of eleven options), they had experienced as a result of the project. The most common responses were: "cleaner/greener processes" (20%), "better understanding and process control" (17%), "increased productivity" (12%), "friendlier to the environment products" (11%), and "install more efficient equipment" (11%). Other direct benefits were also reported, but less frequently.

Project participants also observed that the project:

- Demonstrated the importance of using environmental performance indicators;
- Helped to create a culture of continuous improvement;
- Helped to improve service quality;

- Helped to reduce pollution;
- Helped the companies to be more competitive;
- Helped companies to identify material and product wastage;
- Demonstrated the importance of ongoing support;
- Helped companies to decide whether or not to implement possible changes based on the presentation of financial results;
- Helped companies to save money.

Some project participants also suggested that this was a good program which had arrived at a bad time, since the weak economy did not allow investments in improvements, even though production improvements and savings realized from these directly helped companies to reduce the financial impacts of the economic situation.

Monitoring tangible long term impacts of the adoption of cleaner production practices is not a simple task. Nonetheless, WEC has been able to track several indicators in cooperation with the participating businesses. These include the indicators presented above on the use of energy, the generation of waste and wastewater, the use of raw material and water, greenhouse gas emissions, and the savings achieved through the implementation of all the action plans devised locally for each enterprise. These indicators show steady savings and increased environmental benefits. Over time, these are likely to make a difference at the national level. The most impressive results so far are in energy savings, reduction in water use, and reduction of greenhouse gas emissions. In addition to tracking these indicators itself, WEC created a culture of environmental monitoring among the participating businesses. WEC developed monitoring action plans with business owners, managers and staff, fostering the use of more precise measures for tracking energy consumption, water usage, and emissions, among other indicators.

It is evident that all the investments made by the participating enterprises to reduce their impact on the environment have already been surpassed by the savings. Because cleaner production links environmental protection measures, generally considered as an expense, to increased profitability, it is expected that more SMEs will implement it, and that it will expand to other areas of production. Most SMEs working with WEC reported their most impressive achievements were in energy savings. A key challenge for the future is convincing businesses to invest further in reducing material use and contaminant emissions. These actions would reduce the environmental impact of production and also improve business profitability if implemented.

Although it is too early to fully assess long term impact, there are signs that cleaner production projects do yield long term benefits. This is demonstrated by an impact assessment of WEC's Guatemala-El Salvador project which ended in 2010. Of the SMEs that were still in existence, WEC was able to determine that project's effects were both sustainable and profitable. At the end of the Guatemala-El Salvador project in 2010, the 35 SMEs achieved a total US\$ 594,000 in savings. Since then, they have continued to realize savings for a cumulative total of over US\$ 1.3 million.





Case study 4. Guatemala-El Salvador Follow-Up

The survey provides context to the achievements observed during the monitoring activities. The most important findings include:

- The project needs to emphasise recordkeeping so that companies have documentation on the results of their participation in the project that they can reference.
- Although companies implemented cleaner production activities, they often did so without considering the report provided during the project. This attitude of wishing to "solve environmental problems" without really taking in account the solutions proposed in the action plans also came across in in-depth conversations with company leadership.
- The most common reason companies cited for implementing cleaner production measures were: to lower their production costs (25%), creating higher quality products (16%), increasing productivity (15%), being able to claim financial incentives (14%), and improving client/customer relationships (11%).
- Companies did not identify complying with government regulation/laws/standards as a main driver for implementing cleaner production, although the contrary is usually assumed in to be the case in these projects. WEC surmises that this is due to the fact that, even though these sectors are environmental priorities for the governments, they are too small to be a primary focus of regulatory activity.
- Neither responding pressure from client companies nor improving corporate image with their clients
 were identified as main drivers of clean production initiatives. This is a surprising finding, that the half
 of the companies surveyed were involved in this project through a greening the supply chain initiative
 (Wal-Mart).

The Guatemala-El Salvador follow-up found that 19% of companies had closed and 5% had changed their economic activity in the past 2.5 years. These high numbers reflect how vulnerable SMEs are in the current economy. This finding also indicates that these companies have a low capacity to invest and to access loans, which is a major barrier to implementing any change, including environmental initiatives. This finding also explains why companies focused their efforts on the more affordable measures, which require little or no investment, rather than measures that were more expensive, yet more profitable. This widespread inability to invest is a limitation both to starting and sustaining green production initiatives. The overall instability of the sector is another limitation, as some companies implementing environmental action plans are likely to close down, while new companies, not exposed to environmental training, will start. WEC determines that this is a major risk factor in working with small and medium-sized enterprises.

Change of Behavior

Both the public and private sectors have shown clear signs of increased interest in cleaner production. For example, from 2008 to 2013, the number of SMEs voluntarily adopting cleaner production practices and technologies, thanks to ECP projects, reached 714. This number is rapidly increasing, showing a spreading recognition of the benefits of investing in cleaner production practices and technologies. These benefits are often not initially obvious to SMEs. But as the dual benefits of reduced environmental impact and increased profitability become more widely understood, more SMEs are expected to adopt clean production practices, beyond the scope of the projects initiated under the ECP within CAFTA-DR countries.

Another important outcome of the ECP is an increase in classes and research focused on cleaner production within research centers and universities, along with current CPCs. For instance, 11 universities signed memorandums of understanding under the leadership of USAID/ELE. In these agreements, they

committed to include cleaner production and EMS modules in undergraduate, graduate, and free courses to be delivered by over 400 teachers. WEC-HED launched in 2012 the Pathways to Cleaner Production Initiative, and so far it has trained nearly 100 teachers, students and other stakeholders in cleaner production. Throughout the region, hundreds of students have graduated from environmental, industrial and chemical engineering and business management programs with a focus on cleaner production. Most



Greening the supply chain - Cleaner Production
Partnership with the private sector.

Photo courtesy of WEC

of them have undertaken internships within SMEs, where they have performed environmental audits, developed EMSs and proposed tangible solutions for reducing SMEs' impact on the environment, while increasing their profitability and competitiveness. The CPCs play an active role in supporting academic institutions and students to develop curricula, skills and innovative knowledge to expand the use of cleaner production and seek improved solutions. The young generation is passionate about cleaner production as part of an emerging culture of sustainable development and environmental awareness.

Implementing agencies made extensive use of the media and publications for knowledge dissemination. Both WEC and USAID/ELE have released several articles

and case studies, and have shared results through local industrial association magazines. They have organized technical and business roundtables that promote cleaner production, energy efficiency and EMS projects. WEC has shared information directly with local newspapers and industry magazines. Both WEC and USAID/ELE have provided educational materials on the technical aspects of best practices, to support the uptake of these practices within SMEs and larger companies. These efforts have led to greater visibility of cleaner production and its benefits amongst businesses.

Strengthening of Local Capacities and Partnerships

The CAFTA-DR ECP helped develop a regional network of partners. These include national ministries of environment and economy, national industrial associations, Cleaner production centers (CPCs), private enterprise councils, and companies that supply SMEs. By combining their efforts, these partners aim to promote and sustain cleaner production practices and technologies within the CAFTA-DR region. At the national level, several national advisory boards have been established. These are comprised of high-level stakeholders, including local university and government representatives, industry representatives and business executives of multi-national corporations which buy from target SMEs. These advisory boards serve to sustain and expand the project's results and to increase dialogue between sectors. The advisory boards have also supported the development of the regional network by participating in creating information products (e.g. a regional database of case studies), communication tools, and organizing events. CPCs are great allies for disseminating best practices, and supporting SMEs to access credit and implement their action plans. All CAFTA-DR ECP cleaner production projects have strengthened the capacities of national CPCs and industry associations by engaging them in developing and working on activities proposed by the program.





Success story 4. 20 local businesses benefited from cleaner production

A total of 20 small and medium enterprises, including nine hotels, improved their production processes and services by incorporating cleaner production and energy efficiency practices with the support of the World Environment Center (WEC) and the Cleaner Production Center of Guatemala.

The group enterprises participated in the project "Partnerships for Cleaner Production with the Private Sector" that started on October 2008 and ended on September 2010.

Thanks to this initiative, the companies saved more than US\$ 224,300, with a previous investment of US\$ 210,400, according to the report submitted last July 2^{nd} by WEC and the Cleaner Production Center.

Participating enterprises included: Algodón Superior, Enlaces Guatemala, Farmasam, Helados Sarita, Industrias Odi, Inversiones Carcama, Industrias Las Popular, Productos Alimenticios Panchoy, Productos Roland, Real Casa y Te Maya. As well as the Hotels Ajau, San Nicolas, Quetzalí, Fortuna Royal, Don Ismael, Centenario, Casa Maco, Astor y Plaza.

Ernesto Samayoa, the project manager and WEC's Director for Latin American operations, explained that the results can be considered a starting point or an example of practices for other businesses interested in improving their production process. He added that the enterprises were part of the partnerships created by WEC with Wal-Mart Mexico and Central America and the Association of Small Hotels in Guatemala. All the enterprises received technical assistance in cleaner production, focusing on areas of opportunities for improvement such as the reducing the use of raw materials, waste management, energy conservation, water use, and reduction of waste and emissions.

Luis Muñoz, the Director of the Cleaner Production Center, stressed that cleaner production has become very important in Guatemala and local businesses take a proactive responsibility and in doing so they not only obtain economic benefits, but also promote environmental conservation.

Article originally published in Revista Industria (www.revistaindustria.com) August 2013 regarding a project promoted by WEC with the support of Guatemala's Cleaner Production Center

Other commitments supported by the CAFTA-DR Environmental Cooperation Program

Secretariat for Environmental Matters (SEM)

The Parties have established the SEM to carry out the functions described in articles 17.7 and 17.8 of the CAFTA-DR, including responding to submissions in cases where the effective enforcement of environmental laws is in question.

The SEM operates as an independent entity within the Secretariat for Central American Economic Integration (SIECA) and under the sole direction and supervision of the EAC. While the SEM does not receive or act on instructions from any authority other than the EAC it is funded through the ECP. Additionally, SEM activities help promote compliance of environmental laws and public participation which relates to ECP theme A.

The tables presented below show the number of submissions by year and by country, respectively. To date, 24 submissions have been filed²⁸ (see Annex 1 for a summary of the submissions filed).

Year	Number of submissions
2007	1
2008	2
2009	1
2010	10
2011	8
2012	2
2013	4

Country	Number of submissions
Guatemala	11
El Salvador	4
Honduras	5
Dominican Republic	5
Costa Rica	2
Nicaragua	1
United States	0

²⁸ See also http://www.saa-sem.org/





Monitoring CAFTA-DR environmental cooperation

The OAS-DSD has been assisting in evaluating if and how the activities carried out by the countries in the region are contributing towards the achievement of the priorities established by the parties. For this purpose, OAS-DSD has worked with stakeholders in developing an evaluation process based on key performance indicators. Since 2009, the OAS-DSD has prepared four independent evaluation reports to provide a general overview of the ECP, including success stories, case studies, challenges and recommendations with a view to improve future environmental cooperation programming. This fourth report provide an overarching perspective of all results achieved to date, by means of an impact or high-level results assessment.

The OAS-DSD developed a new set of impact-level indicators from the current CAFTA-DR ECP monitoring framework. The indicators were selected through an iterative process and in consultation with CAFTA-DR points of contact and implementing agencies. In the future, the OAS-DSD intends not only to continue using its new impact indicators to provide recommendations to improve the implementation of the ECP, but also to revise the entire CAFTA-DR ECP monitoring framework with a view to simplifying it and having implementers and points of contact share their opinions, as new projects and/or subsequent phases are approved in the coming years. The monitoring process is related and supportive of the achievement of outcomes within all ECP themes.

Overall results and impact

Theme A

Under this Theme, the purpose is to strengthen environmental institutions, laws and policies, and to promote effective implementation and enforcement of these laws and policies, as well as the effective implementation of Multilateral Environmental Agreements (MEAs) and civil society engagement to ensure compliance with Free Trade Agreement's (FTA) obligations.

Implementing agencies have worked with CAFTA-DR countries to improved 150 existing laws and adopt 28 new laws and regulations related to wastewater, air pollution, and solid waste. As part of CAFTA-DR ECP, implementing agencies supported the organization of several training sessions and workshops with institutions and officers responsible for enforcement and compliance of the environmental legislation.

Through its outreach interventions, CAFTA-DR ECP disseminated information that helped governments, civil society organizations, private sector stakeholders and individuals acquire a culture geared towards environmental protection and compliance with environmental laws.

Theme B

The purpose of Theme B is to protect wildlife and its habitat for long-term economic and environmental development. Initiatives related to this theme seek to combat illegal trade in endangered species and promote sustainable management of forests, protected areas and other important ecosystems. Key focal areas include strengthening the scientific and institutional capacities of authorities in charge of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), training CITES implementation officials, building wildlife enforcement capacity and networks, supporting new or existing animal rescue centers, and preventing illegal logging.

Implementing agencies launched various initiatives to build and strengthen capacities and harmonize enforcement across the CAFTA-DR region. These initiatives include training government officials on CITES basic legal structures, implementation and enforcement; developing accessible, replicable training material; supporting the development of procedures and systems that increase the performance and

effectiveness of CITES implementation; and developing tools to address limits on the implementation and enforcement of CITES. Other interventions focused on supporting wildlife rescue centers and strengthening regional collaboration and synergy.

With support from various partners, HSI, DOI, USFS and other implementing agencies conducted a number of regional, national, bi-national and tri-national workshops and capacity building activities addressed at a wide range of stakeholders. These activities dealt with a range of topics including transport regulations, rescue center best practices, animal handling, forest legislation, ecotourism, ²⁹ sustainable agricultural techniques, ³⁰ basic regulations and mechanisms for CITES implementation, best practices to improve implementation of the law and tools to manage CITES permits. Regional meetings of CITES officials and other relevant parties provided an efficient venue to share best practices, discuss national and regional priorities, identify capacity gaps, and provide opportunities for government officials within the region to engage in joint collaboration, and enhance government to government cooperation in CITES as a result.

Theme C

The goal of Theme C is to implement a market-based conservation system. Initiatives related to this Theme focus on sustainable tourism, agriculture and forest products, as means to support economic growth, sustainable natural resource management and environmental protection through ecological certification. The main expected result for Theme C is improved capacity to maintain the natural resource base and protect the environment to support sustained and sustainable economic growth.

To measure this result, OAS-DSD designed specific indicators that capture information on visible/measurable changes in agricultural practices and farm management, increased revenues for producers, and benefits for the environment derived from improved practices.

Projects linked to Theme C have yielded clearly tangible impacts, both for the population whose livelihoods come from the forest and plantations, and for the environment from which they get their living. The overall goal of the projects funded under this Theme has been to improve the livelihood of Central American producers by promoting and implementing organized, sustainable, and environmentally-friendly production systems that will create economic incentives for producers and enhance long-term environmental conservation and wildlife protection. RA worked with coffee, cacao, banana and pineapple producers to enhance the environmental and economic sustainability of their production through their organic and fair trade certification process. HSI worked with farmers who had abandoned cacao plantations or were having very limited yield, to enhance their production and highlight and protect important wildlife, including endangered species living in these productive areas.

Theme D

The improvement of the private sector's environmental performance is to be achieved through cleaner production strategies, environmental management systems (EMSs), voluntary mechanisms, public-private associations, and by building stronger institutional and human resource capacity. Initiatives related to this goal focus on encouraging businesses to adopt clean production methods and EMS. Businesses which do so gain a competitive edge through reduced resource consumption and waste. Other initiatives related to Theme D focus on working with financial institutions, enterprises and cleaner production centers (CPCs)



 ²⁹ USFS developed three manuals to support ecotourism, respectively named the "Cetacean Observation Handbook," the "Turtle Observation Handbook" and the "Manual for Community Ecotourism Tour Guides."
 ³⁰ Development of training material on Silvo Pastoral Systems, Solid Waste focusing on the development of Organic Fertilizers, Biological Control (Integrated Pest and Disease Management Soil and Water Conservation, Water Resource Management, Marketing, Gender, Crop Management, Establishment and Management of Plantations, Management and Development of Coffee with shade.



to increase capacity, develop voluntary mechanisms for cleaner production, and provide incentives and recognition to companies that use improved processes and technologies.

Enterprises that have awareness of, commitment to, and the capacity to undertake environmentally responsible action will use clean production technology, adopt eco-efficiency practices and use environment management systems. At this stage in CAFTA-DR ECP implementation, OAS-DSD is looking at the impacts generated by the adoption of these policies, incentives and the commitment demonstrated by the private sector to reduce its negative impact on the environment. Some field visits by the OAS-DSD team revealed a growing interest within universities and research centers for cleaner production methods. Researchers within these institutions were motivated by the desires to foster a more competitive private sector and to make a stronger contribution to the national efforts to contain or reduce greenhouse gas and pollutant emissions, the use of energy, water and raw materials, and the generation of solid waste and wastewater. As the research, dissemination of information and private sector participation are expanding, impacts from the contribution of CAFTA-DR ECP are becoming more tangible.

III. LESSONS LEARNED

The OAS-DSD asked the implementing agencies to report on the main lessons they had drawn from their experience with their projects and programs. Based on these lessons, agencies were also asked to propose recommendations for future work. The OAS-DSD itself has several recommendations for improving the results of work within the ECP. Some recommendations that are still valid have been extracted from previous OAS-DSD's Monitoring Report. As the ECP closed a funding cycle in 2013 and is opening another one in 2014, this is a relevant moment in the program to take stock of what has been learned over the past few years and put these insights into action to improve the effectiveness of the next funding cycle.

Best Practices

- 1. Regional meetings of officials from CAFTA-DR countries provided an efficient venue to share best practices, discuss national and regional priorities, identify capacity gaps, and provide opportunities for government officials within the region to engage in joint collaboration, and enhance government to government cooperation.
- 2. Efforts from implementing agencies to provide technical assistance, deliver training and support regional meetings and workshops led to increased knowledge of environmental regulations and international resolutions, a more consensual approach to specific environmental issues, and improvements in environmental legislation and regulations in CAFTA-DR countries.
- 3. ECP support to national inter-institutional thematic coordination mechanisms has facilitated the implementation process of several interventions and guaranteed the sustainability of results. For instance, working together on common goals creates new, productive relationships that are likely to last and thus contribute to solving other environmental problems. Compiling legal compendiums or preparing a model wastewater regulations required people and national institutions to work together to achieve a common goal and establish collaborative relationships across sectors in a country or across international borders.
- 4. In order to increase the degree of engagement in public participation, the program supported the production and dissemination of information in the media, including paper-based and on-line publications, videos and radio announcements. It also sponsored community meetings, workshops and specific training and capacity-building activities regarding the assessment and use of environmental information.
- Outreach strategies and public awareness projects are very useful prior to developing concrete environmental interventions. These initiatives increase potential beneficiaries' awareness of issues and help open their minds to possibilities for changing their existing livelihood practices to ones that are better for the environment.
- 6. The Smalls Grants Program has proven successful in the engagement of local organizations in the CAFTA-DR countries, such as CSOs, academic institutions, and professional organizations in the public participation opportunities and mechanisms that the CAFTA-DR Environment Chapter and Environmental Cooperation Agreement provide.
- 7. When planning training events and workshops, it is important to use local and regional technical experts to provide this training, in collaboration with relevant U.S. and international technical experts. These experts have relevant local and regional knowledge; may be easier for participants to relate to; and are usually more readily available to consult with even after the event has ended.





- 8. Support to CITES implementation and enforcement led to consolidated wildlife enforcement operations and to the building of multidisciplinary inter-agency teams. Such collaborations led to successful joint inspection and seizure operations.
- 9. Support provided under the ECP led to the signature, in 2010, of a Wildlife Seizure Cooperation Agreement between El Salvador, Honduras and Nicaragua that clarifies roles and responsibilities and promotes cooperation in the fight against illegal trade.
- 10. As a result of interventions under the ECP, rescue centers' operations were consolidation and adapted to each CAFTA-DR country's specific situation and training needs related to protection of endangered wildlife and illegal trade.
- 11. ECP activities also supported the development of institutions in charge of overseeing the production of certified crops.
- 12. Managing the commodity pipeline is a key function of a certification system. This requires using market intelligence to achieve an optimal balance between certified demand and supply, while also feeding into country-level growth strategies. RA has an enviable record among voluntary certification organizations in securing a large percentage of their target commodity markets as certified. Presently, about 37% of coffee and 36% of cacao on the market is RA-certified. Developing this system has been a key achievement for the project, since it is crucial for operating effectively in the global marketplace.
- 13. Public-private partnerships generate advantages in the process of transforming productive sectors or territories. Public-private sector collaboration generates a greater impact on the environmental performance and competitiveness of businesses; however, they are processes that take time and require great commitment on the part of both actors.
- 14. Prior to the ECP cleaner production interventions in regional SMEs, few of the participating companies had considered the environment as an important issue. Most of them had never received training on environmental issues, nor joined a pollution prevention project. Thus, the ECP was clearly able to influence the companies' environmental strategies by introducing them ideas about environmental problems and challenges that companies face and the link between environmental and economic performance of companies. The strongest incentives for SMEs to green their production continue to be related to cost savings. SMEs tend to continually improve their environmental performance as they see a return on investments in technology.
- 15. Creating synergies among project implementers within a country may increase the overall impact of the assistance. For example, WEC and CCAD worked together on similar CAFTA-DR projects, and were able to convince the Salvadoran dairy sector to commit to a voluntary agreement for cleaner production. This led to more companies joining the projects and improving their environmental performance.
- 16. Local capacities must often be strengthened so that activities can be maintained once a project's funding term ends. To transfer technical leadership and strengthen local technical capacities, 76 staff from participating SMEs were trained under the ECP. The training covered water and energy savings practices, waste management, occupational health and safety, and biodiversity.
- 17. The implementation of the education in cleaner production program has been a welcome addition to the ECP. Through the improvement of the academic development and curricula in sustainable development and cleaner production in participating universities, students are able to execute their practical training in local SMEs from different sectors to recommend practices and

- technologies in cleaner production to improve the environmental performance and productivity of participating SMEs.
- 18. Documenting participation at all events is essential to understanding how many and what type of people a project has reached. To this end, it is important to have participant sign-in sheets for workshops, pre- and post- evaluations, and documentary proof of public/private input into curricula.

Challenges and Observations

- 1. The fact that the environmental agenda is not seen as a fundamental pillar of the development agenda is still a challenge. The economic and social agendas take priority. In addition, the environmental agenda is not focused enough and relies on too many objectives.
- 2. The ability of national authorities to grasp and understand the ECP cooperation has also been a challenge. Furthermore, it has been challenging to carry out an efficient cooperation process with a different political dynamic in each country, as well as improving enforcement of environmental legislation considering the asymmetries in the region. There is still a need to overcome challenges related to funding reduction and the allocation of funds. However, it is important to recognize the roll of the POCs in adjusting and coordinating all of the efforts to try to enhance the results of the cooperation.
- 3. Government agency staff must often obtain high-ranking approval for various decisions, sometimes from ministers or deputy ministers. This poses a key challenge to working with government agencies, since it is difficult for government staff to assert ownership of CAFTA-DR ECP when their decision-making authority is limited in this way. This challenge is compounded by a high turnover of staff in some ministries and other partner organizations. If Points of Contact compile a list of topics and decisions to be validated at high level, this may ease this challenge by generating more commitment from people implementing CAFTA-DR ECP on the ground. This would support data collection to help measure positive outcomes from the projects.
- 4. Many programs are designed to be implemented at the regional level. One disadvantage of this approach is that it often cannot take area-specific trends and customs into account. It lacks funding and local partnerships to do so. The implementing agencies recommend developing outreach programs more oriented to local needs and realities, which would strengthen the effectiveness and sustainability of all programs.
- 5. Meeting the objectives of the CAFTA-DR ECP successfully requires many activities to be undertaken at the same time, presenting a challenge to implementers in general, and CAFTA-DR countries. However, significant results can be achieved with limited resources by focusing on institutional strengthening and capacity building.
- 6. Environmental and social sustainability cannot be achieved without benefits to the farmer in terms of improved livelihood and profitability. It is necessary to dedicate attention to issues like yield and quality improvements, particularly for small farmers who are often very unproductive and produce inferior quality coffee. Market benefits alone will often not be sufficient to make the cost-benefit equation a positive one for farmers.
- 7. The lengthy process for the approval, by the US Government, of funds assigned for implementation of ECP projects creates challenges in planning project activities, and reduces the leeway for flexibility and adjustments.





- 8. With regards to animal protection and conservation, it is of utmost importance to press governments to create and maintain national databases of animal confiscations. This data will help to clarify the scope and key concerns regarding wildlife protection for individual countries and regionally.
- 9. The wildlife protection component of the program should have an evaluation component, implemented in partnership with the appropriate government authorities, to assess existing strengths and weaknesses. Findings from this exercise should be used to prioritize objectives in countering the illegal wildlife trade.
- 10. Regional weather influences must be considered and adequately planned for, specifically the height of the rainy season and the hurricane season. Many implementation calendars have been upset by unfavorable climatic conditions. To mitigate this, all implementing agencies should have contingency plans which identify probably climatic risks to their expected results. This could be as simple as extending the timeline to implement specific activities during rainy season and hurricane season.
- 11. CAFTA-DR stakeholders identified climate change as a growing concern throughout the region. Future ECP efforts could look into supporting climate change interventions, including mitigation strategies and adaptation to the effects of climate change. Climate resilience is a complex issue which calls for a coordinated response from governments, the private sector and civil society stakeholders to improve urban management, infrastructure, and the systems that deliver and maintain clean water, air and waste disposal services. The USAID's Feed the Future and the Agency's Global Climate Change Initiative are two initiatives with the potential to be synergistic partners in this area.
- 12. It is important to mention that those results which have not been achieved so far are due to different reasons. In some cases, political will was lacking because many results were linked to legislation or regulations that have not been approved by the national congress. Thus, these results directly depended on cooperation at the political level. One important lesson when establishing a cooperation agenda is to define a strategy that enables one to overcome these barriers. There is a need to consider elements related to economics, politics, and institutional capacity, and try to ensure the most harmonious relationships possible.

IV. RECOMMENDATIONS

- Continuity of assistance provided by implementing agencies was stressed. It is important to take
 advantage of the relationships already developed with the countries without interruption. For
 instance, EPA has been very valuable in assisting with drafting, implementing, and enforcing
 environmental laws and regulations. CCAD has been a strategic partner in the ECP of CAFTA-DR
 because of the access to high level authorities within the ministries, and ability to expedite
 administrative procedures and following up on the execution of activities.
- 2. The ECP requires a website that includes information on all programs and activities being implemented in the framework of the ECA. In this context, the website should provide decision makers with programmatic and technical information through formats such as databases and statistics. Furthermore, a proactive outreach and communication strategy should be implemented from the early stages of the program to ensure visibility, share information, best practices and lessons learned, and reach a wide spectrum of stakeholders. The use of social media could assist in these tasks.
- 3. It is important that the regional cooperation is complemented by a bilateral cooperation in order to create a greater impact on the cooperation or amplify the scope of action.
- 4. As the ECP is focusing on those programs that have achieved greater success and are replicable, it should also allow for discussion on emerging environmental priorities in the region.
- 5. Uniform criteria must be established by CAFTA-DR Parties in the selection of implementers; this process should be transparent and discussed in an open fashion among the POCs.
- 6. Implementing agencies should have contingency plans and flexibility to adjust changes and political priorities. They should make work plans jointly with the ministries to identify the needs and priorities. Greater importance should be given to jointly plan the cooperation not only with POCs but also with experts, and to take into account all possible variables, better managing national risks, timing, and realities. In addition there should be greater transparency with respect to funding. It is difficult to plan a program without knowing the amount of funding.
- 7. Follow-up activities are crucial if SMEs are to realize long-term benefits and generate sustainable sector-wide changes. Recommendations include impact assessments as a means of providing key information and creating meaningful incentives to engage SMEs in long-term investments. These projects are more effective when the long-term benefits are understood from the outset, and when permanent government mechanisms and incentives are in place to encourage replication of best practices. It is also important to design projects with enough time to teach, provide assistance and to provide follow up support to SMEs. This last step is crucial if the project is to sustainably alter SMEs' operations. The design phase of the project should entail close collaboration with local partners. Throughout the life of the project, there should be an ongoing focus on transferring leadership to these local partners so that results can be sustained after the project ends.





ANNEX 1

Registry of Citizen Submission³¹ Secretariat for Environmental Matters CAFTA-DR

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2007	CAALA/07/001 TORTUGAS MARINAS RD	Dominican Republic	May 9, 2007	Factual Record Published	-	Related to the Sea Turtles Case, the Secretariat published factual record on January 2011.
2008	CAALA/08/001 EXTRACCIÓN DE ARENA EN LAS CANAS RD YELLEN	Dominican Republic	Novembe r 17, 2008	Archive	06/03/2009	The Petitioners (Kristi and Mark Herritz) claim that the government of the Dominican Republic has failed to comply with certain environmental legislation by allowing the extraction of sand from the beaches in Las Canas. The Secretariat sent a notice to the Environmental Affairs Council that the Submitters, Kristi and Mark Herritz, decided to withdraw their Submission in light of the quick response by the Government of the Dominican Republic.
2008	CAALA/08/002 EXTRACCIÓN DE ARENA EN LAS CANAS RD YELLEN	Dominican Republic	December 2, 2008	Archive	06/03/2009	The Petitioner (Mark Yellen) claims that the government of the Dominican Republic has failed to comply with certain environmental legislation by allowing the extraction of sand from the beaches in Las Canas. The Secretariat sent a notice to the Environmental Affairs Council that the Submitter, Mark H. Yellen, decided to withdraw his Submission in light of the quick response by the Government of the Dominican Republic.
2009	CAALA/09/001 URBANIZACIÓN EL ESPINO ES	El Salvador	April 24, 2009	Review suspende d	2/26/2010	The Petitioner (Víctor Hugo Mata Tobar) claims that the government of El Salvador has failed to comply with certain domestic environmental legislation in relation to the urbanization and distribution of land in the area known as El Espino (San Salvador), which has brought negative environmental consequences for the area. The Secretariat determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission.
2010	CAALA/10/001 RESIDENCIAL VILLA VERANDA ES	El Salvador	January 14, 2010	Active	-	The Submitter claims that the Government of El Salvador failed to enforce certain domestic environmental legislation when it authorized the Villa Veranda Housing Project to be developed in Northwest Santa Tecla, La Libertad. The Secretariat works on the preparation of a Factual Record.
2010	CAALA/10/002 INCUMPLIMIEN TO DE LA LEY DE CAZA GALAS GT	Guatemala	February 3, 2010	Review suspende d	4/27/2010	The Petitioner (Guatemalan Center for Legal, Environmental and Social Action (CALAS)) claims that the Republic of Guatemala has failed to enforce the so called General Hunting Law (Decree 36-04) by not prosecuting those that have committed crimes covered by the law. The Secretariat has determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission.

³¹ For complete information see http://www.saa-sem.org/

2010	CAALA/10/0 03 LOS COBANOS FUNDARRECI FE ES	El Salvador	February 4, 2010	Suspended	-	The petitioner states that the area referred to as Los Cóbanos Reef, which has been declared the Los Cóbanos Protected Natural Area Complex, is the only reef in the Pacific between Panama and Mexico and that it is an important part of El Salvador's natural heritage. In this light, the petitioner denounced that, beginning in 1996, it has demanded that the Ministry of the Environment, "[] enforce the Law on the Environment in regards to two tourism companies that have caused serious damage to the ecosystem and that jeopardized the entire reef system and existing biodiversity in the area. This is especially true in the case of the Decamerón Hotel, which has constructed a breakwater in the ocean with the goal of changing currents and taking possession of area sand []" The Secretariat has determined not to request a response from the Republic of El Salvador.
2010	CAALA/10/0 04 LACHÚA GT	Guatemala	February 15, 2010	Inactive	5/17/2010	The petitioner claims that the Government of Guatemala has failed "to effectively enforce national environmental legislation, specifically articles 46, 64, 97 and 128 of the political constitution of the republic of Guatemala, Decree 4-89 – Protected Areas Law and Regulations, Decree 68-86 law to protect and improve the environment, Decree 5-95 that ratified the convention on biological diversity, and Decree 4-88 that ratified the convention on wetlands of international importance, especially as waterfowl habitat (RAMSAR). All of the above is related to the construction of the Transversal Corridor of the North roadway project, specifically the Rubelsalto-Playa Grande section of the road, which crosses the border of the Laguna Lachuá National Park." The Secretariat has determined not to recommend the preparation of a factual record
2010	CAALA/10/0 05 ATITLÁN GT	Guatemala	February 15, 2010	Review suspended	5/19/ 2010	The Petitioner (Guatemalan Center for Legal, Environmental and Social Action (CALAS)) claims that the Government of Guatemala has failed to comply with different laws governing the protection and management of Lake Atitlán located in the Department of Sololá, and as a result the lake is on the verge of environmental collapse. The Secretariat determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspended review of the Submission
2010	CAALA/10/0 06 LAGUNA DEL TIGRE FONPETROL GT	Guatemala	March 8, 2010	Suspended	-	The petitioner claims that the State of Guatemala is not enforcing, among other regulations:, Congressional Decree number 4-89, the Protected Areas Law (specifically articles 19 and 20); Congressional Decree 5-90 and its reforms declaring the "Maya Reserve" in the department of El Petén a protected area and the corresponding master plans; Decree 71-2008, the National Economic Development Fund Law; and the Ramsar Convention on Wetlands (Ramsar, Iran, 1971). According to the petitioner, the "[] modification, expansion and extension of oil exploitation contract 2-85, signed by the Ministry of Energy and Mines and PERENCO GUATEMALA LIMITED," will represent State noncompliance with these regulations. The Secretariat is working on the preparation of a Factual Record according to the work plan submitted to the Environmental Affairs Council.





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2010	CAALA/10/007 OMOA HN	Honduras	March 8, 2010	Suspended	-	The Petitioner (FUNDAMBIENTE) claims that there have been a series of irregularities and non-compliance with the national legislation of the Republic of Honduras related to the installation and expanded operation of the Gas del Caribe Company in the site known as La Puntilla, Municipality of Omoa. The Secretariat, after analyzing both the Submission and the response from Honduras, recommended the preparation of a factual record to the Environmental Affairs Council
2010	CAALA/10/008 HOSPITAL NACIONAL DE MIXCO-MONTE REAL GT	Guatemala	July 27, 2010	Review suspended	7/27/2010	The Submitter (Monte Real Community Development Council) claims that the State of Guatemala has not effectively enforced its environmental legislation in regard to the construction of a hospital in the Monte Real Neighborhood, located in Zone 4 of Mixco in the Department of Guatemala. The Secretariat determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2and suspends review of the Submission. (The Submitter has 30 days to file an expanded Submission).
2010	CAALA/10/009 JARDINES DE TICKAL II GT	Guatemala	Sept. 3, 2010	Review Suspended	9/3/2010	The Submitter (Amilcar Lobos Yong) claims that local car repair shops, auto body workshops, car importers, parking lots, informal used car lots, and dog breeders pollute the environment and affect the life of the neighbors in "Jardines de Tikal II," Guatemala, City. The Secretariat determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspended review of the Submission.
2010	CAALA/10/010 CONTAMINACI ÓN AUDITIVA- ANTIGUA GUATEMALA GT	Guatemala	October 1, 2010	Suspended by submitter	1/23/2011	The Petitioner (Hotel Casa Florencia and 7th Avenue Neighbors Committee of Antigua Guatemala) argues that the State of Guatemala is not enforcing certain national environmental legislation in regard to noise pollution in the city of Antigua, Guatemala, located in the department of Sacatepéquez. Specifically, the Petitioner argues that Antigua, Guatemala is a World Heritage Site and that the noise pollution caused by regular city activity and, specifically, the El Esfuerzo Sports and Social Club, affects public health and interferes with the daily activities of the city. The submitter requested to the Secretariat the temporary suspension of their submission.
2011	CAALA/11/001 SEA TURTLES CR	Costa Rica	January 10, 2011	Review suspended	-	The Submitter claims that there have been anomalies in the use of turtle excluder devices (TEDs) by several shrimp trawlers in violation of domestic regulations designed to protect sea turtles in Costa Rica. In addition, the Submitter denounces irregularities in processes related to the issuance of fishing licenses that regulate what activities said boats may pursue. The Secretariat determines that the Revised Submission was presented after the 30-day time limit had already passed and concludes review of the case.

2011	CAALA/11/002 NATIONAL MIXCO HOSPITAL II GT	Guatemala	April 4, 2011	Review Suspended	04/04/2011	The Submitter (The Community Development Council for the Monte Real Neighborhood) claims that the State of Guatemala has not effectively enforced its environmental legislation in regard to the construction of a hospital in the Monte Real Neighborhood, located in Zone 4 of Mixco in the Department of Guatemala. The Secretariat determines that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission
2011	CAALA/11/003 DEFORESTATIO N LOS AMATES GT	Guatemala	May 4, 2011	Review Suspended	05/04/ 2011	The Submitter denounces the deforestation of the upper part of the basins where the Cacaguatalla, Frio, Corral de Piedra and El Jute rivers are born and whose water, supplies the water distribution and bypass tank system used by the communities surrounding the Pontezuelas Farm located in the Los Amates Municipality in the department of Izabal. The Secretariat has determined that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission
2011	CAALA/11/004 WEST BAY ROATAN HN	Honduras	May 16, 2011	Active	-	The Submitter claims that, during the construction and expansion of a hotel complex on the West Bay coast of the Island of Roatán in Honduras, no prior environmental impact study was prepared, a series of irregularities were committed and national Honduran legislation was not enforced. The Secretariat for Environmental Matters has notified the Environmental Affairs Council of a time extension for issuing determinations.
2011	CAALA/11/005 SEA TURTLES- TED II-CR	Costa Rica	August 27, 2011	Suspended	-	The Submitter claims that there have been anomalies in the use of turtle excluder devices (TEDs) by several shrimp trawlers in violation of domestic regulations designed to protect sea turtles in Costa Rica. In addition, the Submitter denounces irregularities in processes related to the issuance of fishing licenses that regulate what activities said boats may pursue. The Secretariat for Environmental Matters has notified the Environmental Affairs Council of a time extension for issuing determinations
2011	CAALA/11/006 OMOA II – HN	Honduras	Sept. 28, 2011	Suspended	-	The Submitter claims that the State of Honduras, either through action or omission, has not enforced, among other regulations, the General Law on the Environment, Decree 01-93 (specifically articles 1, 5, 7, 35, 41, 48, 52, 53, 54, 58, 59, 62, 66, 68, 70, 72, 74, 78, 79 and 80) as well as articles 65, 68 and 145 of the Constitution of the Republic of Honduras. This claim is regarding the "[]installation and expanded operation of the Gas del Caribe company in the site known as La Puntilla located in the northern part of the urban center of the Omoa municipality []" The Secretariat is currently analyzing the Submission to determinate whether it fulfills requirements of Article 17.7.2 of the CAFTA-DR.



STATES



2011	CAALA/11/007 AGUA CALIENTE RIVER ES	El Salvador	Nov. 14, 2011	Suspended	-	The Submitter claims that a local company is not complying with regulations governing the treatment of solid waste and residual waters that are being discharged into the Agua Caliente River and that the authorities have been notified of this situation but have done nothing about it. The Secretariat determines that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission
2011	CAALA/11/008 MAYA BIOSPHERE GT	Guatemala	Nov. 14, 2011	Suspended	-	The Submitter claims that the State of Guatemala is not effectively enforcing certain domestic environmental legislation related to Administrative Case File Number 19-2-2009, Area PTN-1-2008, created by the Ministry of Energy and Mines in regards to the invitation for hydrocarbon exploration and exploitation within the perimeter of the Maya Biosphere Reserve and adjacent areas. The Secretariat determines that the Submission does not comply with all of the requirements of CAFTA-DR Article 17.7.2 and suspends review of the Submission
2012	CAALA/12/001 "OMOA III-HN"	Honduras	July 27, 2012	Suspended	-	The Submitter claims that there have been a series of irregularities and nonobservance of internal Honduran legislation in regard to the installation and expanded operations of the Gas del Caribe Company in the area known as La Puntilla, located in the northern part of the main city in the municipality of Omoa.
2012	CAALA/12/002 NOISE POLLUTION II – ANTIGUA GT	Guatemala	October 2012	Suspended	-	The Submitter argues that the State of Guatemala is not enforcing certain national environmental legislation in regard to noise pollution in the city of Antigua Guatemala, located in the department of Sacatepéquez. Specifically, the Submitter argues that Antigua Guatemala is a World Heritage Site and that the noise pollution caused by regular city activity and, specifically, the El Esfuerzo Sports and Social Club affects public health and interferes with the daily activities of city residents
2013	CAALA/13/001 LAKE MASAYA NI	Nicaragua	February 28, 2013	Suspended	-	The Submitter claims that the State of Nicaragua has failed, either through action or omission, to comply with the Political Constitution of the Republic of Nicaragua, specifically articles 23, 24, 25, 27, 26, 46, 47, 48, 52, 55 and 130 as well as Article 641 of the General Law on the Environment and Natural Resources, the Penal Code of Nicaragua, the Law on the Public Prosecutor's Office and the Penal Procedures Code, as the result of environmental deterioration caused by polluting Lake Masaya in the department of Masaya in the Republic of Nicaragua.
2013	CAALA/13/002 HAZARDOUS WASTE DR	Dominican Republic	May 23, 2013	Suspended	-	n.a.
2013	CAALA/13/003 EMISIONES CONTAMINANT ES LOS ALCARRIZOS RD	Dominican Republic	June 19, 2013	Active	-	The Submitter claims that there is non-compliance with environmental legislation due to the alleged irregular operations of a biodiesel plant in the Los Alcarrizos area. The Submitter claims that the air and water has been polluted as the result of this situation as oils are being dumped into the soil in the area.
2013	CAALA/13/004 CUYAMEL II HN	Honduras	August 23, 2013	Active	-	n.a
2013	CAALA/13/005 HAZARDOUS WASTE DR	Dominican Republic	October 23, 2013	Active	-	n.a.



