

15 Years

of environmental cooperation

REPORT



CAFTA-DR
Environmental Cooperation Program

Costa Rica

Dominican Republic

El Salvador

Guatemala

Honduras

Nicaragua

United States



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15 Years
of environmental cooperation

REPORT



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List of Acronyms and Abbreviations

ACEPESA	Central American Association for the Economy, Health and the Environment
ADA2	Environmental Law and Water Alliance
ADIS	Association for Comprehensive Sustainable Development for Humanity and the Environment
ADPG	Pedro García Development Association
AEIH	Association of Industrial Enterprises of Herrera and Santo Domingo Province, Inc.
ALIARSE	Foundation for Sustainability and Equity
ANDA	National Administration of Aqueducts and Sewers - El Salvador
ARCAS	Association for the Rescue and Conservation of Wildlife – Guatemala (Asociación de Rescate y Conservación de Vida Silvestre)
ASPRODE	Advising Programs and Projects Development
ASAPROSAR	Salvadoran Association for Rural Health (Asociación Salvadoreña Pro-Salud Rural)
BORSICCA	Industrial Waste Exchange of Central America and the Caribbean
CAFTA-DR	Central America-Dominican Republic-United States Free Trade Agreement
CALAS	Center for Environmental and Social Legal Action of Guatemala
CATIE	Tropical Agricultural Research and Higher Education Center
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)
CEDARENA	Center for Environmental Law and Natural Resources
CER	Center for Eco-Efficiency and Social Responsibility (Centro de Ecoeficiencia y Responsabilidad Social)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CODDEFFAGOLF	The Committee for the Defense and Development of Flora and Fauna of the Gulf of Fonseca (El Comité para la Defensa y Desarrollo de la Flora y Fauna del Golfo de Fonseca)
COCATRAM	Central American Commission for Maritime Transportation (Comisión Centroamericana de Transporte Marítimo)
CONAP	National Council of Protected Areas of Guatemala (Consejo Nacional de Áreas Protegidas de Guatemala)
CP	Cleaner production
CPC	Cleaner production center
DOI	U.S. Department of the Interior

DOJ	U.S. Department of Justice
DOS/OES	U.S. Department of State – Bureau of Oceans and International Environmental Scientific Affairs
EAC	Environmental Affairs Council
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
ECC	Environmental Cooperation Commission
ECP	CAFTA-DR Environmental Cooperation Program
EE	Energy Efficiency
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EPA	U.S. Environmental Protection Agency
ESNACIFOR	National Forestry Sciences School in Siguatepeque – Honduras
FENICPESCA	Nicaraguan Federation of Fisheries
FRMT	Rigoberta Menchú Tum Foundation
FUNCORCO	Corcovado Foundation
Fundación IPA	Foundation Institute for Environmental Research and Promotion
FUNDE	National Foundation for Development - El Salvador
FUNDES	Foundation for Economic and Social Development in Guatemala
FUNJIDES	Jinotegana Foundation for Sustainable Development
GHG	Greenhouse Gas
HSI	Humane Society International
ICF	National Institute of Forest Conservation and Development – Honduras
INGES	Research and Social Management Institute
INPESCA	Nicaraguan Institute of Fisheries and Aquaculture
ISO	International Organization for Standardization
ISWM	Integrated Solid Waste Management
ITAP	International Technical Assistance Program (DOI)
IUU	Illegal, Unreported and Unregulated
MAMUCA	Association of Municipalities of Central Atlantida, Honduras
MARENA	Ministry of Natural Resources - Nicaragua
MARN	Ministry of Environment and Natural Resources - El Salvador
MEA	Multilateral Environmental Agreement

MIMAT	Miskitu Indian Mairin Asla Takanka / Miskitas Women's Association
MINAE	Ministry of the Environment and Energy - Costa Rica
MOUs	Memorandum of Understandings
MSME	Micro, Small and Medium Enterprise
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
OAS	Organization of American States
OAS-DSD	Organization of American States – Department of Sustainable Development
OSPESCA	Organization of the Fishing and Aquaculture Sectors of the Central American Isthmus
PAHO	Pan American Health Organization
POCs	Points of Contact
RA	Rainforest Alliance
RETC	National Register of Pollutant Release and Transfer
SAICM	Strategic Approach to International Chemicals Management
SEM	Secretariat for Environmental Matters
SERVIR	Regional Visualization and Monitoring System
SICA	Central American Integration System
SIECA	Secretariat of Central American Economic Integration
SIRPAC	Central American Fisheries and Aquaculture Integrated Registry System
SME	Small and Medium Enterprise
SWM	Solid waste management
TRAFFIC	Wildlife Trade Monitoring Network
UNITAR	United Nations Institute for Training and Research
U.S.	United States (of America)
USG	United States Government
USAID	United States Agency for International Development
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
US\$	U.S. Dollar
WCS	Wildlife Conservation Society
WEC	World Environment Center
WWF	World Wildlife Fund



Executive Summary

This Special Edition of the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR) Environment Cooperation Program (ECP) monitoring report provides an overview of 15 years of cooperation. Since 2005, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and the United States have been working together to strengthen environmental protection, and promote public participation in environmental decision-making under the CAFTA-DR Chapter 17 (Environment Chapter).

The United States has invested over US\$100 million in environmental cooperation and attracted more than US\$21 million in co-funding from private and government partners. Funded projects addressed shared environmental challenges and provided environmental expertise to build technical capacity in the region. The ECP's efforts respond to priorities set by the Parties and opportunities for creating impact. These areas of action include building capacity to combat illegal wildlife trade; improving air quality; modernizing the Environmental Impact Assessment (EIA) process; strengthening waste management; fostering the public's access to environmental information and increasing civil society's knowledge of environmental laws.

These investments have yielded tangible and lasting results in the region. To support improved enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the ECP established the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN, or ROAVIS in Spanish). Through CAWEN, officials in the region joined to conduct more than 30 cross-border wildlife operations, seizing illegally trafficked species of wood, birds, mammals, reptiles, orchids, and insects.

The ECP also supported the training of more than 2,205 judges, prosecutors, customs officers, and other enforcement officials. Cooperation through CAWEN has not only increased the number of CITES cases presented and prosecuted before the courts but also improved the application of administrative sanctions. This work helps to stem illegal wildlife trafficking, promote ecosystem conservation, protect people's livelihoods, and continue the sustainable development and growth of national economies.

The ECP has made significant strides in improving air and environmental quality in various sectors. By building the technical capacity of CAFTA-DR Parties to manage emission inventories, data analysis, standards and regulations, the ECP has helped produce more stringent and harmonized air quality and fuel emissions standards, thus contributing to positive human and environmental health outcomes. By providing training in EIA

to over 140 technicians, and standardizing and modernizing EIA monitoring and permitting processes, the ECP contributed to improved environmental and economic outcomes in the commercial mining, tourism and energy sectors.

Under the CAFTA-DR Small Grants Program, more than 20 projects led by civil society organizations focused on promoting environmentally sound solid waste management through a community-participation model. Together, these projects helped establish waste collection routes, formalize waste collectors, start recycling and composting programs, develop and implement waste management ordinances, and foster dialogue between municipalities and community members. Between 2018-2019, the program improved disposal of 6,000 tons of solid waste, recycled 90 tons of plastic, removed 5.6 tons of solid waste from the environment and trained 14,000 people in techniques for improved solid waste management.

The Secretariat for Environmental Matters (SEM), provided for under the framework of the Environment Chapter of CAFTA-DR, is helping promote public participation in environmental decision-making. Since 2007, the SEM has received 44 submissions from the public asserting that a CAFTA-DR Party failed to effectively enforce environmental legislation. The environmental submission mechanism and the SEM's outreach contributed to improved transparency of governmental processes and promoted dialogue between CAFTA-DR governments and their citizens. Since 2017, the SEM developed partnerships with 11 universities and delivered environmental law webinars to judges, prosecutors, professors and students. Currently, the SEM is working to complete four new environmental law manuals that include information on CAFTA-DR Chapter 17, thus building capacity at law schools.

Overall, the ECP's influence is broad, reaching over 25 million people through wildlife conservation awareness campaigns disseminated over social media, traditional print ads, radio spots, community murals and events. The ECP has been mindful of context, working with local partners to effectively reach urban centers as well as less-connected rural regions.

For this 15th anniversary report, the ECP supported a survey of current and past program implementers and beneficiaries to gather insights about the sustainability and impacts of the program to date. Fifty-three people responded to the survey, including program participants from as far back as 2005.

In the area of strengthening government institutions for effective enforcement of environmental frameworks, 78% felt that day-to-day, they are still utilizing skills and knowledge acquired in training(s) provided by the ECP. Further, 83% of respondents could

identify evidence that government institutions or other institutions (private, academic, NGOs) have strengthened their capacity, especially for enforcing environmental laws, regulations, policies, and norms. Seventy-five percent of respondents reported that the work through the ECP created tangible environmental and/or economic improvements.

The survey also provided an opportunity to capture implementers' experiences as they navigated the uncertainty and challenges resulting from the COVID-19 pandemic. Implementers reported a need to modify or cancel activities. For example, certain evaluations, activities, and training sessions (e.g., that required hands-on aspects, such as working with live animals) were not possible. Other responses pointed to issues with connectivity, lack of knowledge on using virtual platforms, and difficulties working at a distance at the community level.

Finding ways to adapt to the pandemic also created new opportunities. Implementers found that some activities (e.g., conferences, meetings, training) could be done virtually and be more efficient while providing cost savings. Further, implementers were able to open up activities to a larger number of participants and more diverse representation from government, academia, the private sector and civil society.

Further results and insights from the survey are included in this report.

The CAFTA-DR ECP now leverages 15 years of measurable results, impact, lessons learned, a vast network of collaborators and an engaged citizenry. The ECP approach can help solve emerging environmental challenges in a strategic, cost-effective and results-oriented way. As the CAFTA-DR Parties celebrate 15 years of cooperation, they will continue to work to protect, improve and conserve the environment and natural resources for present and future generations.



1. Introduction

Since 2005, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and the United States have been working together to strengthen environmental protection, and promote public participation for environmental decision-making through the Central America-Dominican Republic-United States Free Trade Agreement (CAFTA-DR) Environmental Cooperation Program (ECP). The CAFTA-DR ECP promotes strong economic ties and the effective enforcement of environmental legislation.

This 15th Anniversary Report presents the achievements and results of the CAFTA-DR ECP. The United States has invested over US\$100 million in environmental cooperation projects under the ECP to address shared environmental challenges, including strengthening enforcement of environmental laws; building capacity to combat illegal wildlife trade; developing air quality standards; strengthening wastewater and solid waste management; modernizing Environmental Impact Assessments (EIAs) processes; promoting conservation of marine and coastal ecosystems; and fostering public participation for environmental decision-making.

The achievements of the ECP in the region are the outcomes of a process sustained over time that contribute to strengthening the legal, scientific, administrative and operational capacity of the governments, and the empowerment of citizens and communities for proactive participation in environmental decision-making.

Through the implementation of environmental cooperation initiatives, the 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. In the last 15 years, efforts and interventions of the ECP have adapted to respond to priorities raised by the Parties, the CAFTA-DR Environmental Affairs Council (EAC), technical experts, the CAFTA-DR Secretariat for Environmental Matters (SEM), and input from civil society, as well as the identification of areas where the ECP could be effective and impactful.

The interventions under the ECP contributed to the improvement of over 260 laws and regulations to address wildlife trafficking, air and water pollution, solid waste management, and other critical environmental issues; provided training to more than 140,000 people in environmental policy and enforcement; improved environmental management for more than 1.9 million hectares of land; supported more than 870 Micro, Small, and Medium Enterprises (MSMEs) in the adoption of cleaner production technologies, leading to reductions of greenhouse gases; reached over 31 million people through awareness campaigns on protection and conservation of wildlife throughout the region; and attracted more than US\$21 million dollars in funding from private and government partners to support environmental cooperation activities.

This report also features a number of selected success stories, as well as the results of an electronic survey, conducted in September 2020, to highlight the tangible and sustainable outcomes of the ECP interventions.



2. Overview

2.1 CAFTA-DR Chapter 17

The CAFTA-DR countries developed the ECA in concert with Chapter 17 (Environment) of the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR). In Chapter 17, the Parties commit to expanding their cooperative relationship, recognizing that cooperation is important for achieving their shared environmental goals and objectives and that strengthening their cooperative relationship on environmental matters can enhance environmental protection in their territories and may encourage increased trade and investment in environmental goods and services.

In CAFTA-DR Chapter 17, CAFTA-DR countries agree to ensure that their laws and policies provide for and encourage high levels of environmental protection, to continue to improve those laws and policies and to not fail to effectively enforce them. [Chapter 17](#) refers to the ECA in several places including in Article 17.9 and Annex 17.9, which identifies priorities for environmental cooperation activities.

Since then, the CAFTA-DR countries have evolved a program of cooperative action to advance their common development goals by building the capacities of government and civil society, including non-governmental organizations, the private sector and the general public, to protect, improve and conserve the environment.

CAFTA-DR is the first free trade agreement between the United States and a group of smaller developing economies. This agreement is creating new economic opportunities by eliminating tariffs, opening markets, reducing barriers to services, promoting transparency, and establishing state-of-the-art rules for 21st century commerce. It is facilitating trade and investment among the parties and furthering regional integration.

Central America and the Dominican Republic represent the third largest U.S. export market in Latin America, behind Mexico and Brazil.

U.S. exports to the CAFTA-DR countries were valued at \$26.3 billion in 2008. Combined total two-way trade in 2008 between the United States and Central America and the Dominican Republic was \$45.6 billion.

2.2 CAFTA-DR Environmental Cooperation Agreement

On February 18th, 2005, the CAFTA-DR Parties signed the [Environmental Cooperation Agreement \(ECA\)](#) 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. In particular, it depends on their ability to advance in the achievement of their long-term environmental goals pursuant to ECA priorities (article V):

Priority areas of cooperation (PA)

- 1** Strengthening institutional and legal frameworks and the capacity to develop, implement, administer, and enforce environmental laws, regulations, standards, and policies.
- 2** 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.
- 3** Fostering partnerships to address current or emerging conservation and management issues, including personnel training and capacity building.
- 4** Conserving and managing shared, migratory, and endangered species in international trade and management of marine parks and other protected areas.
- 5** Exchanging information on domestic implementation of multilateral environmental agreements that all the Parties have ratified.

- 6** Promoting best practices leading to sustainable management of the environment.
- 7** Facilitating technology development and transfer and training to promote the use, proper operation, and maintenance of clean production technologies.
- 8** Developing and promoting environmentally beneficial goods and services.
- 9** Building capacity to promote public participation in the process of environmental decision-making.

2.3 CAFTA-DR Environmental Cooperation Program

The Environmental Cooperation Agreement (ECA) sets out the framework for developing, implementing and evaluating an environmental cooperation program (ECP) under the supervision of an Environmental Cooperation Commission (ECC)¹, composed of government representatives from the relevant ministry or department of each party. Designated representatives from

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



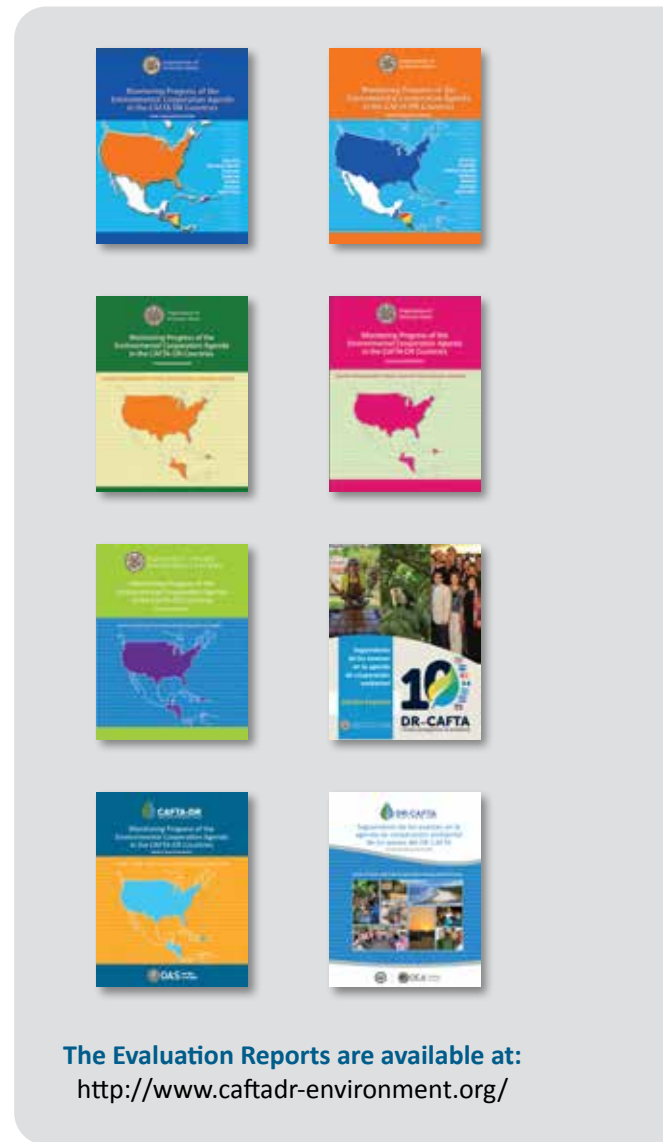
➤ CAFTA-DR Points of Contact Meeting
Miami, FL – May 2019

those ministries or departments serve as general Points of Contact (POCs) for cooperative work under the ECA. In terms of areas and modalities of operation, the ECA emphasizes capacity build-

ing; development of voluntary mechanisms, such as partnerships, market-based initiatives and economic incentives; adoption of best practices; and exchange of information.

2.3.1 Key partners of the Environmental Cooperation Program

- National Institutions are engaged in the management and oversight of their commitments within the Environmental Cooperation Agreement. They assist in the management of the environmental cooperation at a national level, in coordination with other actors such as ministries, universities, cleaner production centers, and local businesses.
- CAFTA-DR Points of Contact play a vital role in assuring the success of environmental cooperation. Designated by the ministries or departments responsible for cooperation, they are the “glue” of program coordination. They receive and transmit information to and from their governments, other Points of Contact and implementing agencies, contractors and NGOs.
- The Environmental Affairs Council was established to guide the implementation of the Environmental Cooperation Program; it’s comprised of representatives of the Parties at the ministerial level or equivalent. The Council generally meets on an annual basis.
- The Organization of American States prepares independent evaluation reports, using a Results-Based Management approach, to provide a general overview of the CAFTA-DR Environmental Cooperation Program, including success stories, case studies, challenges and recommendations documented from the beginning of the implementation of the Program, with a view to improve future environmental cooperation programming.



The Evaluation Reports are available at:
<http://www.caftadr-environment.org/>

- The Secretariat for Environmental Matters was created to provide support to the procedural mechanism process by which members of the public can make submissions asserting that a Party is failing to effectively enforce its environmental laws. The Secretariat operates under the direction and supervision of the Environmental Affairs Council. The Secretariat activities help promote compliance of environmental laws and public participation. For more information visit: <http://www.saa-sem.org>



Implementing Agencies are US Federal Government Agencies, contractors, and non-government organizations that plan and carry out activities to reach the objectives of the Environmental Cooperation Program. They provide training and other capacity building initiatives at the heart of the Program, perform essential assessments and analyses, build linkages between governments and civil society, and conduct outreach as well as education programs for the public. Implementing agencies include:



3. Results of the Environmental Cooperation Program

This section provides an overview of achievements from ECP interventions carried out in the past 15 years. Given the broad range of work undertaken, outcomes are presented under 18 Areas of Implementation (marked “A” through “R”), which were identified for this report to better grasp the impact of the work and guide the reader.

These 18 Areas of Implementation are further organized under five Areas of Focus (denoted I through V), which were selected in 2005 to guide the work of the ECP:

- I. **STRENGTHENING GOVERNMENT INSTITUTIONS FOR EFFECTIVE ENFORCEMENT OF ENVIRONMENTAL LAWS, REGULATIONS, POLICIES AND NORMS**
- II. **INCREASING PUBLIC PARTICIPATION AND TRANSPARENCY TO SUPPORT INFORMED ENVIRONMENTAL DECISION-MAKING**
- III. **PROTECTING AND CONSERVING WILDLIFE AND HABITATS FOR LONG-TERM ECONOMIC AND ENVIRONMENTAL DEVELOPMENT**
- IV. **IMPROVING MANAGEMENT AND CONSERVATION OF THE ENVIRONMENT TO SUPPORT SUSTAINED ECONOMIC GROWTH**
- V. **IMPROVING PRIVATE SECTOR ENVIRONMENTAL PERFORMANCE**

In order to continue to track progress on the nine Priority Cooperation Areas (PA) identified in the ECA (referenced earlier in section 2.2. CAFTA-DR Environmental Cooperation Agreement), the outcomes have been associated with the relevant PA(s).

The report also contains summaries of projects implemented under the CAFTA-DR Small Grants Program, which aims at increasing environmental protection through civil society engagement and public participation in CAFTA-DR countries. The principal strategy of the program is to provide seed funding of up to US\$50,000 to a civil society organization (CSO) in each CAFTA-DR country to support the implementation of a project that aims to incentivize local engagement in environmental management. CSOs selected also participate in trainings and mentoring programs. Projects were implemented in some of the areas of implementation mentioned above, with public participation as a cross-cutting theme and common denominator.

I. STRENGTHENING GOVERNMENT INSTITUTIONS FOR EFFECTIVE ENFORCEMENT OF ENVIRONMENTAL LAWS, REGULATIONS, POLICIES AND NORMS

Strong environmental institutions, laws and policies and their effective enforcement, effective implementation of Multilateral Environmental Agreements (MEAs), and a civil society actively engaged in environmental decision-making and enforcement are key factors in ensuring that CAFTA-DR governments meet Environment Chapter obligations.

The CAFTA-DR ECP aims at strengthening environmental institutions, laws and policies, and promoting effective implementation and enforcement of these laws and policies, as well as the effective implementation of MEAs. To achieve this goal, the ECP has: (1) trained inspectors, prosecutors, investigators, judges, and other law enforcement officers on investigating, prosecuting, and adjudicating violations of civil and criminal environmental laws; (2) provided technical assistance to wastewater analytical laboratories; (3) improved coordination of officials responsible for enforcing laws related to ensuring the sustainability of fisheries in the region; (4) trained customs officials to identify shipments that potentially violate obligations under MEAs; and (6) developed environmental compliance and enforcement indicators, to name some of the results achieved in 15 years of environmental cooperation.

CAFTA-DR ECP's efforts under this rubric are organized in the following Areas of Implementation:

The Program's efforts include:



A. Modernizing environmental impact assessment



B. Strengthening wastewater management capacity



C. Increasing knowledge in solid waste management



D. Improving management of chemicals and hazardous substances



E. Improving air quality management



F. Improving procedures for filing environmental complaints



G. Strengthening environmental management information systems



H. Greater technical capacity on the implementation and enforcement of environment legislation



I. Improving fisheries regulation



J. Improving environmental curricula of universities and other institutions of higher learning



A. MODERNIZING ENVIRONMENTAL IMPACT ASSESSMENT

1 3 6 9

Environmental Impact Assessments (EIA) provide a tool to integrate environmental, economic, and social concerns, while mitigating adverse impacts on natural and human environments. EIAs allow governments to set conditions for approval (i.e., for site selection, construction, operation and closure), plan for infrastructure needs and land use, and monitor impacts and compliance. If EIA requirements are circumvented prior to construction there can be significant environmental, economic and social costs down the road. Unnecessary costs and delays caused by inefficiencies in the EIA process reduce the benefits sought from economic investment.

MAIN OUTCOMES

- *EPA and ECP partners trained at least **140 technicians** on the principles of Environmental Impact Assessment (EIA) review for the commercial mining, tourism and energy sectors.*
- *Existence of procedures of EIA certification and registration.*
- ***3 technical guides** were prepared with EPA leadership, to support the revision of EIA in the metallic and non-metallic mining, energy and tourism sectors (<https://www.epa.gov/international-cooperation/technical-review-guidelines-environmental-impact-assessments-tourism>).*
- *Every country in the CAFTA-DR region has implemented an improved procedure for EIA review. Also, four countries (Costa Rica, Dominican Republic, El Salvador and Nicaragua) are using the NEPAassist GIS-based analytical tool.*

- *Workshops, field visits, and technical visits to improve the capacity of public institutions in EIA.*
- ***6 new and/or improved procedures** for EIA review and environment permits and **6 countries** implement a system of follow-up and control of environmental complaints.*

Strengthening the review process for Environmental Impact Assessment

With support from the CAFTA-DR ECP, the U.S. Agency for International Development (USAID) and the U.S. Environmental Protection Agency (EPA) developed an initiative to upgrade the environmental impact assessment systems in Central America and Dominican Republic. The work focused on strengthening the technical capacities and developing the technology needed to improve environmental standards in order to promote economic growth without negative effects on the environment. For instance, in El Salvador, before the CAFTA-DR ECP intervention, the process for the approval of environmental permits, particularly in the construction sector, was lengthy and complex. The issuance of environmental permits is now faster and more efficient given enhancements conducted on El Salvador's Environmental Assessment System. This new system is the first on-line platform of its kind able to categorize the projects proposed as “low”, “medium” or “high” risk to the environment. The “low-risk” projects, which represent 60% of the projects in the construction sector, can now be streamlined thanks to the quick categorization process and on-line revision. According to the Ministry of Environment and Natural Resources (MARN), this tool has reduced the revision period for obtaining an environmental permit deemed as “medium-risk”

to the environment, from 62 to 40 days; and the revision period for “high-risk” projects has been reduced from 40 to 5 days. This new system has been successful in practice and could become a model for other countries in the region.

In addition, USAID supported MARN in the implementation of three complementary modules to improve the Environmental Assessment System, in the control and follow-up of projects, including consolidation of consultations, follow-up and alerts of the processes and integration of geographic information, which contributes to the decision-making process. In the Dominican Republic, support provided to the electronic platform to follow-up on Environmental Compliance

Reports (ICA, in Spanish), considerably reduces costs by simplifying the compliance report without the need for intermediaries. This electronic platform also helps to strengthen transparency and provide real-time information that facilitates the decision-making process. Involving the public and stakeholders in the EIA process leads to better identification of economic, social, and environmental costs and the development of future monitoring systems. Clear and transparent enforcement of EIA requirements, procedures, and commitments to mitigation and monitoring helps governments, investors, civil society and Indigenous nations mitigate risk and increase opportunities for longer term sustainable economic growth.

Technical review guidelines for Environmental Impact Assessments in the tourism, energy and mining sectors



With the support of the USAID, EPA coordinated a regional collaborative process with CAFTA-DR partners to develop EIA Technical Review Guidelines for three sectors identified as priorities: energy, mining and tourism.

The guidelines are a product of regional experts in EIA and the relevant sectors, drawing upon existing materials from within and outside these countries and from international organizations. The guidelines aim to strengthen Environmental Impact Assessment of proposed projects undergoing review by government officials, non-governmental organizations and the general public throughout the life of the projects. The guidelines are intended to help users to identify, avoid, prevent and/or mitigate potential adverse impacts, and increase potential beneficial impacts. These guidelines do not represent the policies, practices or requirements of any one country or organization. Each EIA Technical Review Guideline consists of the following components:

- **Volume 1** contains the guidelines that track internationally recognized elements of an EIA with a glossary and references.
- **Volume 1, Part 2** contains an example Terms of Reference, which is cross-linked to Volumes 1 and 2 for the different types of mining, energy, and/or tourism projects. Countries can use this as a reference as they prepare their own EIA program requirements.
- **Volume 2** contains Appendices with detailed information on the applicable sector, requirements and standards, predictive tools, and international codes.

Source: <https://www.epa.gov/international-cooperation/capacity-building-programs-under-dominican-republic-central-america-united#eia>

Establishing a process of certification and registration for environmental consultants and auditors

The CAFTA-DR ECP helped in the development of the course “Principles of EIA Review,” and it was implemented in the CAFTA-DR region. The aim of this course was to create a pool of trained consultants and form an official registry of EIA technical consultants. This standardizes, to the extent possible, the process for EIA reviews in the region and institutionalizes EIA training to ensure its continuity beyond the life of the ECP implementation. In addition, a three-day course on the training of trainers was offered, to create a database of facilitators for future EIA course offerings. For example, in the Dominican Republic, NEPAssist, a GIS-based analytical tool, which is a web mapping application for EIA that helps increase the capacity of the ministries to efficiently access, integrate and analyze environmental, social and economic information, has been integrated within an already existing internet-based EIA tracking system. NEPAssist provides instantaneous access to distributed environmental, social and economic information drawn from many different institutions; instantaneous spatial integration of the data; and analysis to help respond to citizens’ complaints, plan inspection activities, and make compliance status, thus permitting EIA processes and making them transparent to the public.

The combination of these two tools has given the country a robust instrument that responds to all the requirements of the existing legislation, making the review process more transparent, efficient and expeditious, as well as allowing for effective accountability in the granting of permits. The review process at the same time has been simplified, requiring a single team-based review session, and has improved the availability and quality of information for project proponents and civil society. Furthermore, coupling the

tracking system with the NEPAssist, has allowed easier identification of projects through geospatial mapping and visualization of actual satellite imagery. This in turn has facilitated the screening of information to confirm the veracity and completeness of applications and EIA documents and setting priorities for review, inspection and enforcement. If the public or local officials observe construction at a site, they can check whether it has EIA approval, helping to monitor compliance with EIA requirements and promoting transparency. It also enables EIA review staff to quickly identify whether a project may raise issues with protected areas or flood zones, as well as in general assess the environmental and social impacts of development projects. The implementation of both systems is a great achievement for the Dominican Republic, as it quickly put information at the hands of individuals making environmental management decisions.

Workshops and technical visits to improve the capacity of public institutions in environmental impact assessment

Regional technical workshops (2007-2012) were held to analyze the advances and challenges that countries face with regards to the administration of environmental impact assessments. The purpose of the workshops was to identify solutions to common and current problems in each country, which will allow them to reach a consensus regarding the strategies and procedures required to establish a common agenda.

National events and activities were also organized to train technical staff from ministries of environment, tourism, as well as members of the private sector and academia. It was under this context that Environmental Impact Assessment Guidelines were developed and validated, through a collaborative process consisting of two regional expert meetings for discussion followed by sev-

eral rounds of review and comment on draft documents, and also benefited from the overall guidance and active involvement of country EIA Directors. The work was supported by USAID and their consultants.

“Our work dynamic has completely changed for the best. We have gained significant time savings as we don’t have to scan anymore and verify everything with cartography. The struggle in consulting free software available online and dealing with its limitations is over. Everything now is in one single place.” — Technicians, Single Entry Unit (Ventanilla Unica), Ministry of Environment and Natural Resources (Dominican Republic)

“The strength of these [NEPAssist data with the EIA tracking] systems lies in the reliability and accuracy of information that can be accessed in real time by users.” — Abraham Rodríguez, Technician, Single Entry Unit (Ventanilla Unica), Ministry of Environment and Natural Resources (Dominican Republic)

“We are very happy with how the system is working and the time savings that have been accomplished.”
— Roberto Herrera, President, National Network of Corporate Support for Environmental Protection (Dominican Republic)





B. STRENGTHENING WASTEWATER MANAGEMENT CAPACITY

1 3 6 9

Wastewater management has been a priority for the CAFTA-DR countries and a key benchmark for environmental monitoring in the region. Even though the region has a wealth of water resources, the high levels of pollution in rivers and lakes due to inadequate environmental controls constitute a serious challenge. The ECP has helped reverse this situation through greater implementation of performance standard methodologies and regulations in wastewater management, as well as the establishment of reference laboratories.

MAIN OUTCOMES

- *All countries have received tools to establish wastewater discharge parameters for key industrial sectors in the region.*
- *EPA provided technical assistance to the CAFTA-DR countries in the development of a regional model wastewater regulation, as part of the harmonization of environmental regulations, policies and procedures program.*
- *Countries have a greater institutional capacity in the regulatory and technical assessment process of wastewater treatment plants.*
- *Improved capacity of regional laboratories to determine the quality of wastewater discharge. EPA trained wastewater labs in the region on ISO 17025 Water Quality Standards, leading to the selection of a regional and four national Reference Labs. EPA also completed a manual on appropriate wastewater treatment for the region.*

Greater institutional capacity in wastewater management

CAFTA-DR countries are utilizing a regional Standard Wastewater Model as template, which is a scientific methodology that established 12 basic elements for developing and implementing regulatory programs for the discharge of effluents. The countries have initiated a process of discussion and socialization of the standard at the public-private levels, so they can slowly begin to lay the foundations in order to adapt this regional instrument into national regulations.

The Dominican Republic, El Salvador, Guatemala and Honduras undertook activities to reach agreements on the allowed discharge parameters, handling of sludge and legislation. As a multi-stakeholder initiative, national agencies responsible for environmental management participated in this effort including, potable and sewage management agencies, as well as municipalities, the academic and private sector (textiles, coffee, paper mills and slaughterhouses). Some companies have voluntarily been implementing the parameters of this new regional standard.

With the support of USAID and EPA, technical diagnoses were performed in 12 domestic wastewater treatment plants in Costa Rica, the Dominican Republic, El Salvador, Guatemala, and Honduras, to observe their operations and propose optimization strategies. EPA prepared technical reports for each treatment plant identifying opportunities for optimizing operations to improve treatment and efficient use of energy. These diagnoses have helped to unite and standardize the technical procedures regarding wastewater management and therefore contributing to the improvement of the overall quality of the environment in the region.

USAID and EPA delivered technical workshops on wastewater management with sustainable technologies and operation of treatment plants, aimed at technical staff from the ministry of environment, as well as the academic sector and municipalities. A regional training workshop on design, maintenance, process control and oper-

ation, and management factors limiting the performance of treatment and wastewater plants was held in Costa Rica. One of the outcomes of the workshop was a set of recommendations to improve the operation and performance of these plants.

Improved capacity of regional laboratories to determine the quality of wastewater discharge



The CAFTA-DR ECP also conducted interventions (2013-2018) to improve the capacity of regional laboratories to accurately determine the quality of the wastewater discharge. An audit process showed that each country had shortages in different areas, such as: sampling, traceability, custody of the process chain and comparisons between laboratories. Based on these evaluations, EPA worked with 12 laboratories² from Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua, to train them on ISO 17025 Water Quality Standards (a quality control system, technically competent and capable of generating valid results), leading to the selection of a regional and four national Reference Laboratories. An inter-comparison process among laboratories was developed. This work allowed for a pre-certification of laboratories and helped establish a wastewater reference network for the CAFTA-DR region to help increase the sustainability of water resources in the region.

² One laboratory was located in Panama: the Water and Physical-Chemical Services Laboratory of the Universidad Autonoma de Chiriqui (LASEF).



PRCC. Cocabel, Wastewater Treatment Plant, Lempira, Honduras.

Small Grants Program

Country

Costa Rica

Organization

Asociación
Centroamericana para la
Economía, la Salud y el
Ambiente (ACEPESA)

Project

Improvement of the
Sanitation Conditions
of the Population of the
District of Arancibia-
Puntarenas

Year: 2013

The project implemented by ACEPESA took place in the Río Aranjuez basin, in the communities of Ojo de Agua, Bajo Caliente, and Corazón de Jesús, in Puntarenas, Costa Rica, and promoted proper disposal of wastewater and solid waste. The goal was to establish a model for improved sanitation conditions in three communities through public participation and to reduce watershed contamination. Each community established working committees that assessed the locality's environmental issues and identified key actors to collaborate within their communities. The Municipality of Puntarenas and the National Energy Company are two key actors that worked to pursue the project's goal.

Through participatory processes, three community committees established 26 "bio gardens" to treat wastewater and ten compost containers. A community-level solid waste management system began in Puntarenas. The municipality will be responsible to gradually implement it under the Waste Management Law in collaboration with citizens and other civil society sectors.

Other relevant outputs include training 650 people on wastewater and solid waste management and related laws through 28 workshops, including 109 students in global water monitoring activities. The project's success lies in the community committees' organizational effort, their will to improve their surrounding environmental conditions, and reaching out to their local authority to jointly comply with national legislation.



➤ Site Visit to Small Grants Project in Osa Peninsula, Costa Rica

Small Grants Program

Country

El Salvador

Organization

Fundación Nacional para el Desarrollo (FUNDE)

Project

Strengthening Civil Society of El Salvador for Public Participation and Social Auditing on Environmental Issues under CAFTA-DR

Year: 2013

"If we have an environmental pollution problem, we now know that we can go to the Ministry of the Environment and the Secretariat of Environmental Matters."

Participant in a workshop at Puerto La Libertad, El Salvador.

FUNDE implemented a project on integrated water resources management (IWRM) focusing on creating a "Handbook of environmental public participation mechanisms under the CAFTA-DR," which aims to describe the mechanisms of public participation in environmental matters outlined in CAFTA-DR's Environment Chapter 17. This resource is different from other sources of information related to Environment Chapter because it capitalizes on extensive research using both literature analysis and interviews to create a step-by-step practical guide on using the five mechanisms provided for in the CAFTA-DR. The second component of the project focused on training and disseminating the Handbook among organizations that work with environmental issues, specifically IWRM. Under a methodology specifically developed for this project, FUNDES conducted workshops fostering the attendants' active participation to guarantee an understanding of the public participation mechanisms. A total of 84 people, representing 31 civil society organizations received training on accessing the public participation mechanisms.



Small Grants Program - Public Participation workshop in Santa Ana, El Salvador



C. INCREASING KNOWLEDGE IN SOLID WASTE MANAGEMENT

1 3 6 9

The CAFTA-DR ECP has contributed towards strengthening capacities for proper disposal of solid waste, including the construction, operation and inspection of landfills; investigation of contaminated sites; planning of methane gas systems in sanitary landfills; and improving processes for recycling electronic products.

MAIN OUTCOMES

- To increase the value of solid waste, CAFTA-DR ECP contributed to the promotion of the web-based commodity exchange for solid waste, BORSICCA (Industrial Waste Exchange for Central America and the Caribbean). CAFTA-DR governments have established Regional Solid Waste Management Exchange units.
- Increased awareness of proper solid waste management in communities supported by small grants incentives.
- CAFTA-DR ECP collaborated with countries to improve and harmonize environmental regulations, policies, and procedures related to solid waste management practices.

Costa Rica: Law for Integrated Solid Waste Management approved.

El Salvador: National Solid Waste Policy being updated.

Guatemala: National Regulation of the law on solid waste management; 1 regional policy/strategy of integrated solid waste management.

Nicaragua: updating of the national policy for solid waste management and elaboration of technical norms in solid waste.

Dominican Republic: feasibility study on the modification of a solid waste dump and a study on the capture and reuse of methane gas, as part of a pilot project carried out in the municipality of San Cristobal.

- Regional workshop on the topic of comprehensive management of electronic waste.
- Conducted information exchanges and training, including:

courses on sanitary landfill inspection protocol and audits;

development of regulations, policies and procedures for sanitary landfills and solid waste practices; and

a design plan to retrofit an open dump into a sanitary landfill, including the capture and potential use of methane gas, for use as a clean energy source.

Increased community awareness in proper treatment and disposal of solid waste

Under the CAFTA-DR Small Grants Program, more than the 20 selected projects, led by CSOs, focused on promoting proper solid waste management through a community-participation model.

The Manabao Zero Trash Project, implemented under the Small Grants Program, promoted recycling as a profitable economic activity while fostering a change in communities' attitude and behavior: 88 people (43 women) received training in composting and producing organic fertilizers, with the goal of creating a small business.



Small Grants Program

Country
Guatemala

Organization
Mancomunidad Tzolojya

Project
Support in the Implementation and Consolidation of the Model for the Adequate Management of Solid Waste in the Municipality of Santa Lucía Utatlán of the Department of Sololá

Year: 2013

“We think that this project in the future could serve as an example for other communities and other municipalities.” **Moisés Villagrán**, Coordinator of the Community Development Council in Santa Lucía Utatlán, Guatemala



► Photo Mancomunidad de Tzolojya waste management.

The Atitlán lake basin in Guatemala’s central highlands extends over 548 square kilometers, housing 200,000 inhabitants in 15 municipalities of the Department of Sololá. The lack of proper waste treatment or disposal is the primary source of contamination in the lake. Even though most of the basin lies in a protected area, sound environmental management remains a challenge. Most municipalities within the basin lack an integrated waste management system; streets, hillsides, and riversides have been used as municipal dumpsites, putting the communities’ health and environmental conditions at risk. Three municipalities of Sololá (Sololá, Santa Lucía Utatlán, and San José Chacayá) formed the Manctzolojya association to address common social-economic and environmental issues. This association of municipalities began a pilot project in 2013 on integrated solid waste management in San José Chacayá, which, due to its success, was proposed for replication in Santa Lucía Utatlán. The municipalities’ experiences are now widely recognized beyond the basin’s boundaries as a municipal integrated waste management model.

The project addressed four outcomes: a) environmental education and awareness on solid waste management and its related legislation; b) classification of solid waste from its origin (homes); c) establishment and operation of a recollection and transportation system for classified solid waste; and d) closure of unlawful dumping sites. The main achievements include training of 16 environmental promoters in a two-month environmental certified course; delivery of environmental education to more than 1,300 students of seven elementary schools through puppet shows and other recreational activities; training of more than 2,640 people on the correct way to classify and dispose of solid waste (organics, non-recyclables, and recyclables); more than 40 workshops on environmental information and issues conducted during the implementation period. As part of the mass media campaign, radio spots, TV inserted messages, informational posters, and other outreach material was broadcasted across the implementation area and other municipalities of the basin. Municipal authorities have adopted the project’s outcomes, managing the collection system, and enabling an environmental unit within their municipalities.

Small Grants Program

Country

Honduras

Organization

Asociación de Mujeres Indígenas Miskitas/Miskitu Indian Mairin Asla Takanka (MIMAT)

Project

Strengthening of Integrated Wastewater and Solid Waste Management through Public Participation in Two Municipalities in the North Zone of Rio Plátano Biosphere, La Mosquita

Year: 2013

“The project allowed all MIMAT female members to become recognized in their communities.” **Cendela López Kilton**, Presidenta de Asociación de Mujeres Indígenas Miskitas (MIMAT)



➤ Site Visit to Small Grants Project in La Unión community, El Porvenir, Honduras.

MIMAT’s project sought to promote and enhance women groups’ participation and role to address and improve solid waste and wastewater management that threatened these communities’ environment and well-being. The project worked with local authorities to prepare action plans to improve the sanitation and environmental conditions through a solid waste management system that includes recollection and treatment of solid waste, accompanied by an educational and awareness campaign. MIMAT conducted workshops on national legislation and procedures related to solid waste management and CAFTA-DR’s Environment Chapter public participation mechanisms. The development of these training workshops with women from the area also had a gender component to strengthen their active participation. Two other project outcomes include an environmental law compendium to serve as a reference document for stakeholders and other interested parties; and a technical study on solid waste management to

describe the excellent modality and sites for disposal of the solid waste in Brus Laguna and Juan Francisco Bulnes.

Based on their strengthened capacities and access to useful information, both women groups had several advocacy meetings with the local authorities to establish agreements on developing a solid waste management system in each municipality. Esfuerzo y Triunfo achieved a signed commitment with their local governments to acquire a truck to collect trash in their area. Both municipalities designated specific areas to locate solid waste treatment and crematoriums. Also, four members of the two groups of women are part of the development management roundtables in the municipalities of Juan Francisco Bulnes and Brus Laguna. Both groups also applied for additional funding of their activities, acquiring more than US\$50,000 to implement their work plans.

Small Grants Program

Country
Costa Rica

Organization
Fundación para la Sostenibilidad y Equidad (ALIARSE)

Project
Education for Citizen Action in the Integral Management of Solid Waste in San José

Year: 2015



Community project in the district San Sebastian, San José, Costa Rica: environmental leaders, the Ecopoint (recycling materials gathering point), and mural. Overall, six Ecopoints have been established in San José.

"The CAFTA-DR Environmental Cooperation Program is critical because previously I was leading the Manos a la Obra Project, which had a lot of relationship with the ALIARSE Foundation because it reinforces what we had already started. Now with more information about Law 8839, we can reach the community with more knowledge and thus achieve a better organization."

Isabel Arrieta Pizarro, Community Leader in Pavas District, Costa Rica.

ALIARSE's project sought to strengthen enforcement of the law for Integral Solid Waste Management (Law 8839) through awareness and capacity building of community leaders and local organizations in four districts of San José. They empowered mostly women and youth from marginalized communities suffering high unemployment and school dropout levels and deficient access to environmental education.

ALIARSE set up an environmental leadership program to improve participants' communication skills and community action capabilities, including 95 community leaders. The project developed other innovative tools to raise awareness and educate children and adults. Approximately 4,000 students from 20 education centers learned about sustainability through an educational play, and 5,000 individuals learned about Law 8839 through a video game.


ALIARSE worked in partnership with the Municipality of San José. Their project intended to complement the municipality's Recycling Program, which has the potential to improve on quantity and quality of solid waste collected. Municipal capacities were strengthened with the installation of six EcoPoints to facilitate the collection of recyclable materials and the training of 400 individuals in processing environmental complaints. This experience will serve as a basis for future solid waste management investments and activities carried out by the Municipality and will occur in other districts.

Small Grants Program

Country
Nicaragua

Organization
Instituto de Investigaciones y Gestión Social (INGES)

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

Environmental awareness campaign in Waspam, Nicaragua. 
Photo courtesy of INGES.

The project implemented by INGES in the majority indigenous municipality of Waspam, resulted in the update of a municipal solid waste management plan, last updated in 2003. The new SWM Plan was developed in consultation with government institutions, local authorities, grassroots leaders, religious representatives, municipal market representatives and youth. The final version of the Plan was disseminated widely and translated into the local Miskitu language; incorporated into local municipal work plans; and presented to the Waspam Youth Promotion Committee (COPROJUVE), as well as representatives from the municipal market. In addition, INGES conducted an environmental awareness campaign focusing on proper management and disposal of solid waste. The campaign reached at least 18,000 people from 12 neighborhoods. Updating a municipal SWM plan with the input of members of the community ensures everyone's ownership and engagement in better managing solid waste.



Small Grants Program

Country: Dominican Republic

Organization: ECOBASURA

Project: Public Participation to Promote Good Practices in Solid Waste Management

Year: 2018

ECOBASURA implemented and developed a series of open forums in the municipalities of Baní and Azua and in four different points in the National District, to raise awareness and promote proper solid waste management. With the slogan “Cash in on your garbage,” environmental experts led six forums for 1,474 people (936 women and 538 men) including students, community neighbors and the public. The forums included 27 environmental education talks; 74 workshops to teach people how to use recycled materials (e.g., paper, metal and plastic) to make earrings, pencil holders, and decorative items; and an additional 28 workshops focused on

raising awareness of hazardous waste management. During the forums, ECOBASURA explained how to separate waste at home and showed attendees an educational video with information on proper management of hazardous and non-hazardous household waste. In parallel, ECOBASURA implemented an awareness campaign to promote messages of environmental stewardship, delivered through radio, television, as well as social networks, reaching almost 35,000 people in the area. Promoting good practices in solid waste management raises awareness of some of the environmental problems local communities can address.

Small Grants Program

Country
El Salvador

Organization
Asesoría a Programas y
Proyectos de Desarrollo
(ASPRODE)

Project
Improved Solid Waste
Management in
Communities

Year: 2019

Site Visit to Small Grants Project
in Acajutla, El Salvador. ◀



The project implemented by ASPRODE, in the municipality of Acajutla, provided training for students, leaders of Community Development Associations, fishing cooperatives, and municipal employees of Acajutla on issues related to proper solid waste management. ASPRODE developed a training plan that included modules on solid waste management, environmental legislation, and mechanisms to improve public participation. ASPRODE delivered the modules to 1,132 people (53% women and 47% men). Knowledge assessments carried out at the end of each module showed an average 81.9% passing rate (exceeding ASPRODE's goal of 80%). The trainings will help the community to better separate the waste to ensure efficient management and treatment.

Small Grants Program

Country
Costa Rica

Organization
Asociación Centro de Derecho Ambiental y de los Recursos Naturales (CEDARENA)

Project
Solid Waste Management in Coastal Communities of Paquera, Puntarenas

Year: 2020

CEDARENA's project aimed at reducing pollution and improving waste management in the coastal communities of Paquera through the domestic treatment of organic waste and supporting the draft of a Biodegradable Waste Management Strategy for the district. The project provided 45 families with a composting box and training on how to compost their organic waste through the Takakura method, which involves making a seed compost from fermented solutions and a fermenting bed. Organic waste is mixed with the seed compost and left to degrade in a ventilated container or basket. The process leads to obtaining organic fertilizer, which benefits families. Ecolur, the company that worked with the project, provided guidance and follow up via a WhatsApp group in which participants shared questions. The participating families have composted an estimated 9.1 tons of organic waste through the project. Both CEDARENA and Ecolur also put together a manual for domestic compost, which serves as a resource for other families who couldn't participate in the project's workshops. The success in executing this composting project generated enthusiasm for implementing a larger municipal compost plan. The municipal council has already received a formal presentation of a Biodegradable Waste Management Strategy for Paquera.



➤ Site Visit to Small Grants Project in Paquera, Costa Rica

Successful results obtained by the Industrial Waste Regional Electronic Exchange

The Central America and the Caribbean Industrial Waste Exchange (BORSICCA), an exchange mechanism based on a virtual platform that began operations in October 2009 with the support from the USAID and the Central American Commission for Environment and Development (CCAD) in the framework of the CAFTA-DR ECP. BORSICCA is the culmination of an idea long cherished in the region that seeks better management of industrial waste and byproducts, and reduce the pressure over the landfills and waste dumping sites. It also promotes the development of enterprises through buy/sell mechanisms for plastics, paper, cardboard, metal, glass, wood, used tires and motor oil, organic residues and other non-hazardous materials.

BORSICCA is the first regional exchange of this type, and more than 100 registered users from almost all the countries in the region adhered in the first three months of operation, both companies that produce waste and others interested in recycling it. USAID contributed to the design of the computing platform; the selection and training of one operator for each country, which are the Cleaner Production Centers or the Industry Chamber in each country; a feasibility plan to sustain the mechanism; and a strong promotion of the exchange in each country.

Source: <https://www.sica.int/busqueda/Noticias.aspx?IDItem=50738&IDCat=3&IDEnt=696&IDm=2&IDmStyle=2>



D. IMPROVING MANAGEMENT OF CHEMICALS AND HAZARDOUS SUBSTANCES

1 3 9

Through the development of a pilot project for the design of a national Pollutant Release and Transfer Registry (PRTR), CAFTA-DR countries aimed at improving the management of chemicals and hazardous substances through the compliance of criteria established under the United Nations Institute for Training and Research (UNITAR) guide regarding the implementation of a PRTR system, the reduction of the use of mercury in hospitals, and capacity building in the event of the spillage of hazardous substances. A pilot project was launched in El Salvador and the Dominican Republic (2008-2010) for the implementation of the Strategic Approach to International Chemicals Management (SAICM) and the development of a regional strategy. In addition, some of the activities implemented focused on the design and development of information technology infrastructure (software platform) and the analysis of the legal norms to support PRTR implementation.

MAIN OUTCOMES

- 500-2000 hospital employees trained to handle inventory of products and wastes containing mercury and the uses of mercury.
- 30+ institutions have had training in emergency management of spilled harmful substances.
- CAFTA-DR countries adopted a Pollutant Release and Transfer Registry (PRTR) work plan to track the release and transport of chemicals, waste, and hazardous materials according to United Nations Institute for Training and Research (UNITAR) guidelines.

Institutions trained in emergency management of spilled harmful substances

In 2010, EPA conducted capacity building in more than 30 institutions to respond to uncontrolled emissions across countries in the region. As result of this newly acquired capacity, officials from the Ministry of the Environment and Natural Resources (MARN) in El Salvador were able to declare an environmental state of emergency in August of 2010, for the first time in its history, when a battery company released lead contaminants in the municipality of San Juan Opico in La Libertad. The technical assistance provided by the EPA, and its support to MARN and the National Administration of Aqueducts and Sewers (ANDA), allowed for the exploratory sampling in the area which provided evidence for this event. To address this environmental emergency, MARN promoted an intense inter-institutional cooperation effort to tend to those affected, and conducted sampling to learn the magnitude of the environmental damage.

Source: United States Agency for International Development (www.usaid.gov)

Reduction of the use of mercury in hospitals

In Costa Rica, the National Children Hospital (HNN) and Hospital Dr. Rodolfo Hernández Gómez in San Ramón, Alajuela were the two medical centers that participated in the “Mercury-Free Hospitals” program, developed by the EPA with support from the USAID. The project ended in 2009 but using the HNN as reference, other three major hospitals in the country joined the campaign to reduce the use of mercury: Hospital México, Hospital Calderón Guardia and Hospital de Alajuela.

According to Adriana Romero, Administrative Director of the National Children Hospital “the accomplishment obtained by the National Children Hospital is very important to the public hospital system and to the Costa Rican Social Security System (CCSS); a large number of people from other hospitals come here to receive training on mercury issues.”

With financial support from USAID, the HNN was able to replace old equipment that used mercury. They purchased 700 digital thermometers, 63 new blood measuring kits and 6 expansion probes. At the same time, 500 employees received training on the dangers of mercury poisoning.

Approximately 30 kilograms of liquid mercury were collected since the beginning of the project, an important accomplishment given that one single gram of mercury can contaminate almost one thousand hectares of water, with great risk especially to children and unborn babies.

During the process, a handbook and several protocols were developed. These are in use today. Also, a technical announcement from the HNN was produced aimed at eliminating the mercury thermometers in use in the 29 public hospitals of the CCSS.

Inventory of pollutants

Between April 2008 and June 2009, a total of 1,910 point sources of pollution in the basin of the Great Lake of Nicaragua (also known as Lake Cocibolca) were inventoried in a database developed by the government with the support of the CAFTA-DR ECP. The inventory includes industries and major economic activities of the 10 departments of the country whose tributaries converge or border the Lake of Nicaragua. This has helped the country to take the necessary measures to reduce the pollutant impact in this great basin.

This inventory comprised the provinces of Masaya, Granada, Carazo, Rivas, Río San Juan, Chontales, Boaco, and the high regions of Jinotega, Matagalpa, and Managua. It also included the rest of the 17 provinces of the country. The database helped to determine the pollutant load from each activity and prioritize the greatest impacts, including wet coffee process in Matagalpa and Jinotega; dairies and tanneries in Boaco and Chontales; hotel activity, pork slaughterhouses, and poultry farms in Carazo, Masaya, Rivas, and Granada; food and chemical industries in Managua; and hotels and municipal wastewater in Río San Juan, among other sources.

As a follow-up to the inventory, the Ministry of Natural Resources (MARENA) and USAID conducted a second phase of the project to develop inspection plans by Province, and requesting environmental management plans from industries located in the basin of the Great Cocibolca, and thus contributing in the reduction of the polluting load and to regulate the economic activity.



E. IMPROVING AIR QUALITY MANAGEMENT

1 3 6 9

Improved air quality management will allow CAFTA-DR countries not only to better characterize and understand air pollution within their major cities from industrial processes and commercial transportation routes, but also to reduce air pollution at local and regional levels.

MAIN OUTCOMES

- *More stringent and harmonized air quality/fuel emissions standards are used.*
- *A new special regulation and training over 100 customs officials to control substances that deplete the ozone layer in Nicaragua.*
- *A national emissions inventory developed in Costa Rica.*

INITIAL EFFORTS

Costa Rica: Urban Air Quality Management

Starting in 2009 the Agency for Environmental Air Quality Management (DIGECA) of the Ministry of Environment, Energy of Costa Rica (MINAEC) began to develop a report on air quality not just for San José but for the entire Greater Metropolitan Area of the country (including the cities of Alajuela, Heredia, and Cartago, where 60% of the national population lives). This extended report was made possible through the donation of 10 new kits to measure suspended particulate matter made by the EPA through the CAFTA-DR ECP. Training was also given to the staff from the different authorities that integrate the Air Quality Monitoring Network: National University, MINAEC, Ministry of Health, and the Ministry of Public Works and Transportation.

The 2009 Air Quality Report confirmed, among other findings, an important presence of particles originated by public transportation, therefore allowing changes to be focused on this sector; such as relocation of bus stops, redefinition of routes, monitoring of emissions in highways, and improved controls on the quality of fuels used by public transportations.

In 2019, Costa Rica laid out a plan to zero out carbon emission by 2050. The plan involves decarbonizing four sectors: transportation, industry, waste management, and agriculture.

RECENT EFFORTS

Costa Rica: Improving the policies and practices of air quality management and strengthen regional cooperation

There is considerable variation in the current capacity of parties to CAFTA-DR to manage their air quality programs. For example, some countries conduct little-to-no routine air quality monitoring, while others regularly collect and share ambient air quality measurements. Similarly, vehicle import and emission restrictions and fuel quality standards vary by country, as does the existence and enforcement of stationary source emission limits. Air quality modelling capabilities for policy planning purposes also vary by country. In 2016, EPA and its cooperative agreement partner, Battelle, in collaboration with the Pan-American Health Organization (PAHO), designed and are implementing a program to enhance the capabilities of CAFTA-DR countries to improve air quality, including regional dialogues, and delivery of webinars related to air quality management to help strengthen the design and implementation of air quality management policies.

Based on the discussions generated at the dialogues, the CAFTA-DR representatives agreed to address four AQ issues: (1) emission inventories, (2) standards and regulations, (3) quality assurance/quality control (QA/QC), and (4) data analysis and equipment. EPA and Battelle developed and deployed a series of four webinars to address priorities identified by CAFTA-DR countries. Each webinar is designed to help improve the air quality programs of participating countries by providing tools, techniques, expert knowledge and best practices. The general objective of each webinar is to: 1) strengthen participant's ability to develop and improve the policies and practices of air quality management within their countries or organizations; and 2) strengthen cooperation and collaboration between participating countries, organizations and individuals both within countries and with the region. In the development process of the webinars, EPA and Battelle worked closely with PAHO and the United Nations Environment Programme's Regional Office of Latin America and Caribbean. This collaboration led to the use PAHO's platform to launch the webinars, allowing for an opportunity to share knowledge and expertise with the region and beyond.



F. IMPROVING PROCEDURES FOR FILING ENVIRONMENTAL COMPLAINTS

1 5 6 9

Between 2009 and 2010 CAFTA-DR countries worked on improving criteria and procedures for environmental complaints, coordination between institutions for processing of complaints, and the time taken to process a complaint. By developing a follow-up and control system to deal with environmental complaints, the environment authorities have made it simpler for citizens to file complaints, a procedure which empowers them to take action on environmental issues.

MAIN OUTCOMES

- *Enhanced capacity to use administrative procedures for filing and reviewing environmental claims.*
- *Enhanced capacity of government institutions to receive, process and respond to public complaints about violations of environmental laws.*
- *Costa Rica, El Salvador, Guatemala and Nicaragua have implemented a system of follow-up and control of environmental complaints.*

Improving the procedures to file environmental complaints

CCAD supported countries to improve their administrative procedures, with a focus on environmental complaints. Countries were supported in the formulation of the terms of reference to improve the procedures of environmental complaints and the design and development of systems that facilitate the analysis, follow-up, control and public access to the environmental complaints. Furthermore, terms of reference were defined for the modification of guidelines/regulations about the administrative procedures. By improving these administrative procedures, the general public have access to the relevant information concerning their national environmental legal framework.

Costa Rica, El Salvador, Guatemala and Nicaragua implemented a system of follow-up and control of environmental complaints. The environmental complaints system presents a vital tool in increasing the transparency of environmental cases in the CAFTA-DR region, as well as effectively engaging the general public, civil society and public sector in understanding environmental obligations under existing legislation. This tool will significantly bolster the capacity of corresponding environment ministries in managing a complaints system, as well as engaging society in public environmental regulation and governance. In addition, CCAD developed a software to control and monitor environmental complaints in the countries.

Attention to Environmental Complaints Increases

Guatemala implemented a system for monitoring and control of environmental complaints, which was able to successfully resolve several cases. In addition, the CAFTA-DR ECP contributed in the form of donated office and monitoring equipment, including computers and software, and has facilitated the development of a system and database for environmental complaints. Such improvements have helped to monitor complaints and expedite resolution. For example, while in 2009 fewer environmental complaints were submitted when compared to 2008, the system has enhanced the capacity to follow up on pending cases and promoted the enforcement of the environmental laws. This is reflected in the increased collections from sanctions up to June 2009 (GTQ 87,512.74 or approximately US\$10,500.00) that double the collections in 2008 (GTQ 48,569.37 or approximately US\$5,827.48).

With support from the CAFTA-DR ECP, the environmental complaints system in El Salvador was strengthened and received computer and communications equipment, while in the whole country newspaper and radio ads were placed, and posters were affixed in regional offices, along with banners and bulletins with information on the system. Before the ECP, El Salvador had an archaic system on paper, but now a software has been developed through which the entire complaint system is digitalized. Additionally, the cooperation has helped officials from the Environmental Inspection Department of the Ministry of Environment and Natural Resources, members of the National Civil Police, and other administrative officials to receive training on new computing tools used by the National System of Environmental Complaints of El Salvador.

Source: U.S. Agency for International Development (www.usaid.gov), Interviews with POCs and other government officials in Guatemala and El Salvador



Small Grants Program

Country
El Salvador

Organization
Asociación de Desarrollo Integral Sostenible para la Humanidad y Medio Ambiente (ADIS)

Project
Implementation and Disclosure of Environmental Complaint Mechanisms in El Salvador

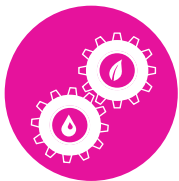
Year: 2010

“A healthy and balanced environment is based on the public participation of women and men who dare to report and achieve a change in attitude in favor of present and future generations.”

Roberto Alejandro Jimenez, ADIS Project Coordinator.

The project strengthened environmental compliance processes by raising awareness with communities and consolidating complaints at municipal governments and the Ministry of Environment. Simultaneously, the project generated dialogues and political advocacy at the local and national levels and enhanced a dynamic process of engaging civilians in monitoring compliance with environmental regulations to protect natural resources and the environment.

In 2010, ADIS organized and ran ten action groups in the ten municipal environmental units of the department of Chalatenango, which are working to resolve environmental issues in their jurisdictions. The Mayor of each municipality swore in these committees for environment management (CIGAS). ADIS also conducted training sessions on environmental legislation and correct procedures to submit complaints, using local and international mechanisms such as CAFTA-DR's Environment Chapter 17. A total of 1,483 people attended these events from rural areas and now better understand the importance of complying with the environmental legislation and their right to get involved in law enforcement in their communities. After the project, community associations supported by the project submitted 238 complaints to the local authorities to solve environmental issues. The CIGAS resolved 49% of the complaints, and the rest are still in process. The citizens of Chalatenango now understand that the mechanism provided for in the Environment Chapter 17 is an additional tool to local and national environmental frameworks.



G. STRENGTHENING ENVIRONMENTAL MANAGEMENT INFORMATION SYSTEMS

1 3 6

Implementation of Environmental Management Systems (EMS) in the private sector is a valuable voluntary initiative in the competitive CAFTA-DR market. This is another tool that is part of the strategy to strengthen the capacities of the countries to meet environmental requirements in the free market.

MAIN OUTCOMES

- *Eight firms in Costa Rica and four in El Salvador designed and implemented in 2008 their EMS.*

Promoting social and environmental responsibility within the private sector

As part of the CAFTA-DR ECP, USAID, EPA and CCAD, implemented the initiative titled “Capacity Development for the Use and Evaluation of Environmental Management Systems by Public and Private Sectors.” The initiative, aimed at helping companies that are aware of their social and environmental responsibility, achieve higher levels of competitiveness, quality, and superior environmental performance to enable them to meet environmental requirements necessary to participate in free trade markets.

Private sector companies in the region received training and capacity building focusing on setting up of procedures to ensure legal compliance; definition of objectives and targets to improve their performance in terms of waste generation, wastewater, water consumption and energy efficiency, efficiency in the use of materials, and

management of hazardous materials; establishing ongoing training programs for workers; integrating environmental variables in decision making processes; and guaranteeing corrective and preventive programs for their environmental impacts.

In Costa Rica, several firms completed the training, including Productos de Espuma S.A. (foam products), Gente Reciclando S.A. (recycling), Fideos Precocidos de Costa Rica S.A. (pasta products), Corporación INYCO, Beneficiadora Monterrosa S.A. (coffee processing), and Distribuidora Florex Centroamericana S.A. (wholesale distribution). The firms acknowledged participated in a process of comprehensive theoretical and practical training of 10 months, during which they were provided with technical assistance to design and implement the EMS appropriate to their needs. Participating companies (small, medium and large) have the capacity to implement their plans and start the system to improve their environmental management.



H. GREATER TECHNICAL CAPACITY ON THE IMPLEMENTATION AND ENFORCEMENT OF ENVIRONMENT LEGISLATION

1 3 6

The Environment Chapter of the CAFTA-DR, requires that the countries establish high environmental protection indexes and both improve and enforce their laws. CAFTA-DR countries have made progress in the way they carry out the legal environmental processes thanks to trainings on collection, analysis and use of evidence.

MAIN OUTCOMES

- *Implementing agencies worked with CAFTA DR countries to update and improve 227 laws and regulations to address wildlife trafficking, air and water pollution, solid waste management, and other critical environmental issues.*
- *A regional legal compendium was prepared and made available to all environmental prosecutors in each country, together with a national compilation of environmental jurisprudence and a manual on investigation, prosecution and sentencing of environmental crimes.*

Increasing capacity of the judicial system in resolving civil and criminal environmental cases

EPA, jointly with the U.S. Department of Justice (DOJ) and CCAD, provided technical assistance to increase capacity of the judicial system in resolving civil and criminal environmental cases. Training and capacity building activities were aimed at government officials from the ministries of the environment, lawyers and environmental judges, the environmental offices of the attorneys gen-

eral, and local governments from the different countries from the region, on topics related to the dissemination of environmental laws and how to obtain and use forensic evidence to ensure environmental compliance. Additionally, to improve the application and enforcement of the laws and regulations in each country, the ministries of the environment from Costa Rica, Dominican Republic, El Salvador, Guatemala and Honduras were supported in their establishment of a baseline, as a guide to measure environmental management, including areas such as wastewater, solid waste, environmental impact assessments, atmospheric emissions, chemical substances, environmental education and legislation.

EPA's capacity assistance included information exchange and training in areas such as investigation of environmental crimes to strengthen environmental law enforcement; and adjudicating environmental cases to strengthen the judicial response to environmental violations.

In addition to these efforts, three inter-institutional mechanisms were created to improve implementation of and compliance with environmental laws, including the Council for

Environmental Compliance in Guatemala, the Environment and Climate Change Commission in El Salvador, and the Central American and Dominican Republic Wildlife Enforcement Network.

Furthermore, the USAID Program for CAFTA-DR on Environmental and Labor Excellence (ELE) completed and validated with corresponding local authorities a compendium of environmental legislation for each CAFTA-DR country, providing users with a consolidated reference tool for environmental enforcement and regulation.

Providing training to improve submission

After 10 years of processing public submissions (a submission is a written assertion that states that a CAFTA-DR country is failing to effectively enforce its environmental laws), the Secretariat for Environmental Matters of the CAFTA-DR (SEM) concluded that there was a need to complete training on preparing proper submissions. The SEM identified the legal clinics associated with universities as potential partners to address this need. The various legal clinics in the region have full-time attorneys to advise practicing students, nationwide coverage, and a legal, physical and academic infrastructure to offer the environmental legal advice for potential submitters.

Since 2017, the SEM has worked with universities legal clinics in the region to provide environmental law advisory service. As a result, the SEM supported four universities in the preparation of environmental litigation manuals in three countries.

Further, two universities began dissemination of the manual and capacity building for professors, students and attorneys at their clinics. The SEM trained a total of



most of them lawyers or law students, in the field of Environmental Law and the SEM Citizen Submission Mechanism. The Legal Clinics Program received its first submission from citizens who received legal counseling from the Free Legal Clinic of the Autonomous University of Honduras.



➤ Puntarenas Port, Costa Rica.

Strengthening environmental management of ports



The Central American Commission of Maritime Transport (COCATRAM) conducted activities (2016-2020) in the region to strengthen institutions for effective compliance and enforcement of environmental legislation and protection at ports in the CAFTA-DR region. These activities strengthened the capacity of Port Environmental Management Units, by improving implementation of National and Port Action Plans and the ISO 14001 standard (the international standard that specifies requirements for an effective Environmental Management System); and complying with the Central American “Green Code”. Several workshops aimed at port operators provided capacity for improved implementation of Environmental Management Systems and Compliance Internal Audit, and offered train-the-trainer opportunities so others could become instructors on these topics.

With support from the ECP, COCATRAM launched an online platform on Solid Waste Management at Port Reception Facilities in the CAFTA-DR region and Panama (fogap.online/web/). This platform serves as a tool to visualize, plot and compare data from 57 ports and terminals, including type and number of vessels docked; volume of solid and liquid waste processed; available technical assistance; and applicable regulatory frameworks per port. COCATRAM will continue to update and maintain the platform, which will continue to be accessible free of charge.

Small Grants Program

Country

Guatemala

Organization

Centro de Acción Legal Ambiental y Social de Guatemala (CALAS)

Project

Promotion of the Mechanisms of Public Participation of CAFTA-DR's Environment Chapter

Year: 2010

“The success of the project lies in the fact that the people of the communities understood the use of the public participation tool provided by CAFTA-DR's Environment Chapter.”

Juliana Edith Turqui, CALAS Public Participation Coordinator

The CALAS project was implemented in two isolated Mayan communities (Mam and K'iche') to disseminate the CAFTA-DR's Environment Chapter mechanisms of public participation. The objective was to empower and enable these populations to use this mechanism and its opportunities. In particular, the project aimed to guide communities through preparing submissions asserting environmental non-compliance to the Secretariat of Environmental Matters (SEM), and thus making use of the submissions mechanism provided for in the Environment Chapter.

The project also included making and printing a thousand copies of a practical guide for using the public participation mechanisms of the Environment Chapter in Spanish, and Mayan languages Mam, and K'iche'. CALAS presented the guide at a press conference to inform local communities about the project's progress, including updates on workshops where civil society, community leaders, and indigenous organizations participated. After the project, the SEM received three cases from these communities of non-compliance with Guatemala's environmental legislation, one of which was accepted and processed.

Small Grants Program

Country

Honduras

Organization

Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)

Project

Strengthening Capacity and Management of Institutions, Local Authorities, and Communities for the Implementation of Environmental Legislation Based on the CAFTA-DR Environment Chapter in Guacerique River Subbasin, Tegucigalpa, Honduras

Year: 2011

“Understanding environmental laws and the importance of the area where we live (Guacerique Sub-basin) will help us protect our resources and develop as environmentally responsible producers.”

Daniel Amador, Comunidad de El Empedrado, Honduras

CATIE’s project sought to improve and conserve the sub-basin environment of the Guacerique River, which is an important watershed supplying 25% (more than 330,000 people) of the population of Tegucigalpa’s Central District. CATIE conducted workshops on environmental legislation and CAFTA-DR’s Environment Chapter, reaching 102 community leaders. Additionally, 210 rural families received training on Good Agricultural Practices (GAP), and two industries within the sub-basin received training in cleaner production practices.

The project’s success stems from establishing strategic alliances with a local water supply and sewage service provider (Servicio Autónomo Nacional de Acueductos y Alcantarillados, SANAA), and the Institute for Cooperation and Development (ICADE). The SANAA staff received training to strengthen their capacity to engage with communities and enhance law enforcement in this area. The sub-basin management plan now includes activities that emerged from the project, ensuring sustainability to the processes initiated. Further, farmers that demonstrated implementation of GAPs, obtained certifications for their efforts and received further support from ICADE.



IMPROVING FISHERIES REGULATION

1 3 4 5 6 8

With coordinating assistance from the Central American Fisheries and Aquaculture Organization (OSPESCA), the CAFTA-DR ECP provided capacity to decrease illegal, unreported, and unregulated (IUU) fishing, assess institutional and legal frameworks for managing fisheries with particular attention paid to monitoring, control and surveillance strengths, weaknesses and gaps.

MAIN OUTCOMES

- *Updated the Fisheries Register of the Integrated Registration System of Fisheries and Aquaculture of Central America (SIRPAC).*
- *Established a program of inspection and selection of inspectors to improve the mechanisms and resources in place to ensure compliance with the binding regulations of the Central American Integration System (SICA).*
- *Training and capacity building activities benefited 83 government officials and inspectors (58 men and 25 women).*

Combating IUU fishing

OSPESCA interventions in the CAFTA-DR countries focused in prevention, control, and eradication of IUU fishing by updating the fishing registry included in the Regulation OSP-01-09 “Integrated Registration System of Fisheries and Aquaculture of Central America” (SIRPAC). This process included assistance to countries with the incorporation of data into the system; delivery of SIRPAC 2.0; and training 16 technicians to operate SIRPAC 2.0. In addition, OSPESCA developed a program for regional inspection, and established the profile for the selection of inspectors. Both the program and the profile were adopted by the OSPESCA Executive Committee. OSPESCA also updated regulation OSP-03-10, which addresses monitoring systems and the use of satellite technology to combat IUU Fishing. Six officials received training to operate the updated system. Furthermore, the Executive Secretariat of the Council of Ministers of Health of Central America and the Dominican Republic (SE-COMISCA) and the Specialized Regional Directorate of OSPESCA, in conjunction with the General Secretariat of the Central American Integration System (DER SICA/OSPESCA), jointly purchased equipment and services for monitoring fishing vessels in the CAFTA-DR region via satellite.

Small Grants Program

Country

Nicaragua

Organization

Fundación Luchadores Integrados al Desarrollo de la Región (LIDER)

Project

Strengthening of Initiatives of Low Environmental Impact, Promotion of Public Participation Mechanisms for Civil Society and Conservation of Natural Resources in the Marine-Coastal Areas in the Gulf of Fonseca

Year: 2015

“The project has allowed us to contribute to the effective protection of natural resources in collaboration with public institutions and private companies, opening the doors to new sustainable fishing alternatives that can serve as a beacon in the processes of sustainable management of protected areas.”

Aleyda Pérez Méndez, President of the Cooperativa de Concheros y Pescadores Artesanales “Marcelino Mendez” - La Ballona community, Nicaragua

The Gulf of Fonseca is a highly biodiverse cross-border region shared by El Salvador, Honduras and Nicaragua; all three nations agreed to promote environmental protection and economic development. In Nicaragua, LIDER implemented a small-grants project in collaboration with local authorities, private companies, and community organizations in the Department of Chinandega to promote participative management mechanisms in two protected areas located in the region. The project responded to local communities’ needs, given that half of them live in a rural environment and protected areas.

LIDER provided environmental legislation training to 1,266 people from five fishing cooperatives in 14 local communities to help them establish a legal business structure. The project offered additional training on sustainable fish and shellfish production techniques. The close collaboration among all stakeholders helped LIDER assist artisanal fishers in establishing three fish farms with the requisite environmental permits.

Additionally, LIDER provided 13 schools with environmental education materials for 868 students to learn about natural resource protection. The project also organized conservation days to engage the local communities in reforestation, mangrove restoration, and marine species repopulation. Direct engagement activities complemented a series of environmental radio campaigns and a video documentary on low impact economic alternatives to reach an even wider audience.

Establishment and protection of no fishing zones



The National Oceanic and Atmospheric Administration (NOAA) and OSPESCA helped develop a range of marine protection services that include professional, self-sustaining marine conservation bodies capable of effectively enforcing conservation laws within fisheries, and prosecuting fishery violations. The project “Support to the Process for Fisheries Regulation in the Central American Isthmus” included a regional plan for inspecting infrastructure for processing; support for the regional action plan for sharks; a Monitoring, Control and Surveillance Network (Red MCV, in Spanish) and regional coordination; an Early Warning and Detection Plan for the Diablo Fish in Lago Cocibolca (Nicaragua); and Regulation of the General Law to Manage and Promote Fisheries and Aquaculture in CAFTA-DR countries.

Additionally, OSPESCA and NOAA provided follow-up to the regional norms for selective fishing, particularly the case for turtle excluder devices (TEDs). To catalyze adoption, NOAA worked with local authorities and NGOs to promote improved use of TEDs in shrimping and circle hooks in artisanal fishing, while working with coastal communities to increase awareness and participation in decision-making regarding sustainable fisheries management.



▶ Sustainable fishing project in the community La Ballona, Nicaragua.



Site visit to Small Grants project in Guatemala's Caribbean coast

Small Grants Program

Country

Nicaragua

Organization

Federación Nicaragüense de la Pesca (FENICPESCA)

Project

Promotion and Strengthening of Civil Society Participation in Protection of Fishery Natural Resource in the Island of Ometepe

Year: 2013

FENICPESCA's project aimed to promote and strengthen the participation of fisher families and local communities in the sustainable use of fishery resources and the preservation of the environment on the island of Ometepe. The island is a World Biosphere Reserve and Natural Reserve, where more than 300 fisher families live. They account for 7% of the island population and are of high economic importance given their productive activity. They supply food to people and tourist establishments, making fisheries one of the island's most important economic activities. Fisher families' access to information and opportunities for exchange on topics regarding ecosystems, natural resource management, and their conservation is low; knowledge on basic concepts of Cleaner Production (CP) and law enforcement is also limited.

The project's outcomes included the capacity building of organized community fishing groups and local governments for monitoring and surveillance of acceptable fishing practices. This social surveillance strengthens local law enforcement and assures that this economic activity is done sustainably and does not threaten natural resources' sustainability in this reserve. Local governments, communities, and fishery organizations established four community committees to work on environmental issues, fisheries, and CP. More than 230 participants identified environmental issues through the committees. They represented 73 communities, 20 municipalities, and 59 cooperatives. Two committees took initiative to initiate environmental campaigns on their own, which was an unexpected result of the project. Ten schools and 400 students engaged with the environmental protection campaigns launched by the committees.

Small Grants Program

Country

Guatemala

Organization

Alianza de Derecho Ambiental y Agua (ADA2)

Project

Establishment of Fisheries Management Guidelines through Multi-Sectoral Strategic Alliances for the Governance of Fisheries Resources in the Guatemalan Caribbean

Year: 2015

“We not only learn about conservation, but also about a sustainable management of our fisheries, involving full participation of fishermen, on alternatives for the commercialization of our products to improve our quality of life and the interest of protecting fishing habitats,”

Jorge Cocon, Shrimper representative.

The Guatemalan Caribbean coast in the Gulf of Honduras holds an ecosystem of high environmental and socio-economic value, providing many fishing communities with the necessary resources to make a living. Nevertheless, despite authorities and local communities' interest in regulating resource management in the area, the process had not formally been carried out.

For this reason, ADA2 implemented a small-grants project to set up acceptable practices of sustainable management through the active participation of citizens of four coastal municipalities and relevant local and national government institutions. ADA2 conducted several multi-sectoral roundtables to allow competent national authorities, local civil society organizations, and fishing associations to start a dialogue and set up the basis for an agreement on fishing resource management. Such conversations resulted in several strategic alliances between stakeholders and a formal proposal addressed by fishing groups to competent authorities to set up regulations.

The process included the development of an assessment of fish and shellfish stocks and exploitation of marine resources in the area. The project provided 258 community leaders with training on natural resource management and environmental legislation. Radio campaigns and TV and radio debates involving all stakeholders helped inform a broader audience about the importance of fishing resource management and public participation for policy-making.



➤ Site Visit to Small Grants Project in
San Juan del Sur, Nicaragua.



J. IMPROVING ENVIRONMENTAL CURRICULA OF UNIVERSITIES AND OTHER INSTITUTIONS OF HIGHER LEARNING

1 3 5 6 7 8

Universities are the most effective means for long-term sustainability of knowledge and raising awareness in new professionals, and future business leaders. Throughout the CAFTA-DR region, hundreds of students graduate each year from environmental, industrial, and chemical engineering, as well as in business management. Through the ECP several implementing agencies teamed up with the national cleaner production centers of the region to support academic institutions and students in developing curricula, skills and innovative knowledge with a focus on cleaner production to assist micro, small and medium enterprises (MSMEs) in improving their environmental performance. The study programs include internships within MSMEs, where students performed environmental audits, developed environmental management systems and proposed tangible solutions for reducing their impact on the environment, while increasing their profitability and competitiveness. Overall, these programs are allowing the younger generations to become increasingly passionate about cleaner production, as part of an emerging culture of sustainable development and environmental awareness.

MAIN OUTCOMES

- *Eleven universities committed to including cleaner production and EMS modules in undergraduate, graduate, and free courses to be delivered by more than 400 teachers.*
- *143 professors across the region have been trained in cleaner production and EMS.*
- *Over 360 students have participated in practicum courses focusing on cleaner production.*

Building a modern workforce to develop responsible and sustainable business practices

Another important outcome of the CAFTA-DR ECP is an increase in the number of courses and research activities focused on cleaner production (CP) practices within universities, research centers and other institutions of higher learning. The number of professionals trained to implement cleaner production practices is not keeping pace with the rising demand. To address this issue, the World Environment Center (WEC) and Higher Education for Development (HED) worked with the private sector to develop responsible and sustainable business practices. WEC and HED teamed up with the national cleaner production centers of the region to support academic institutions and students to develop curricula, skills, and innovative knowledge to expand the use of cleaner production practices and technologies.

Throughout the region, hundreds of students graduated from environmental, industrial, and chemical engineering and business management programs with a focus on cleaner production. Many of these students have undertaken internships within MSMEs, where they have performed environmental audits, developed EMS and proposed tangible solutions for reducing MSMEs' impact on the environment, while increasing their profitability and competitiveness.

WEC worked closely with the cleaner production centers of El Salvador and Guatemala and with the universities, Escuela Superior de Economía y Negocios (ESEN) of El Salvador and the University Rafael Landívar (URL) in Guatemala, supporting project activities within their campuses and supporting student internships carried out at select-

ed MSMEs facilities. The courses “Cleaner Production” and “Sustainable Development” were selected at URL and ESEN, respectively. MSMEs from several industry sectors in both countries received students and supported the project. The students developed action plans for 11 companies (three in El Salvador and eight in Guatemala). The companies implemented these action plans recommended by the students, based on feasibility and both financial and environmental potential for improvements. Even though students were still in their academic learning process, most of companies expressed value in their participation at their facilities. In addition, the students, as the future talent pool, offered companies the opportunity to provide insight into challenges and lessons and what should be included in the curricula being designed.

Workshops, roundtables and other learning events were held to bring together academia and the private sector to strengthen the outcomes of the partnerships, build their interaction, and learn how academia can support students to improve their skills and be better trained when initiating their professional life. Specifically, WEC held a sustainability roundtable in Guatemala in September 2016 where 45 representatives from academic, private sector and government, as well as 50 students, shared their experiences, thoughts and advice on how to improve relations and create practical opportunities for students. Universities have highlighted the importance of the creation or expansion of relationships with the private sector. The ability to develop and conduct practical course work for students at companies has become increasingly important to the participating universities.

The project included several capacity-building events to create systematic collaboration and information sharing, including one held at the Illinois Institute of Technology (IIT) featuring workshops such as “Diagnostics and Energy Audit for

Cleaner Production,” “Life Cycle Assessment and Ecodesign,” and “Business Case and Implementation Strategy for Cleaner Production.” Twenty-one participants from the region attended, including 20 faculty members and one representative from the National Cleaner Production Center of El Salvador.

Both WEC and HED have released articles and case studies, and shared results through local industrial association magazines. HED was involved in joint research initiatives, including the conditional acceptance of one research paper developed jointly by IIT and Universidad Centroamericana Jose Simeon Cañas (UCA) faculty, “From Cleaner Production to Sustainable Development: The Role of Academia” by the Journal of Cleaner Production, while WEC supported IIT/NYIT (New York Institute of Technology) research objectives, participating in one of the research studies “Market Incentives in Latin America”, with the first paper “Stimulating the market: incentives for cleaner production and energy efficiency in Latin America” focusing on a comparative analysis of the availability and utilization of different types of market-based instruments for cleaner production and energy efficiency in MSMEs in Central America. WEC also worked on a “lessons learned document” in each country considering the point of view of the main stakeholders (companies, professors, CP centers, and students) of the project. As mentioned above, they also organized technical and business roundtables that promoted cleaner production, energy efficiency, and EMS projects. WEC shared information directly with local newspapers, industry magazines, TV channels and radio stations. Also, both WEC and HED provided educational materials on the technical aspects of best practices, to support the uptake of these practices within MSMEs and larger companies. These efforts have led to greater visibility of cleaner production and its benefits amongst businesses.

Cleaner production practices that increase energy and water savings and decrease pollution are gaining traction in Latin America as a way to “green” supply chains, save money, and increase competitiveness, while reducing consumption of natural resources and decreasing carbon emissions. Because cleaner production strategies for

environmental protection are generally considered as an expense, it is expected that by raising awareness that this is not the case more MSMEs will implement cleaner production practices and technologies.

Small Grants Program

Country

El Salvador

Organization

Asociación Salvadoreña ProSalud Rural (ASAPROSAR)

Project

Establishment of Fisheries Promotion of a Culture of Environmental Responsibility in the Population of Three Municipalities in the Department of Santa Ana

Year: 2016

ASAPROSAR implemented a small-grants project to allow citizens to defend their rights and take responsibility for local environmental problems in cooperation with public authorities. They established a partnership with the University of El Salvador to train students in environmental law and involve them in training workshops in rural communities and primary and high schools, engaging at least 3,923 people in educational activities. Community members received support to identify the most pressing environmental issues and the necessary information to address them.

Community leaders put together nine environmental complaints and submitted them to the relevant authorities. ASAPROSAR also strengthened local authorities’ capacities by leading the creation of a participative environmental observatory and receiving the approval of environmental ordinances in all three municipalities, thus opening spaces for dialogue between Municipal Environmental Units and citizens, as well as reinforcing the legal basis to improve local issues, such as waste management, water management, and agricultural burning.

ASAPROSAR organized a one-day environmental festival mixing cultural and environmental education activities in each municipality to reach the general public and used local radio and TV channels to disseminate awareness-raising messages, thus reaching more than 200,000 people.



➤ Site visit to Small Grants project in Guatemala's Caribbean coast

II. INCREASING PUBLIC PARTICIPATION AND TRANSPARENCY TO SUPPORT INFORMED ENVIRONMENTAL DECISION-MAKING

The ECP seeks to foster a civil society that is actively engaged in environmental decision-making, and creating a general culture of environmental protection and sustainable development. Easy access to reliable environmental information is a first step in engaging society. Creating forums and other institutionalized processes for public involvement is another step. A third critical step is educating the public about opportunities and methods for engaging in environmental decision-making.

CAFTA-DR ECP's efforts under this rubric are organized in the following areas of implementation:



- K. Providing more access to quality environmental information to the civil society



- L. Improving public involvement in environmental decision-making



K. PROVIDING MORE ACCESS TO QUALITY ENVIRONMENTAL INFORMATION TO THE CIVIL SOCIETY

1 3 5 6 9

The Regional Visualization and Monitoring System (SERVIR) has helped CAFTA-DR countries understand and respond to natural disasters, combat environmental problems, improve agricultural practices and monitor air quality.

MAIN OUTCOMES

- *Improved quality and greater accessibility of environmental information to the population.*

Improved Environmental Monitoring and Informed Decision Making

In 2008, USAID jointly with the Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC) and the National Aeronautics and Space Administration of the United States (NASA), developed and executed a series of pilot projects to improve environmental monitoring and informed decision making in the CAFTA-DR countries. Using satellite technology, the Regional Visualization and Monitoring System (SERVIR) helped the countries understand and respond to natural disasters, combat environmental problems, improve agricultural practices and monitor air quality. These pilot projects were implemented focusing on different applications of geospatial technology oriented at improving national and regional capacity for environmental monitoring. They have been grown out of diverse disciplines, including the environment, forest fire monitoring, coastal pollution monitoring, the integration of geographic information systems in the tourism sector, and institutional strengthening.

SERVIR team members gather and process satellite data, combine it with ground observations, analyze results and quickly pass along the resulting information to assist scientists, educators and foreign government leaders. The program provides a bird's eye view of heavily damaged areas due to natural disasters or environmental problems and making that information available to the response teams.

SERVIR allowed countries to have access to information that they did not have before; now the meteorology offices of the region have access to satellite technology which help countries be prepared in a shorter period of time. For instance, in Guatemala, a major algae bloom spread across Lake Atitlan, a picturesque Guatemalan lake surrounded by steep volcanoes and Mayan settlements. NASA's satellite images showed the scope of the contamination and helped mobilize government action to begin dealing with the pollution. In Dominican Republic, SERVIR helped mapped what has happened in Enriquillo Lake in the past and what is going on currently with the growth of the lake and see what areas of land can be affected in the future and be prepared.

Furthermore, in the event of hurricanes or heavy rains, satellite images provided by SERVIR can help avoid disasters caused by flooding and mudslides, and assist officials in understanding the full extent of the damage, if any. For Honduras, the information provided by SERVIR for decision-making has proved key to better manage information and interaction between agencies.

More information: <https://servirglobal.net/Global/Articles/Article/828/cafta-dr-symposium-2010?page=3>





L. IMPROVING PUBLIC INVOLVEMENT IN ENVIRONMENTAL DECISION-MAKING

1 3 5 6 9

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 ECP supported the production and dissemination of information in the media, such as paper-based and on-line publications (leaflets, 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.

MAIN OUTCOMES

- *34,020+ individuals reached through education and training activities that foster communication between civil society and governments to facilitate public participation in environmental decision making.*
- *1,471,146 + individuals have potentially been reached through campaigns and outreach material on public participation mechanisms and environmental information (2013-2016).*
- *97 public outreach campaigns were carried out (2013-2016).*

Active public participation for environmental decision-making

Efforts by the CAFTA-DR ECP to enhance public participation in environmental protection have occurred through the CAFTA-DR Small Grants Program. As previously mentioned on this report, the Small Grants Program aims at increasing environmental protection through civil society engagement and public participation in CAFTA-DR countries. Projects implemented in this area were design for civil society organizations to play an active part in compliance and enforcement of environmental decisions, through meetings with municipal authorities, mayors, ministries, NGOs, information exchanges, and municipal forums.

Some results of the program include 32,259 individuals trained in natural resource management and/or biodiversity conservation, 6,284 individuals involved in environmental decision-making trainings, 20,376 individuals completing a course/workshop, and 537 individuals trained from civil society organizations. Workshops focused on topics including environmental education, awareness, natural resources management, law enforcement and public participation mechanisms. In some cases, workshops included both environmental conservation aspects and national environmental legislation. Also, the multiplying effect of training trainers and committing trainees to reach other people in their institutions with the acquired information has been very effective and allowed for more people to be reached than originally expected. Overall, a total of 88 massive campaigns were supported, with the audience having access to information on public participation mechanisms and environmental information through these campaigns and outreach material being estimated at 1,351,041 individuals, while the audience reached by campaigns (environ-

mental education and awareness initiatives) was estimated at 422,606 individuals. Additionally, 17,456 individuals have accessed information

through sharing platforms (e.g. Facebook, Twitter, Blog spots, and YouTube).

Small Grants Program

Country

El Salvador

Organization

Fundación Instituto de Investigación y Promoción Ambiental (IPA)

Project

Environmental Units: Mechanisms to Increase Citizen and Corporate Participation in Environmental Management and Implementation

Year: 2011

“When the relevant authorities do not respond to environmental complaints, there is a mechanism to follow at the international level that can be very useful; it is the CAFTA-DR Secretariat for Environmental Matters.”

Ricardo Guerra Tobar, Auxiliary Technician Specialist in Municipal Environmental Management, IPA

IPA’s project sought to protect and conserve the Sucio River and its basin through institutional strengthening of six municipalities, environmental education, and engagement of the public and private sectors in environmental decision-making. Pollution from an industrial corridor and urban runoff negatively impact the basin’ ecosystem and biodiversity, including documented issues with lead contamination. The Sucio River is the largest tributary of the Lempa River and provides 26% of San Salvador’s drinking water, serving more than 1,566,600 people.

IPA conducted training workshops for 1,246 people on environmental legislation and the CAFTA-DR public participation mechanism. Each municipality set up Municipal Environmental Management Committees (COGAM, in Spanish) to bring together civil society and local authorities to promote dialogue and resolve environmental issues. The COGAMs drafted or updated six participatory municipal environmental diagnostics to strengthen decision making. A robust environmental awareness campaign followed, including radio spots, radio interviews and forums, posters, and brochures promoting conservation.



► Photo Courtesy of Mancomunidad Trinacional Fronteriza Río Lempa.

Small Grants Program

Country

Costa Rica

Organization

Fundación MarViva

Project

Empowering communities for environmental advocacy

Year: 2018

Fundación MarViva implemented a project in the coast-line cantones (a canton is an administrative division of a country) of Nicoya, Nandayure, Cañas, and Abangares. The first stage of the project resulted in a manual to help communities create and launch grassroots environmental advocacy campaigns. The goal of this tool was to increase community engagement in local decision-making processes. This manual was developed via a participatory process, receiving input from 130 community members (68 women and 62 men), and was made available in hard copies as well as in a digital format. In the second stage, MarViva trained five government entities on environmental decision-making. Training targeted two municipalities, municipal delegations of the Ministry of Health, Ministry of Environment and National System of Conservation Areas. In a parallel effort, MarViva carried-out communication and outreach campaigns to increase community awareness on proper management of solid waste, reaching approximately 50,000 people.

Public guides for access to environmental information

In order to promote public participation in environmental decision making, EPA developed public guides for access to environmental information; organized public participation workshops; and implemented a small grants program to provide outreach and education on strengthening environmental decision making. The quick guides for environmental information were 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 Costa Rica, the Dominican Republic, El Salvador, Guatemala, and Nicaragua. An informal public participation network was formed and hosted on Facebook.

The goal of EPA's public participation program for CAFTA-DR (2013-2018) was to create a network of trained public participation experts in the region, and to use public participation, education and outreach to engage communities in environmental decision-making processes to help enforce environmental laws. This work included a regional public participation workshop with local NGOs, and national public participation workshops to increase community awareness of public participation. These efforts allowed the community to be heard and validated, and to influence the decision-making process to protect the environment.

Public participation in the environmental impact assessment process

Environmental Impact Assessments (EIAs) provide a tool to integrate environmental, economic, and social concerns, while mitigating adverse impacts on natural and human environments. EIAs allow governments to set conditions for approval (i.e., for site selection, construction, operation and closure), plan for infrastructure needs and land use, and monitor impacts and compliance.

Involving the public and stakeholders in the EIA process leads to better identification of economic, social, and environmental costs and the development of future monitoring systems. Clear and transparent enforcement of EIA requirements, procedures, and commitments to mitigation and monitoring helps governments, investors, civil society and indigenous groups mitigate risk and increase opportunities for longer term sustainable economic growth.

Current interest in streamlining EIA processes, along with increasing investments in large-scale development projects in the region, reflect the importance of advancing EIA policy and practice. Currently, there is a complex network of rules and regulations that are inconsistent across national boundaries and full of loopholes. Leaders in the region recognize that without effective social and environmental safeguards in place, increased investments and trade may result in unintended consequences leading to accelerated deterioration of the region's rich natural capital, loss of livelihoods, and other short and long-term consequences.

In order to support constructive engagement among governments, businesses, and civil society, toward more informed decisions in EIA process in CAFTA-DR countries, EPA is working to develop Regional Guidelines on Public Participation in EIA, to strengthen the implementation of inclusive public participation and availability of information within existing national EIA frameworks. To support this work, EPA is working with CAFTA-DR governments to identify needs for enhancing public participation in EIA process to promote transparency and governments' accountability with existing environmental laws.

Small Grants Program

Country

Dominican Republic

Organization

Alianza ONG

Project

Strengthening of National Capacities for Compliance with the CAFTA-DR's Environment Chapter

Year: 2010

Alianza ONG's project sought to promote CAFTA-DR's Environment Chapter among the public and private sectors, civil society organizations, and the general population. In addition, the project aimed to engage communicators and journalists from different media outlets covering environmental news to learn more about CAFTA-DR. For this purpose, the project focused on conducting training workshops, promoting an outreach campaign, and working with authorities on institutional strengthening. In the training component, 100 people, including university students from environmental-related programs, lawyers, and the general public attended environmental legislation and Environment Chapter workshops in various parts of the country. Thirty journalists from different media outlets participated in outreach activities, which included creating a database of environmental news. These journalists visited an ecotourism project to illustrate a sustainable project that complies with national environmental legislation. Regarding the institutional strengthening aspect of the project, Alianza ONG submitted to authorities of the Environment Ministry (SEMARENA) a proposal of internal procedures to strengthen the advisory committee for the implementation of the Environment Chapter.

Small Grants Program

Country

Nicaragua

Organization

Fundación Jinotegana para el Desarrollo Sostenible (FUNJIDES)

Project

Environmental Protection with the Participation of Civil Society and the Municipal Government of Santa Maria de Pantasma

Year: 2016

FUNJIDES provided 1,317 local government officers, community leaders, and students with training sessions on environmental legislation and processes, conflict resolution, and public participation mechanisms. More than 3,238 people participated in three environmental initiatives: an environmental challenge for students, and a campaign to collect agrochemical containers, with the support of local enterprises Syngenta and Ramac. Radio and TV campaigns raised awareness of improved agricultural practices, water management, CAFTA-DR communication mechanism, and other useful environmental tips to an audience of 70,000 people in the municipality.

Other investments focused on improving environmental management, such as solid waste containers and disaster response equipment for environmental volunteers in the area.

FUNJIDES also brought together local government officials, national institution representatives, farmers, entrepreneurs, and other civil society leaders to identify the most pressing environmental issues in the municipality and the best way to address them. After six meetings supported by the foundation, the local Environmental Unit committed to continue using this citizen participation platform as a resource to successfully implement the municipal environmental plan.



➤ Site visit to Small Grants project in Salado y Barra, Honduras

III. PROTECTING AND CONSERVING WILDLIFE AND HABITATS FOR LONG-TERM ECONOMIC AND ENVIRONMENTAL DEVELOPMENT

Many ecosystems and species in CAFTA-DR countries are adversely impacted by habitat loss and illegal harvesting and trade. The protection of wildlife and habitat is critical to long-term economic and environmental development in Central America and the Dominican Republic. Illegal trade in wildlife (flora and fauna) poses a serious threat to such development. To combat such trade and protect wildlife and habitat, the ECP is working to prevent species trade that violates international standards. This work includes enforcing the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and improving the protection and management of forest resources and protected areas.

CAFTA-DR ECP's efforts under this rubric are organized in the following areas of implementation:



M. Improving enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).



N. Promoting the sustainable management of wildlife, forests, protected areas, and other important ecosystems.



O. Preventing illegal logging.



M. IMPROVING ENFORCEMENT OF THE CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

1 3 4 5 6

The CAFTA-DR ECP has been providing support to the CAFTA-DR countries' efforts to improve the implementation of CITES, and coordination among CITES authorities and other officials involved in combating the trafficking of wild flora and fauna in the region. Illegal wildlife trafficking is a growing threat in the region that puts national and international security at risk. Everyday this illegal trade damages people's livelihoods, community integrity, income-generating jobs, sustainable development and national economies. As some of the most biologically diverse regions in the world, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras and Nicaragua are under a barrage of threats that undermine important wildlife populations. Illegal poaching for a variety of reasons – to own wildlife as pets, to use their skin or other parts for fashion or medicinal purposes, and to sell some of these animals for local and international illegal trade – can have a severe effect on biodiversity loss. The majority of these uses are prohibited by national laws, and international trade in endangered species of both plants and animals must be authorized by CITES. The establishment of the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN) is an important milestone in the fight against crime related to national and international traffic of wildlife. Additional efforts in this area include strengthening scientific and institutional capacity of CITES authorities, training officials responsible for implementation of CITES, supporting new or existing animal rescue centers.

MAIN OUTCOMES

- Strengthened legal and operational framework to improve CITES implementation in CAFTA-DR countries.
- Established and strengthened the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN).
- Conducted more than 30 nationwide wildlife seizure operations.
- 435 arrest for wild flora/fauna violations (2018 to 2019).
- 2,284 government officials participated in CAWEN activities (2010-2018).
- 8 annual meetings for evaluation, strategic planning and information exchange.
- 4 binational meetings for coordination and planning of seizure operations.
- 213 judges trained on the importance of sanctioning crimes against wildlife.
- 93 prosecutors and attorneys participated in workshops on good practices on law enforcement.
- 313 police agents/investigators trained on techniques to investigate environmental crimes.
- 476 wildlife inspectors learned about regulations and good practices to implement CITES.

- *Animal rescue centers have improved their management system for rehabilitation, confiscation, and possible liberation of species taking into consideration national legislation and CITES principles.*
- *Development of a CD with an interactive course that contains administrative, legal and technical aspects of the implementation of CITES.*
- *An interactive training CD on animal handling was developed, including field guides and references to CITES regulations.*
- *An economic valuation study of CITES species in CAFTA-DR countries was undertaken, as well as a study to analyze the behavior of trade in CITES species in the region.*
- *Development of a digital trafficking map with information about wildlife trafficking in Central America.*

A regional network to combat wildlife trafficking

Recognizing the need for better national and regional coordination to confront the growing illegal wildlife trade, the U.S. Department of the Interior's International Technical Assistance Program (DOI-ITAP) has worked since 2010 with a wide variety of government and non-government entities and supported the establishment of the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN), a regional inter-agency mechanism. On September 5, 2010, in the chambers of the Supreme Court of Costa Rica, attorney generals (or their delegate) from each of the CAFTA-DR countries signed a Memorandum of Understanding to form CAWEN. This regional inter-institutional mechanism aims to provide a forum for cooperation, exchange of experiences, promotion, dissemination and

strengthening of the Attorney General's and Environmental Attorneys Offices to apply policies and strategies in the fight against crime related to national and international traffic of flora and fauna. This high-level support for CAWEN represents an important affirmation of political will on the part of the governments. CAWEN has been instrumental in building significant political support to confront illegal wildlife trade by facilitating government-to-government coordination, and by promoting the participation of attorney generals from the region and representatives from the Central American Commission for Environment and Development (CCAD), Interpol, the United States Fish and Wildlife Service (USFWS), 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 collaboration, and the elaboration of a CAWEN roadmap for workshops and training. For instance, in 2011, with DOI-ITAP 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.

National networks have also been established, formed by law enforcement agencies within each country to guarantee the effective application and enforcement of wildlife protections. These national networks have improved internal coordination and communication by increasing the number of joint inspections, presenting court cases, and more judgments related to the violation of wildlife laws and regulations. The creation of CAWEN marked a milestone in the area of enforcement, connecting regional governments to cooperate in the fight against wildlife trafficking; it is recognized in international forums as a model to follow.

Combating wildlife trafficking

Since 2008, DOI-ITAP has been implementing activities to combat and prevent species trade that is not in compliance with MEAs or international environmental law (e.g., CITES). Illegal wildlife trade, which ranges from illegal logging to supply the demand for exotic woods, to illegal fishing for food, to unlawful harvesting of animals and plants for souvenirs, medicines and other products, is estimated to be a multibillion-dollar business. The ECP has worked closely with CAFTA-DR governments to identify gaps in existing legislation, regulations and policies, which has led to the adoption of new legislation and the formal establishment of responsible agencies. DOI-ITAP has also been working with national and regional authorities to ensure that the staff tasked with these CITES responsibilities have the capacity to carry them out effectively. Specifically, DOI-ITAP has worked to strengthen scientific and management capacity of CITES authorities, and to train officials responsible for implementation of CITES. By improving the functioning of the management, scientific and enforcement authorities, countries will be able to meet the basic compliance requirements of CITES.

Regional meetings of CITES officials and other relevant parties provide an efficient venue to share best practices, discuss national and regional priorities, identify capacity gaps, and issues in need of attention, provide opportunities for government officials within the region to engage in joint collaboration, and ultimately enhance government-to-government cooperation in CITES. Such meetings also provide a forum for member countries to present proposals of regional importance, define their priorities for future collaboration and networking, and plan joint regional operations. All parties have identified as priorities the need to unite efforts to address illegal wildlife trafficking at all points along the chain of criminal activity, from poaching to final sale, and build capacity of government officials to disrupt this chain, from

detection in the field to successful prosecution of criminals.

DOI-ITAP led on-site consultations with selected law enforcement officials in the Dominican Republic, El Salvador, Guatemala, and Honduras. It also delivered cross-sectorial enforcement workshops and field training on priority issues defined by the countries. 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.

Over the years, in addition to CITES activities, DOI-ITAP has also worked with projects supporting turtle conservation, improving environmental regulations for mining based on best practices, and public participation in government processes for management and law enforcement in protected areas at the sub-national and national levels in Guatemala.

CAWEN and Improved Enforcement



DOI-ITAP led the development of CAWEN, which has allowed for improved coordination and communication between agencies for better inspection, compliance, information exchange, and law enforcement at both the regional and national levels. Yearly network meetings allow for continued information exchange, trend analysis, and hands-on enforcement and inspection training sessions. Training has also been implemented with both CITES and non-CITES officers, leading to improved investigation and prosecution related to the trafficking of wild flora and fauna. DOI-ITAP has trained more than 2,205 judges, prosecutors, security officers, and inspection/customs officials between 2010 and 2019. CAWEN recently started tracking some of the confiscations that were being made. In 2018, 662 kilograms of wood, 4,598 birds, mammals, and reptiles, 5,563 marine animals, 7,058 orchids, 1,861 insects, and 3,370 animals that were killed for bushmeat were confiscated. At least 506 individuals were apprehended, 353 infractions investigated, and 17 operations undertaken. Furthermore, CAWEN has not only increased the number of CITES cases presented and prosecuted before the courts but also improved the application of administrative sanctions. This has occurred because of increased communication and coordination of institutions that make up CAWEN, both at the regional and national levels, as well as improved access to information to document cases. Wildlife trafficking is an area where officials continuously need to keep up with the changes in laws, trafficking trends, supply and demand, and personnel. Hence, training sessions on new regulations, trafficking mechanisms and trends (e.g., through mail services or airports), and species identifications are always required. Although DOI-ITAP still plays a role in arranging annual meetings and developing and delivering training, CAWEN has become progressively more autonomous over time. Countries are also increasingly able to hold joint planning meetings for inspection and enforcement operations, both at the national and regional levels.



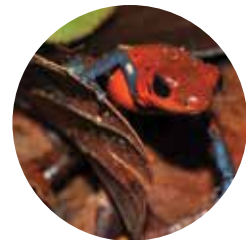
Rhinoceros iguana



Orange Orchid



Scarlet Macaw

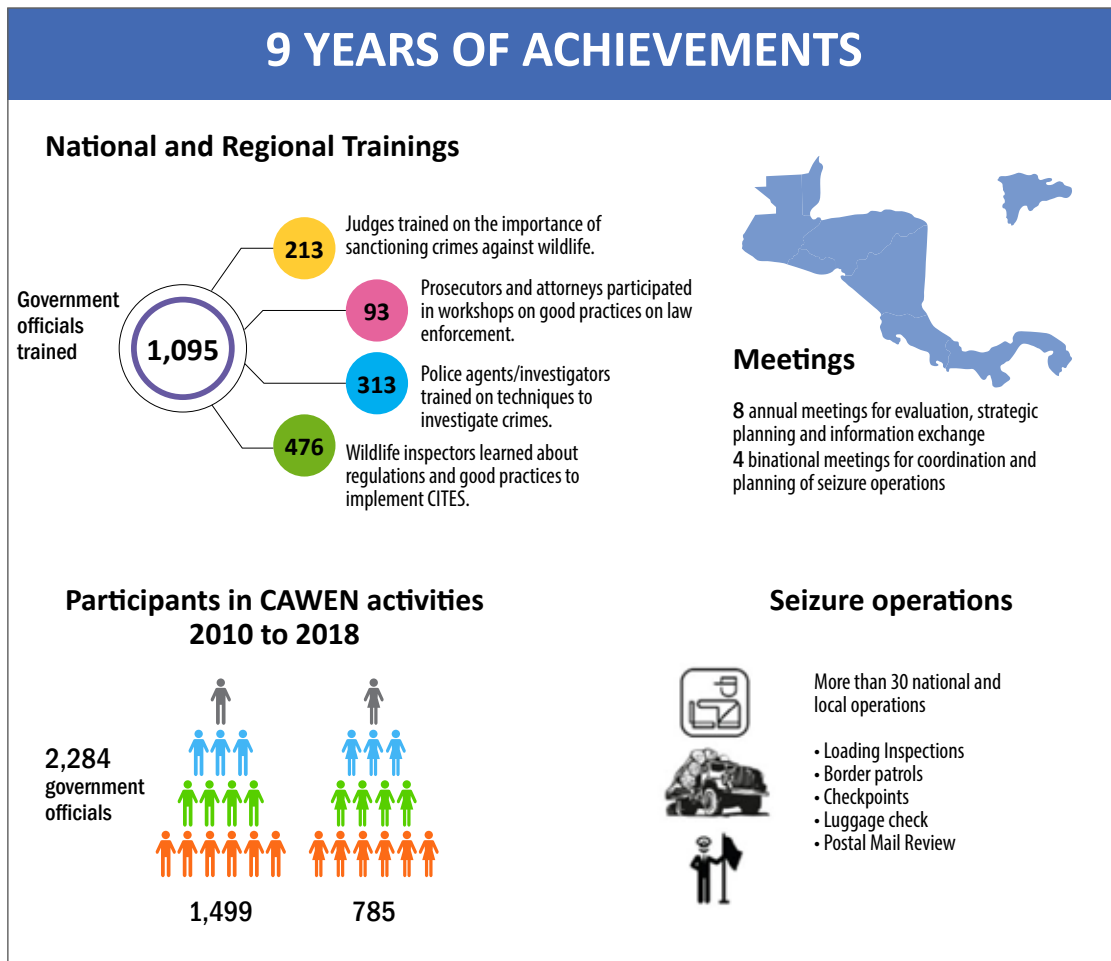


Strawberry poison frog

Strengthening scientific and institutional capacity of CITES authorities

DOI-ITAP, with support from other implementing agencies and different partners, has conducted extensive regional, bi-national and national workshops and other capacity building activities for customs officials, environment ministries technicians, CITES Management and Scientific Authorities, police forces, municipal environmental units, judges, prosecutors, among others. The topics of these initiatives have included a variety of issues to improve CITES implementation and enforcement including technical and legal advice on program development; national wildlife enforcement; handling of confiscated wildlife; sharing of best practices; success stories on the imple-

mentation of the law; training of future trainers; development of species identification guides and fact sheets; results of monitoring studies; development of non-detrimental findings (NDFs); prosecution and protection of national flora and fauna, among other topics. Participants from many of these workshops have committed to hold additional training activities, improve information sharing, improve coordination mechanisms, and organize coordination meetings to improve wildlife enforcement in their country.



Using modern technology to protect wildlife



DOI-ITAP worked with host governments and regional experts such as biologists and enforcement officers to create the Vida Silvestre (Wildlife) mobile app (www.vidasilvestre.net). This free and publicly accessible app provides user-friendly information on species identification, the legal and conservation status of species, and submission of tips/information and consultations on species identification. It

is a tool for governments, especially people “on the front line,” to help them identify species and assess what their next actions should be—to seize/confiscate, leave as legal, review which national laws apply, etc. The app is currently used by government inspection and enforcement officials. Moreover, countries are continuously working to develop and include additional species identifications in the app, which focuses on trade species of concern from all parts of Central and South America, as well as the Caribbean.



Public participation to improve compliance with wildlife legislation

Under the “Public Participation in Compliance with Wildlife Laws in CAFTA-DR Countries” project (2013-2016), Humane Society International (HSI) created a digital trafficking map, an important tool to get ongoing statistics about wildlife trafficking and consequently helping governments and law enforcement agencies to better implement raids, control operations and confiscation of wildlife. In collaboration with local partners, HSI conducted environmental educational activities in each of the CAFTA-DR countries. The educational programs included activities such as workshops, theatre plays and field trips to improve knowledge about endangered wildlife species and illegal trafficking issues and reached a total of 3,287 students, school-children, and community members.

HSI also worked closely with local partners to conduct community liaison workshops. All countries conducted workshops to educate community leaders on wildlife legislation and economic alternatives to poaching. HSI, in conjunction with local partners, was able to identify community groups and funding alternatives for economic investment in each rural community. Furthermore, HSI worked with education departments in Costa Rica and El Salvador to include wildlife protection issues in school curriculums. Before the development of the outreach campaigns in each CAFTA-DR country, a baseline survey (on wildlife attitudes, perceptions and behaviors of people)

was carried out in one large city, and in one small community in each country to gather perceptions related to wildlife. A total of 1,200 individuals were surveyed. Two additional follow-up surveys were completed to determine changes in perception and knowledge of local communities after the implementation of the outreach campaign. More than 100 volunteers from local partners, NGOs, universities and government agencies collaborated in the implementation of surveys across CAFTA-DR countries. In conjunction with local partners, outreach campaigns (e.g., digital billboards, distributed outreach materials such as posters, brochures and stickers, radio ads and radio interviews, educational workshops) in each region reached a total of 11,173,258 people.

Results from the baseline survey determined that 41% of people were not taking any actions to protect wildlife and that 55% did not know any laws that protect wildlife in their countries. In the first follow-up survey the percentage of people not taking any actions to protect wildlife dropped to 25%, and in the second follow-up survey to 13%, suggesting a direct positive effect derived from activities related to the outreach campaigns in rural and urban areas. The knowledge of wildlife legislation also increased, with 70% starting to have some awareness on wildlife laws in the second follow-up survey. Overall, individuals surveyed demonstrated a better understanding on practices that threaten wildlife, such as illegal hunting and consumption, and had an increase in the awareness of the importance of wildlife protection.



One of the key achievements of DOI-ITAP has been to aid in the review of CITES legislation in El Salvador and Honduras, which involved updating regulations, including those for law enforcement authorities. According to the CITES Secretary, both countries reached Category 1 status as a result of this action. This facilitates trade through the promotion of better control of the products in the country of origin.

DOI-ITAP has also helped to improve the CITES permit management systems in CAFTA-DR countries. In Costa Rica, even further updates and improvements have been made with the CITES permit system, allowing for the use of electronic permits. Electronic permitting management has resulted in: 1) greater efficiency and transparency from governments, as the progression of applications can be seen by the public and officials; 2) an interconnected system between the agencies of the Government of Costa Rica that apply CITES for better commercial regulation and enforcement; and 3) an improved ability to detect trade trends and apply the law. Costa Rican government officials have emphasized the importance of the support provided by DOI-ITAP in regards to the electronic permit application and reporting system, stating it has improved their implementation of CITES, through increased capacity and inter-institutional synergies, which have ultimately improved the traceability and legality of the wildlife trade. These improved processes will continue to be used in the future. According to the CITES Secretariat, Costa Rica has recently issued its best annual report to the Parties of CITES to date—a report that was submitted on time and contained more accurate and thorough data.

Environmental Education



HSI and partners worked directly with urban and rural communities to address both the supply and demand of the illegal wildlife trade.

COSTA RICA



Activities centered on Peninsula Osa, where partner Corcovado Foundation delivered workshops in schools with the support of youth groups.

DOMINICAN REPUBLIC



Activities took place in the communities of Boca de Yuma, San Rafael del Yuma, El Limón, Bayahibe and La Romana. Local partners Fundación Dominicana de Estudios Marinos (FUNDEMAR) and Sociedad Ornitológica de la Hispaniola (SOH) delivered workshops and trainings targeting the tourism industry. Activities on the protection of turtle nesting beaches of endangered hawksbill turtles were completed.

EL SALVADOR



Activities took place in the communities of El Melonal and La Cañada in the Union district. Local partner the Wildlife Quarantine Rescue Center delivered workshops and organized educational visits to animal rescue facilities. Additional education efforts including highway raids to educate about illegal wildlife trafficking.

GUATEMALA



Activities took place in the municipalities of Uaxactún and El Arrozal. Partner AR-CAS drafted the play, “Dejame Volar,” to teach local communities about the importance of not having exotic birds as pets. Asociación Zootropic and Asociación de Rescate y Conservación de Vida Silvestre (ARCAS) also organized workshops and field visits to animal rescue centers.

NICARAGUA



Activities targeted communities around Volcán Mombacho in the municipalities of Charco Muerto and Granada. Local partner Fundación Cocibolca delivered workshops for students and teachers following the “Detectives de las Aves-Vinculando a los niños a través de las Aves” methodology, an educational and awareness program designed by Cornell University in New York.

HONDURAS



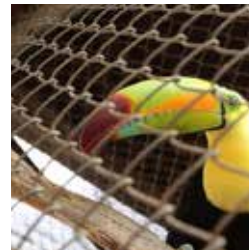
Activities focused on the Comayagua municipality, where local partner Honduran Association for the Protection of Animals and their Environment (AHPRA, in Spanish) delivered workshops for both schoolchildren and high school students. AHPRA also delivered workshops to regional police officers and to the Mayor’s office.

Improving management of animal rescue centers

HSI supported initiatives to improve animal rescue centers and to engage multiple stakeholders (including government officials, national police forces, and customs officers) to improve animal welfare. Support to improve animal care included the development of training protocols adapted to each center's location and needs, and in some cases the 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, an animal handling curriculum (CD format) and field guides and, in some cases, the provision of equipment for animal care support. Training and protocol topics included animal intake, rehabilitation, emergency and evacuation, quarantine release, and euthanasia. 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.

Some of the most common rescue center species included:

- Howler monkeys
- Jaguars
- Margays
- Yellow-Naped Amazons
- Scarlet Macaws
- Great Green Macaws
- Rhinoceros
- Iguanas
- Beaded Lizards
- American Crocodiles
- Hawksbill Turtles
- White-Faced Monkeys
- Hispaniola Amazons
- Rainbow-billed Toucans
- Green Iguanas
- Boas



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



N. PROMOTING THE SUSTAINABLE MANAGEMENT OF WILDLIFE, FORESTS, PROTECTED AREAS, AND OTHER ECOLOGICALLY IMPORTANT ECOSYSTEMS

1 3 4 5 6 8

The CAFTA-DR ECP has provided technical assistance to improve natural resource management and forest governance. Efforts focus on collaboration to enhance opportunities for trade and economic development based on legal and sustainable natural resource use. As a result of ECP support, over 1.3 million hectares of biological significant land have come under improved natural resource management, and over 20 million people have been reached by specific outreach campaigns in protected areas.

MAIN OUTCOMES

- *The CAFTA-DR Small Grants Program directly reached 2,027 people by campaigns supported by the CAFTA-DR ECP, while 520,153 members from civil society had access to public participation mechanisms and environmental information through campaigns and outreach material.*
- *HSI in conjunction with local partners developed outreach campaigns in each region, which reached a total of 11,173,258 people to support the enforcement of wildlife laws locally and regionally.*
- *DOI-ITAP developed 5 communication/outreach tools and materials, including 3 public outreach videos highlighting CAWEN/ROAVIS activities and priorities and raising awareness of the negative impacts of wildlife trafficking and the importance of applying wildlife laws.*

- *World Conservation Society (WCS) has improved the management of approximately 240,500 hectares of biological significance and/or natural resources.*
- *Strengthened management efforts included fire break clearing and monitoring to contain/avoid wildfires which improved the biophysical conditions of areas of biological significance, and animal habitat.*
- *Taxonomic guides have been developed for Tillandsia identification (Guatemala), species at risk (El Salvador), iguanas, and forest species, to name only a few.*
- *Over 1,000 people were trained in ecotourism and protected area management.*
- *10,000 forest plants were grown in nurseries, which were distributed among the different sectors of the subsystems of protected areas of the Gulf of Fonseca, Nicaragua, to support reforestation and mitigate the silting of estuaries, and also to improve the quantity and quality of water infiltrating into aquifers.*



➤ Xate leaf, cultivated and commercialized by indigenous communities in Uaxáctun, Guatemala

Developing integrated community-government law enforcement

DOI-ITAP has largely focused on the south-to-south promotion and replication of a successful public participation model to improve protected area governance and multi-sector decision-making, as well as supporting an outreach and educational campaign to raise the profile of the assets and threats to the Maya Biosphere Reserve (MBR) and the Maya Mountains-Chiquibul Biosphere Reserve MMCBR, which are important habitats for many CITES species. The multiyear interventions (2009-2015) consolidated mechanisms to ensure sustainable management and conservation resulted in a comprehensive “Law Enforcement and Governance Strategy and Action Plan” for Guatemala’s MBR, with supporting monitoring indicators to measure implementation processes in the country. Manuals and protocols were designed to collect environmental crime data, analyze and

categorize this information, and use self-protective measures while patrolling in conflict zones. Also, strategic law enforcement posts were built in the MBR, and law enforcement patrols were equipped to perform their work. Support from DOI-ITAP 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 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.

DOI-ITAP's in-country partner in Guatemala, Asociación Balam, successfully promoted the benefits of strengthening public participation as a tool for the protection and sustainable use of natural resources in the MMCBR. Through this work, government and community leaders of the MMCBR signed a formal agreement to work collaboratively, and learn from the successes of the Maya Biosphere Reserve Multi-Sector Roundtable that operates in northern Petén. They have since drafted plans and Memorandums of Understandings (MOUs) and developed tools to guide and monitor the development activities and environmental protection in the area.

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, helped the agency leverage an additional US\$1

million in congressionally-appropriated funds for natural and archeological resource conservation in the Reserve in 2010.

In late 2010, with DOI-ITAP 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-ITAP 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.



Strengthening capacity through wildlife conservation projects

WCS provided technical assistance to Dominican Republic, Guatemala, Honduras and Nicaragua to improve enforcement of wildlife trafficking laws, by strengthening the capacity of key community organizations through tangible, on-the-ground

wildlife conservation projects. To stem demand of the Hispaniolan Parrot for pet trade in Dominican Republic, WCS developed monitoring programs of the species at two key sites: Sierra de Bahoruco National Park and Saona Island at Cautubanamá National Park. The programs contributed to an increase in the local capacity to protect the Hispaniolan Parrot through training of eight community members at Saona Island, Oviedo, and Pedernales to monitor parrot management and conservation efforts. Newly gathered parrot population data has increased knowledge about the species and will serve as a baseline for a scientific study to be carried out from 2018 through 2021 on parrot ecology and population trends at a national level, in collaboration with BirdLife International and Manchester Metropolitan University. In addition, social media and direct outreach activities using an education toolkit developed for the program, and activities under a Parrot Road Show undertaken in Santo Domingo, Santiago, Duarte, Barahona and Independencia provinces reached more than 11,900 people regarding parrot conservation and the threats of illegal trafficking. A strategic Conservation Plan developed for Sierra de Bahoruco National Park, explicitly identifies the Hispaniolan Parrot and its

habitat as conservation targets and empowers nine institutions to co-manage and oversee conservation efforts.



➤ Hispaniolan Parrot

The WCS project in Nicaragua and Honduras focused on the delimitation and cleaning of boundaries in indigenous territories: Kipla Sait Tasbaika KST, Miskitu Indian Tasbaika Kum MITK, and Mayangna Sauni Bu MSB and detailed summaries of the findings were presented to the indigenous authorities and the government officials from the ministries of environment. The project was enormously popular as cleaning the boundaries was overdue and evaluations of incursions were a high priority. These activities, along with a complementary project designed to deliver technical assistance to manage livestock, were instrumental in the signing of conservation agreements with the territories. These agreements include prohibitions on hunting spider monkeys and white-lipped peccaries, and conditions on controlling agricultural damage by tapirs and jaguars. The work conducted in these three territories has prompted adjacent territories to conduct similar activities.

In Guatemala, WCS worked on improving the management of approximately 240,500 hectares of biological significance and/or natural resources. Approximately, 5,700 hectares of conservation area and its adjacent buffer zone are under partial protection. Also, strengthened management efforts included fire break clearing and monitoring (including 14 km on foot route to Peñon de Buenavista), which have helped to contain/avoid wildfires and preserve scarlet macaw nesting habitat. In Nicaragua, threatened boundaries of territories were cleared and patrols were initiated. Furthermore, WCS reported that a total of 58.85 km (Guatemala 18.2 km; Nicaragua 32.65 km) of fire breaks were cleared, which improved the biophysical conditions of areas of biological significance, and ultimately protected hundreds of hectares of land.



▶ Visit to recoverable waste plant in Santiago de Los Caballeros, Dominican Republic.

Small Grants Program

Country
Dominican Republic

Organization
Asociación de Desarrollo de Pedro García (ADPG)

Project
Pilot Project to Raise Awareness about the Protection and Conservation of the Environment, through Training and Publicity with Public and Civil Society Participation, in the Municipal Districts of Pedro García, Santiago Province and Yásica Arriba, Province of Puerto Plata, Dominican Republic

Year: 2015

ADPG implemented a pilot project to raise awareness about the protection and conservation of the environment in 13 communities located in the Rio Yásica basin. Although these small rural communities have fewer than 4,000 inhabitants, local agricultural and commercial activities, such as coffee and fruit plantations and cattle farming, cause deforestation and river pollution.

ADPG carried out a Strategic Plan for Raising Awareness of Environmental Protection and Conservation in collaboration with two local authorities, 13 communities, and 13 schools. They implemented train-the-trainer activities to allow 76 teachers to teach more than 3,500 students about environmental protection. Educational institutions organized eight environmental initiatives, such as art workshops. ADPG also equipped schools and villages with 30 waste containers. They organized a river clean-up day and a reforestation day with the local community to raise awareness of these issues and promote a behavior change. A broader awareness-raising campaign using printed media, radio, and television helped inform the communities about the project and its activities.

ADPG built local institutional capacities, notably through the establishment of two Environmental Commissions under the municipal governments of Pedro Garcia and Yásica. These pilot activities triggered a positive dynamic and led to the investment in a larger project aimed at implementing a Zero Waste framework in the two municipal districts.

Small Grants Program

Country
Costa Rica

Organization
Fundación Corcovado

Project
Promotion of Local Leadership for Environmental Protection in the Osa Peninsula: Green Classroom Project.

Year: 2016

The Osa Peninsula is one of the most biologically diverse places on earth. The area has approximately 25-30 distinct ecosystems, which provide essential habitat for many endemic and endangered species, such as jaguars (*Panthera onca*), tapirs (*Tapirus terrestris*), and three species of sea turtles. The ecosystems are under threat due to human causes, such as illegal logging and poaching. Fundación Corcovado's project aimed to increase awareness of the importance of public participation and local leadership to protect the environment in the Osa Peninsula. The project focused on educating children and teenagers on environmental matters to generate leadership, local knowledge, and empowerment to promote environmental protection and community development.

Fundación Corcovado worked with teachers and students on the conservation of land and marine resources as well as on environmental leadership, and building alliances with non-profit organizations and academic entities to achieve these goals. The project reached 325 children per month on average from the 22 schools that received environmental education sessions once a month for over one year. The project also created six environmental groups to allow the most motivated young leaders to participate in practical activities outside the classroom.



To promote a broader impact, the foundation worked closely with the Ministry of Public Education to put together an environmental conservation training program for teachers. The project also published an environmental education manual and activity book to provide teachers of the whole Southern Pacific region of Costa Rica with easy-to-use activities and educational materials they could easily incorporate into lesson plans.



Site Visit to Small Grants Project in Osa Peninsula, Costa Rica

Improved environmental management in areas of biological significance

- In 2009 the Ministry of Natural Resources and Environment (MARENA) in Nicaragua conducted a capacity-building campaign including 88 public sector park rangers, 12 NGOs staff, and 20 representatives from civil society. This was accomplished through a round of trainings funded by USAID. The training content included scientific and technical subjects such as introduction to biodiversity, environmental law, the importance of protected areas, and the functions of park rangers. Participants trained on the use of maps and compasses, the monitoring of flora and fauna, forest fires, wetlands, and human resource management. At the end, participants were eligible to receive a certificate provided the successful completion of training.
- DOI worked with Honduras in the development of the “National Strategy for Control of Extraction and Illegal Transport of Forest Products and Wildlife” as a measure to better protect and sustainably manage trade in mahogany and other CITES species that inhabit these forests.
- USFS worked in Honduras during 2009-2010 to improve overall protected area management and conserve biodiversity within priority protected areas. During the early stages of the ECP, USFS, in coordination with the MIRA project, supported and strengthened environmental interpretation information at the Lancetilla Botanical Garden and Research Station (a protected area). USFS developed an interpretative plan for the Cuero y Salado Protected Area with input from community leaders on potential sites, themes and exhibitions within the protected area.
- Tillandsia plants (air plants) provide opportunities for commercial trade and are an important source of income for Guatemala. Effective control of internal and international trade is a priority for Guatemalan CITES officials, in order to ensure sustainable use of the species and maintain a healthy population. During 2009-2010, the National Commission for Protected Areas (CONAP, in Spanish), with support from DOI, developed a Tillandsia Identification Guide for Guatemala. The guide contains 74 species, including basic information and photographs at different stages of development so that customs officials and wildlife technicians can correctly identify and control the species at ports of entry, border crossings, airports, and in protected areas.
- In 2010, DOI partnered with the Utah Valley University, Texas A&M University, TRAFFIC and the International Iguana Foundation (IIF) to conduct a regional trade analysis on several native iguana species that are traded to the United States in potentially harmful numbers. As a result, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua have access to data on trade patterns for these species and their CITES Authorities have the capacity to conduct trade analysis.
- During 2010-2012, USFS established 274 hectares of agroforestry systems, increasing tree coverage and improving the economic, social and productive conditions of small farms in Nicaragua. In addition, USFS conducted 34,500 meters of soil conservation works, contributing to the conservation, use and sustainable management of the natural resources; and protected through reforestation four water sources whose watersheds supply water to 42 communities inside and outside a protected area.

Small Grants Program

Country

Honduras

Organization

Comité para la Defensa y Desarrollo de la Flora y Fauna del Golfo de Fonseca (CODDEFFAGOLF)

Project

Increasing Knowledge on Environmental Regulations and Procedures of Actors Involved in the Management of Protected Areas of the Gulf of Fonseca

Year: 2016

“Environmental education is a long-term task; it begins today to reduce tomorrow's impacts.”

Dina Morel, CODDEFFAGOLF Collaborator.

The project implemented by CODDEFFAGOLF focused on strengthening capacities and alliances between civil society and state agents for environmental management and governance of the protected areas in the Gulf of Fonseca. During its development, CODDEFFAGOLF assisted 100 trainers in completing a workshop on environmental legislation and natural resource management. Thirty-five representatives of civil society and local governments also acquired knowledge on conflict resolution. With the project's intervention, 2,000 people increased their knowledge concerning the mechanisms of public participation and threatened species in the Gulf of Fonseca. Over 120 representatives of organized civil society, government, and local authorities now have access to updated environmental information. At the end of the project, the Roundtable for the Environment, Risk Management, and Adaptation to Climate Change (AGRACC) led and promoted three environmental initiatives with significant impact on the area.

Small Grants Program

Country

Costa Rica

Organization

Equipos de Desarrollo Tierra Verde (EDTV)

Project

Increasing Knowledge on Environmental Regulations and Procedures of Actors Involved in the Management of Protected Areas of the Gulf of Fonseca

Year: 2011

“The indigenous people have an ancestral heritage, which is not only a territory to administer, it is also a culture closely linked to ecosystems and a language with which they express their being and identity.” **Eduardo Vega Castillo**, EDTV Executive Director

The project raised awareness among three groups of indigenous people on the CAFTA-DR environmental chapter and provided tools for environmental decision-making and management. The project's outreach strategy consisted of broadcasting radio programs in indigenous people's cultural radio stations and circulating a press bulletin with national coverage that spoke about children's participation on topics regarding nature conservation. EDTV conducted training workshops to inform local people on national environmental legislation and the CAFTA-DR's Environment Chapter, reaching 1,951 people. With community input, the project generated proposals on inter-institutional cooperation within the territories, and on enhancing political incidence before multilateral and public entities. This project highlighted the importance of integrating indigenous people as stakeholders and as ancestral beneficiaries of the natural resources when undertaking policymaking and environmental management.



▶ Site visit to Small Grants Project in Golfo de Fonseca, Honduras

Improving conservation of marine turtles

The CAFTA-DR ECP hosted training workshops to present the benefits of using circular fishing hooks for non-nylon fishing lines. Among the key topics were techniques to de-hook and release sea turtles caught by fishing long lines. To measure compliance with environmental standards presented at training workshops, ELE conducted commercial trials in Nicaragua and Costa Rica where the fisherman in general accepted the exchange of the “J” hooks for circle hooks. During these experimental fishing trips, 25,900 hooks were used and 105 turtles were caught as by-catch, with less than 1% turtle mortality.

Many specific activities in this area has taken place during the implementation of the ECP; some highlights include:

- During 2012, in the Dominican Republic, Grupo Jaragua, a local NGO, educated international tourists by posting public ser-

vice announcements in baggage claim areas of airports and also at the entry point for tourists disembarking from cruise ships on the critically endangered status of the Hawksbill turtle.

- 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.
- In 2015, USFS organized a festival for the protection of the sea turtle was in Nicaragua with the participation of more than 400 people.

Small Grants Program

Country

Guatemala

Organization

Fundación Rigoberta Menchú Tum (FRMT)

Project

Promoting Environmental Managers to Enforce Environmental Laws in Guatemala

Year:2011

“The irrational and unsustainable use of natural resources can only stop to the extent that the population is aware of environmental legislation, and has a responsible and committed citizenry participating in demanding compliance with its provisions to regulate its use and exploitation.”

Constantino Reyes, Project Technician, Fundación Rigoberta Menchú Tum.

FRMT enhanced participatory and organizational skills among different civil society stakeholders to address environmental challenges in indigenous populations. The project took place in seven municipalities in San Marcos, Sololá, Baja Verapaz, and Alta Verapaz. It also reached indigenous peoples from five Mayan speaking languages (Mam, Tzutujil, K’aqchiquel, Q’eqchí, and Achí), local authorities, community leaders, teachers, and students of rural secondary schools. The project conducted 14 workshops on environmental legislation and public participation mechanisms, with 215 participants using a project-specific manual. Other activities included 21 environmental exhibits and meetings with an environmental network of 25 representatives from organizations whose members participated in FRMT’s workshops and demonstrated interest in follow-up activities.

The project engaged civil society and local authorities through a virtual network on environmental issues and discussed community interests in development projects. A total of 1,851 young people participated directly in the outreach activities, including students who are members of this environmental network.



O. COMBATING ILLEGAL LOGGING

1 3 4 5 6

*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. Furthermore, illegal logging lowers global timber prices, causing U.S. firms and timber mills to lose up millions each year. Worldwide, illegal logging leads to annual losses of upwards of US\$10 billion. Illegal rosewood trade has been acknowledged as a regional and international issue of concern and CITES has now listed the entire genus *Dalbergia* under Appendix II of the Convention. Further compounding the issue, little information exists on the population and ecology of rosewood in the CAFTA-DR region, making it difficult to monitor and prevent illegal logging of these species.*

MAIN OUTCOMES

- *Regional wood identification workshop (2016) for CITES officials, government agencies, researchers and non-profit organizations in CAFTA-DR countries (25 participants).*
- *New laws and regulations have been adopted to strengthen the CITES legal framework and foster biodiversity protection, including legislation in Costa Rica, El Salvador.*
- *Taxonomic guides have been developed for *Tillandsia* identification (Guatemala), and forest species.*
- *More than 300 government officials trained in systems and methodologies to prevent and combat illegal logging.*

- *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.*
- *2011 conference in Honduras to share experiences, tools and methods for managing illegal logging and deforestation from across the Americas.*

Technical assistance to combat illegal logging

The focus of USFS's technical assistance has been to prevent illegal logging, processing and trade of illegal timber 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. USFS conducted

training sessions with 305 government officials focusing on systems and methodologies to combat illegal logging, and 98 agents received training to process timber violations.

USFS trained members of the police force, the army, customs services, the Secretariat for Public Works and Transportation, forestry technicians from ICF and ESNACIFOR, and professionals from the timber industry to recognize 20 to 30 of the most common illegally traded tropical wood species in the region. By streamlining the legal process and enforcement (sanctions) associated with the trade of illegal timber, the 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 (including 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.

Other CAFTA-DR ECP interventions facilitated the exchange of existing information and reference

material to combat illegal logging. For instance, participants from different government 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.

■ Combating illegal rosewood trade

Rosewood, also known as redwood, cocobolo, or rosul (scientific name: *Dalbergia*) is one of the world's most trafficked wild products. Increasing demand in China is a significant driver of the extraction of these rare and valuable tree species across Central America and throughout the world. The deforestation of this species, which primarily grows in dry tropical forests, has had a devastating impact on indigenous forest communities and the natural resources that sustain their livelihoods.

Under the ECP, USFS has focused on targeting the reduction of the illegal harvesting, processing and trade of rosewood in CAFTA-DR countries by building the capacity of key agencies and organizations to effectively identify threatened species, enforce national environmental laws, implement CITES regulations, and share information. This program has facilitated discussions and workshops with actors involved in combating illegal logging in CAFTA-DR countries, by gathering region-wide information on the population and ecology of rosewood, developing programs to sustainably manage rosewood throughout the region, and trainings provided to CAFTA-DR officials on the identification of rosewood and other common illegally traded wood species. USFS has supported the creation and dissemination of materials about rosewood for management and enforcement agencies through the region. This work builds on USFS previous work on mahogany conservation (2011), further increasing capacity in the CAFTA-DR countries to address forest gov-

ernance and improve enforcement of national environmental laws and implementation of international treaties, such as CITES.

In 2017, USFS developed a comprehensive report and executive summary on the population and ecology, as well as trade information of the genus *Dalbergia* and proposed recommendations for future activities about the management and protection of *Dalbergia* species. Furthermore, USFS developed a user-friendly brochure with basic information about biology, distribution and keys for the identification of *Dalbergia* species that are under pressure from logging in the region. The brochure has been distributed to the authorities in charge of the national and international control of wood commerce. An additional brochure with basic information about biology and taxonomy for the identification of rosewood was also developed. USFS also hosted wood identification workshops, focusing on correctly identifying *Dalbergia* species found in the region, covering information about CITES, and on understanding and controlling the movement of timber wood products into and out of their countries. These workshops were held in Costa Rica, Honduras, El Salvador, Guatemala and Nicaragua for customs inspectors, government agencies, CITES officials and other local actors. One specific challenge that was encountered during the implementation of the wood identification workshops continues to be the reliable identification of the different species of *Dalbergia* found in Central America. For example, at least nine new species have been identified recently in the region that had not been previously recorded. Without up-to-date information on the number of species that exist and their population levels, it can be difficult to develop comprehensive wood identification activities.

■ Detecting wood of illegal origin

In 2017, USFS established a group of regional wood identification specialists and trained them in macro and microscopic wood identification. Strengthened capacity in wood identification allows for countries to better control and monitor timber trade and ensure legality, which in turn creates a more level playing field within the global timber industry. USFS also facilitated training on the use and management of XyloTron, an automated wood identification device, and helped develop a regional network of university laboratories that foster institutional collaboration and support the development of the XyloTron image library. Having a regional image library and database are key steps to enabling the XyloTron to become field operational. Also, USFS assisted in outlining an operational plan to create and feed the XyloTron database with a variety of species of commercial interest in the region. Under this proposal, each participating university would collect and prepare samples, which would then be imaged and uploaded into the database. The laboratory at the National Forestry Institute (INAB) in Guatemala, the National University of Science and Forestry of Honduras (U-ESNACIFOR) and the National University of Agriculture in Nicaragua (UNA), each have a XyloTron and its associated equipment. One positive unexpected result is that the Guatemala wood forensic laboratory is now independently collaborating with the Forestry Department in Belize.

■ Preserving seeds to support reforestation

To ensure a sufficient supply of certified genetic stock for native and endemic tree species, a laboratory must have a climate-controlled facility to preserve germplasm (seeds and tissues from which new plants can be grown) and prevent rot, either via cold or dry storage. For many laboratories in tropical, humid environments, cold storage is a more feasible option due to the difficulty in maintaining dry storage facilities. The CAFTA-DR ECP has facilitated exchanges between the re-

gion's seed bank directors. USFS has coordinated regional dialogues on seed banks to share challenges and lessons learned for seed bank development in each country, as well as strengthened the seed bank network in CAFTA-DR countries. These exchanges resulted in the creation of a work plan aimed at establishing alliances among the seed banks and identifying opportunities for technical cooperation and the development of mutual capacity, including training, research, and exchange of experiences. In addition, these exchanges also propelled the establishment of a WhatsApp and e-mail group for consultation and information exchange on seed banks. Furthermore, USFS provided targeted training for technicians of the National Forestry Institute of Guatemala (INAB) on designing seed bank testing and management protocols, and provided support for the identification of proper quality control and monitoring measures to ensure that the new cold storage room could maintain appropriate conditions for seed storage. This newly inaugurated cold storage facility greatly increases the laboratory's capacity for maintaining an inventory of seeds, and will support reforestation and restoration of threatened timber species for years to come.



IV. IMPROVING MANAGEMENT AND CONSERVATION OF THE ENVIRONMENT TO SUPPORT SUSTAINED ECONOMIC GROWTH

The ECP's focus on this area is on building the bridge between the protection of the environment and the sustainability of economic activities. This entails the development and promotion of economic incentives and other voluntary and flexible mechanisms, in order to promote the protection of the environment. Initiatives related to this topic focus on sustainable agriculture, sustainable use of forests and other products, and sustainable tourism, as a means to support economic growth, sustainable resource management and environmental protection through organic certification.

CAFTA-DR ECP's efforts under this rubric are organized in the following areas of implementation:



P. Supporting environmentally friendly agricultural and forest product practices



Q. Strengthening ecotourism practices in communities



P. SUPPORTING ENVIRONMENTALLY FRIENDLY AGRICULTURAL AND FOREST PRODUCT PRACTICES

2 3 4 6 8 9

Promoting and implementing organized, sustainable, and environmentally-friendly production systems can lead to an increase in economic benefits for CAFTA-DR producers and enhanced production, long-term environmental conservation and wildlife protection. The certification process and sustainable product development in CAFTA-DR countries, has yielded several environmental benefits, including enhanced soil fertility, reduction of contaminants in soil, surface water and underground water, and increased cover of native species, all helping to preserve the health of producers and their families and the environment.

MAIN OUTCOMES

- More than 8,000 individuals directly reported increased revenues.
- More than 190,640 hectares were reported under improved management.
- More than 30,000 people from rural and indigenous communities attended best practices workshops, and trainings on sustainable or environmentally-friendly agricultural practices, organic certification, school garden management, natural, resource management and/or biodiversity conservation.
- At least 190,640 hectares are under improved technologies or management practices (e.g. certified crops), including 44,745 hectares of high biological significance.

- Organic production processes have been found to benefit an average of 192 species living in cacao production areas, including endangered species.
- Six National Strategies on Sustainable Production.
- Nine farming alliances in Costa Rica, El Salvador, Guatemala and Nicaragua.

Certified coffee program

Coffee is one of the world's most traded commodities; however, smallholder farmers in coffee-growing regions face many challenges, including commodity price fluctuations and increasingly erratic rainfall patterns. The ECP worked to strengthen the position of coffee farmers by training them in methods that boost yields and maintain the healthy environmental ecosystems.

In 2013, while international coffee prices declined the demand for certified coffee continued to rise. Leading companies like McDonald's USA and McDonald's Canada, Caribou Coffee, Second Cup, Green Mountain Coffee and Nespresso incorporated into their supplies significant quantities of coffee beans grown on Rainforest Alliance-certified farms. While certification costs are high, but the benefits of market stability and quality standards offset the investment. Specifically, certified coffee is generally of higher quality than uncertified coffee, thus certified production acts as a buffer between the international prices and the farmers. Overall, this rapid growth in sustainable sourcing is contributing to major environmental benefits as well as social and economic benefits for coffee growing communities around the world.



The ECP helped forge successful linkages between the suppliers of certified products and the market of buyers, including food stores, supermarket chains and farmers associations. This was key for the promotion of certified products, ensured incomes for farmers, and helped in the development of environmental standards in various products' supply chain. Alliances meant to improve environmental practices in the production processes can also help enhance food security, mostly in the fruit and vegetable production sector, with the participation of all stakeholders involved in the value chain of these products.

During 2013-2015, Rainforest Alliance developed a traceability system that assisted with tracking of certified products through the supply chain and enabled producers to collect premiums for sustainable goods. The traceability system also facilitated the development of an electronic marketplace, making it easier for buyers to source sustainable materials. The project registered more than 2,000 new companies in Marketplace (a growth of 172%), and 652 new companies signed Licensing Agreements to use the Rainforest Alliance-certified seal (381% growth). These figures indicate an increase in the demand for

sustainably-produced goods. Results from this project show that the vast majority of certified producers have been able to sell their harvests to the most demanding companies.

■ Sustainable cacao production

Cacao in Central America has the 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 shifting environmental conditions make coffee production in some areas less viable. Furthermore, cacao is a cash crop that promotes reforestation of land cleared for pastures or annual crops. More than half of cacao production in Central America takes place on small-scale subsistence farms of fewer than 12 acres. These small farms are also home to CITES-protected species, like the two-toed sloth, the toucan, and the howl-

er monkey. Certified environmentally-friendly cacao protects wildlife while at the same time raising the standard of living for cacao producers.

The project focused on locating groups of producers within the Central American region and determining the needed improvements for increasing cacao production and quality. HSI worked with two cacao organizations in two separate countries. During 2008-2011, in Costa Rica, HSI collaborated with Asociación de Pequeños Productores de Talamanca (APPTA) and selected 100 producers as part the program. In Nicaragua, HSI partnered with Asociación Pueblos en Accion Comunitaria (PAC) in Bocay and San Carlos, and selected 300 producers with which to implement the program.

The activities of this project focused on working with the 400 producers to protect the biodiversity on the cacao plantations, increase the production and quality of the cacao beans, and improve the process for adequate fermentation and drying of the cacao, for both APPTA and PAC. By improving their agricultural practices, all the producers integrated into the program eventually became certified organic and therefore obtained an increased purchase price for their cacao, even during the transition process. BioLatina in Nicaragua and EcoLogica in Costa Rica handled the organic certification process for PAC and APPTA, respectively.

HSI worked with grafted cacao trees for Nicaraguan and Costa Rican producers, aimed at improving the production capacity of existing trees on cacao plantations. Through HSI's partnership with Tropical Agricultural Research and Higher Education Center (CATIE), the nurseries were established with materials genetically produced to resist diseases, hence improving the quantity and quality of cacao grown with these trees.

In order to improve production and control diseases on cacao plantations, producers were trained on rehabilitating their trees, in order to improve the quantity and quality of cacao produced from each tree. A total of 131 producers implement-

ed this innovative and useful technique and were able to train 400 additional producers.

HSI carried out biodiversity inventories on 30 farms in both countries, which established the presence of at least 192 species of plants and animals within a cacao farm. In order to strengthen biodiversity protection in these communities, HSI developed posters and educational materials, and carried out environmental education workshops in all three locations (Bocay and San Carlos, Nicaragua and Talamanca, Costa Rica). The focus of environmental education activities was to engage communities to protect the biodiversity around cacao farms, which can often be difficult to ensure as some cacao producers consider the animals to be pests, given they can eat the growing cacao. Forty-four workshops focusing on the importance of rainforest ecosystems reached 1,700 students in 31 schools in both countries.

■ Supporting cacao value chain

Lutheran World Relief (LWR) launched a project in 2012 focused on supporting the cacao value chain. LWR worked with 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 promoted 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. LWR 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. National cacao roundtables were organized in El Salvador, Honduras and Nicaragua to coordinate activities in target cacao growing areas and to organize cacao forums in each country. A cacao quality contest was held in Nicara-

gua, 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.

To increase market access for smallholder cocoa farmers implementing sustainable agriculture practices, LWR implemented an approach which included direct business training and technical assistance, involving private sector and strategic actors in the provision of technical assistance, increasing access to credit services and training for product certification. LWR identified three key areas for strengthening the cocoa value chain to improve market access in Central America:

- 1) Create stronger producer organizations with sound business practices.
- 2) Build capacity for higher quality production both on-farm and during off-farm post-harvest processing.
- 3) Increase symbiotic engagement between producer organizations and the business community to support sustainable cocoa production.

In El Salvador, LWR used additional funding sources to work in 47 municipalities across Usulután, San Miguel, Morazán in El Salvador to establish cacao agroforestry systems that increase income and employment opportunities while promoting sustainability and biodiversity. The implementation strategy included:

- Promoting public-private dialogue and investment for cacao value chain development.
- Setting national cacao quality and sustainability standards.

- Improving farmers' land management and use of natural resources.
- Fostering the sourcing, production, and use of high-quality genetic material by farmer-owned nurseries.
- Incorporating women in small cacao and agroforestry businesses.
- Strengthening farmer organizations through business and management trainings.
- Facilitating policy making on the provision of incentives, research and extension services.

Key results obtained include:





In 2014, as part of the Small Grants Program, the Mancomunidad de Municipios del Centro de Atlántida (MAMUCA) of Honduras implemented the project “Incidence in the Conservation and Sustainable Use of Natural Resources in Water Supply Micro-Watersheds in Communities of Municipalities of La MAMUCA, Applying Principles of Environmental Education.” MAMUCA worked in ten communities, establishing ten school gardens and ultimately reaching approximately 500 families. These functioning school gardens resulted in students receiving an organic and healthy intake of food. Also, by utilizing the methodology “learning by doing,” MAMUCA ensured that the technical assistance and training students received will be replicated in their homes, with the participation of the family. Ultimately, this helped families acquire food security and in some cases even surplus production, which allowed for some economic benefits in the form of income generation. In addition, MAMUCA trained 1,120 individuals (714 women) in managing school gardens, organic food, compost, and food preparation.



➤ Site visit to Small Grants project in Osa Peninsula, Costa Rica



Site visit to Small Grants project in Barahona Province, Dominican Republic



Q. STRENGTHENING ECOTOURISM PRACTICES IN COMMUNITIES

1 2 3 4 5 6 8

Tourism is a major driver of world trade and ecotourism is becoming increasingly important. Nevertheless, many of the most promising protected areas for ecotourism are either mismanaged or being converted to agricultural land. Ecotourism can help provide incentives and alternatives for local producers to manage biological and water resources sustainably. The main goal of the CAFTA-DR ECP in this area has been to support economic growth projects in tourism that promote conservation and generate income for surrounding communities.

MAIN OUTCOMES

- *In Costa Rica and Nicaragua 65 people participated in workshops on ecotourism as an economic alternative.*
- *42 micro, small and medium enterprises completed the Green Deal Tourism Certification and are applying Sustainable Tourism Good Practices.*

The importance of ecotourism

Between 2008 and 2011, USFS developed community-based ecotourism initiatives as profitable economic units that generate local employment and ensure the sustainable use of the natural resources. For instance, to contribute to the socio-economic improvement of the population in and around the protected area of the Chacocente Wildlife Refuge in Nicaragua, USFS delivered training workshop to strengthen the capacity of local stakeholders to develop ecotourism in their communities, focused on the conservation of sea turtles, basic techniques for first-aid delivery, and environmental interpretation.

USFS also developed three handbooks to support ecotourism in local communities: (1) Cetacean Observation Handbook, (2) Turtle Observation Handbook, and (3) Manual for Community Ecotourism Tour Guides.

V. IMPROVING PRIVATE SECTOR ENVIRONMENTAL PERFORMANCE

Micro, Small and Medium Enterprises (MSMEs) are great contributors to the CAFTA-DR region's GDP. The ECP has been partnering with the private sector to improve environmental performance through cleaner production strategies, environmental management systems, voluntary mechanisms, public-private associations, and by building stronger institutional and human resource capacity.

CAFTA-DR ECP's efforts under this rubric are organized in the following area of implementation:



- R. Increasing commitment of the private sector to environmental performance





R. INCREASING COMMITMENT OF THE PRIVATE SECTOR TO ENVIRONMENTAL PERFORMANCE

2 3 6 7 8

The ECP has given the CAFTA-DR countries the necessary tools to work with different sectors, including the private sector to jointly assign the shared responsibility for the conservation of natural resources. It has enabled the creation of new public-private alliances and strengthened existing ones. Government agencies have promoted a system of incentives that allow them to guide efforts to improve and reduce environmental impacts. Also, the ECP has generated a culture of environmental monitoring among the participating businesses. Overall, cleaner production practices that increase energy and water savings and decrease pollution are gaining traction, as a way for enterprises to green supply chains, save money, and increase competitiveness, while reducing consumption of natural resources and decreasing carbon emissions.

MAIN OUTCOMES

- *More than 770 MSMEs from different sectors throughout the region received technical assistance in cleaner production and eco-efficiency.*
- *Companies that received assistance have substantially optimized their consumption of energy, water and raw materials compared to the baseline, as a result of adopting cleaner production solutions.*
- *5 technical guides on cleaner production topics have been developed and distributed.*
- *Over 100 professors across the region have been trained in cleaner production and environmental management systems.*

- *Over 364 students have participated in practicum courses focusing on cleaner production.*
- *11 universities have committed themselves to including cleaner production and environmental management system modules in undergraduate, graduate, and free courses.*
- *The ECP supported the implementation of incentives to promote the adoption of cleaner production technologies.*

Reaching out to the private sector

During 2009-2011, USAID Environmental and Labor Excellence Program (ELE) for CAFTA-DR spent a significant amount of effort and resources directed to the private sector in order to improve environmental performance through a series of actions designed to promote the adoption of practices and technologies in Cleaner Production, eco-efficiency with special emphasis on pollution prevention, and energy efficiency. Additionally, Environmental Management Systems (EMS) were incorporated as a tool for identifying environmental aspects and impacts arising from the provision of services or resulting from product development activities, with an interest in carrying out preventive measures to reduce negative effects on the environment. A regional diagnostic study of applying cleaner production in the CAFTA-DR countries was performed, identifying sectors with the most potential for its adoption in the short term, and therefore to act within the framework of the environmental regulations in each country. Concurrently, a regional assessment of voluntary mechanisms and incentives and financial vehicles were conducted to foster the adoption of cleaner production.

In this process, business profits were estimated relative to environmental improvements in the consumption of energy, water and raw materials. Additionally, there was a cost-benefit analysis from the business perspective, as well as analysis of risk reduction and profitability.

Creating, improving and strengthening financial and nonfinancial incentives; technical assistance specializing in a wide range of topics; and building capacity of professionals, teaching courses and direct training or through educational institutions— these were the three key strategies implemented by ELE. Ensuring sustainability also

required strengthening capacities of the Cleaner Production Centers (CPCs) in the region, “one stop shop” for private sector companies seeking cleaner production and EMS solutions. In addition, foundations were laid for continuous improvement through signing letters of understanding to incorporate cleaner production and EMS topics in academic training, as a strategic action to supplement the training of professional cadres to support companies in improving environmental performance.

Small Grants Program

Country
Guatemala

Organization
Fundación para el Desarrollo Económico y Social de Guatemala (FUNDES)

Project:
Toward the Competitive Development of Exporting small and medium enterprises (SMEs) through the Incorporation of Good Environmental Practices

Year: 2010



FUNDES provided support to small and medium enterprises (SMEs) to incorporate acceptable environmental practices in production lines. Specifically, the project socialized the public participation mechanism of the Environment Chapter among 15 SMEs from different production sectors, including construction, food, agriculture, domestic and industrial chemicals, logistics, and transport and services. Working with these SMEs, 340 workers have improved their knowledge of environmental legislation related to their production activities.

FUNDES conducted clean production workshops involving these 15 SMEs and suggested actions to improve their production activities with the environment. Of all the SMEs, nine of them went through an assessment in creating an Environmental Management System based on standard ISO 14001:2004. Throughout this training, the enterprises learned more about environmental legislation and cleaner production, focusing on production activities. Also, each SME identified ecological impacts in its product line and established mitigation measures. The nine enterprises drafted a cleaner production project profile to be included in the environmental management system.

Promotion through information

With the support of the ECP, ELE developed (2009-2011) a series of publications in order to promote the adoption of cleaner production practices, eco-efficiency and energy efficiency in the industrial and agro-industrial sectors.

TECHNICAL GUIDES

- Manual on Composting in Poultry Farms.
- Cleaner Production Guide for Fruits and Vegetables in Honduras.
- Guide to Best Practices in Energy Efficiency in Industrial Refrigeration Systems.
- Guide to Best Practices in Energy Efficiency for Steam Systems.
- Eco-efficiency measures for the hotel sector.
- Reference Guide: Opportunities for Funding for Investment in Cleaner Production Projects (Costa Rica).
- Reference Guide: Opportunities for Funding for Investment in Cleaner Production (El Salvador).

CASE STUDIES

- Case Study: Eco-Efficiency Assessment of Hotel Altocerro, Dominican Republic.
- Case Study: Eco-Efficiency Assessment of Hotel Árbol de Fuego, El Salvador.
- Case Study: Eco-Efficiency Assessment of Hotel Balcones de Chinandega, Nicaragua.
- Case Study: Eco-Efficiency Assessment of Los Lácteos Chisacsí, Guatemala.

Success story: eco-efficiency strategy



A total of 39 small hotels in El Salvador, Nicaragua and the Dominican Republic participated in an eco-efficiency initiative implemented by the USAID between 2009 and 2011. A successful example is the Arbol de Fuego Hotel in El Salvador (16 rooms), where 18 eco-efficiency diagnostic recommendations were implemented in fewer than nine months. Up to 90% of incandescent light bulbs were changed to LEDs and compact fluorescent light bulbs. Also, by changing water faucets and showerheads, water consumption was reduced by 40%. This update cost less than US\$5.00. These actions illustrate the nature of the changes that can give fast results at a low cost. The hotel also launched a program to reuse towels and bedding, thus reducing the laundry load and subsequently lowering power consumption and reducing wastewater generation. They also installed solar panels to be used to heat water. Comparing data from 2009 and 2010 revealed that average energy consumption per guest fell by 38% and peak demand dropped by 42%. Examples like this demonstrate the clear commitment of companies in key economic sectors that have embraced cleaner production as a means to boost competitiveness.



“Despite our commitments to the environment, in 2008 we experienced a hike in energy consumption which generated an enormous cost, it was no longer economically sustainable. The CAFTA-DR ECP has given us many recommendations and tools to save water and energy, and to reduce costs. With these tools in hand, we made a serious commitment to implement the changes. These and other measures implemented have enabled us to reduce energy consumption by 38% and our power bills by almost 60%. Improving the efficiency of our resources definitely works. We are very thankful for having participated in this project.”

Carolina Baiza, Marketing Manager
Hotel Arbol de Fuego, El Salvador (USAID 2011)
Source: USAID Final Report 2009-2011

Success story: cleaner production practices



In Guatemala, the National Cleaner Production Center, municipal and environmental authorities, representatives of the tourism sector, CCAD, and USAID came together in a joint effort to support the pilot project to apply cleaner production in ten hotels located around Lake Atitlan. This project revealed the importance in working both at the sector level and the geographic level. Within this project, participating hotels were able to decrease water consumption by 60% and energy consumption by 30-40%, which significantly reduced hotel operation costs and helped them become more economically competitive.



“Cleaner production is a way to carry out best operating practices in tourism in harmony and conservation of the environment. It has demonstrated its potential as a tool for public and private management to preserve our beautiful Lake Atitlan, and to continue showing the world our country’s beauty.”

- **Mr. Gerardo Higueros**, Mayor of Panajachel, Sololá, Guatemala.

Source: USAID Final Report 2009-2011

Increasing cleaner production and energy efficiency practices in the CAFTA-DR region

During 2016-2020, the World Wildlife Fund (WWF) worked with the National Cleaner Production Centers (NCPCs) of El Salvador, Guatemala, and Honduras to establish collaborative partnerships with universities and the private sector, specifically in MSMEs located in the watersheds of Acelhuate in El Salvador, Motagua in Guatemala, and Chamelecón in Honduras. The project built local capacities on cleaner production (CP) and Energy Efficiency (EE) among university teachers and students, and MSMEs per-

sonnel, expanded the adoption of CP and EE in MSMEs, and increased awareness of the benefits of CP and its role in integrated watershed management (IWM). Seven universities participated in the project, including:

El Salvador: Universidad de El Salvador (UES) and Escuela Superior de Economía y Negocios (ESEN)

Guatemala: Universidad Rural (URURAL), Universidad Rafael Landívar (URL) and Universidad de San Carlos de Guatemala (USAC)

Honduras: Universidad Nacional Autónoma de Honduras en el Valle de Sula (UNAH-VS) and Universidad Católica de Honduras (UNICAH)

Furthermore, WWF collaborated with the Central American University Superior Council (CSUCA) in the development of the syllabus for a CP and IWM regional course. NCPCs trained a total of 981 persons: 430 university students, 111 university teachers and 440 MSMEs personnel; and WWF trained 16 members of the NCPCs.

The program included internships in MSMEs for college students and by March 2020, 169 university students had participated in internships: 49 in El Salvador, 79 in Guatemala, 41 in Honduras. The NCPC also carried out roundtables to increase awareness of the benefits of CP and its role in integrated watershed management; the discussion focused on identifying joint actions to adequately prepare university students to implement CP in enterprises.

To expand the adoption of CP and EE in MSMEs, the project conducted 42 in-plant assessments (IPAs): 14 in El Salvador, 14 in Guatemala, 14 in Honduras. Through the concluded IPAs, 458 recommendations were identified: 71 in El Salvador, 79 in Guatemala, and 308 in Honduras. From this total, 230 CP recommendations have been implemented: 26 in El Salvador, 43 in Guatemala, 161 in Honduras. The implementation of these recommendations represents in total: 14.30% of material, energy and water savings, equivalent to US\$290,069; 16.34% decrease in emissions

and/or releases of pollutants and a reduction of 725.75 tons of CO₂e.

Increasing cleaner production and energy efficiency in MSMEs

Between 2008 and 2011, the World Environment Center (WEC) provided assistance to 62 MSMEs to increase cleaner production and energy efficiency (CP/EE) practices and technologies in Costa Rica (16), El Salvador (15), Guatemala (20), and Nicaragua (11), as part of a strategy to promote alliances to support suppliers.

WEC established private sector partnerships in these four countries to improve the private sector's environmental performance, reduce costs, and improve efficiency and competitiveness. WEC developed the program with the support of the cleaner production centers of these four countries, industry associations, and multinational corporations to work with MSMEs that supply goods and services to the multinationals to minimize waste and emissions and enhance production efficiency. Specifically, these partnerships provide local members and suppliers with technical assistance in energy and water conservation; waste, raw material and emissions reduction; environmental management systems; and accessing financial resources required for adoption of the enhanced techniques.

The information below summarizes the results and improvement achieved by the participating companies.

Cleaner Production: Private Sector Partnerships Project



1

Guatemala and El Salvador

WEC established partnerships with:

- Association of Small Hotels of Guatemala (APEHGUA)
- Association of Dairy Processors of El Salvador (ANPROLAC)
- Walmart Centroamerica in both El Salvador and Guatemala

The results/improvements achieved by companies by the implementation of the actions plans at their facilities are:



El Salvador

(Walmart and ANPROLAC)

- Overall economic savings: **\$397,100**
- Investments by companies: **\$83,100**
- Energy savings: **52,838 kWh**
- Fuel reduction: **29,051 gallons**
- Water reduction: **399,885 gallons**
- Wastewater minimization: **1,475 m³**
- CO₂ gas emissions reductions: **280 tons**



Guatemala

(Walmart and APEHGUA)

- Overall economic savings: **\$224,300**
- Investments realized by companies: **\$210,400**
- Energy savings: **10,294 kWh**
- Fuel reduction: **62,045 gallons**
- Water reduction: **450,500 gallons**
- Wastewater minimization: **3,400 m³**
- CO₂ gas emissions reductions: **882 tons**



2

Costa Rica & Nicaragua

WEC established partnerships with:

- Marriot Hotels in Costa Rica
- Coca-Cola/FEMSA in Costa Rica
- Chamber of Industries of Nicaragua (CADIN)
- Association of Exporters and Producers of Nicaragua (APEN)

The work in Costa Rica and Nicaragua is ongoing. The results/improvements achieved by companies so far by the implementation of the actions plans at their facilities are:



Costa Rica

(Marriot Hotels and Coca-Cola FEMSA)

- Suppliers saved **\$273,016** through their improvements realized with **\$417,106** of investments. These results are expected to continue increasing after the term of the project as action plans will continue to be implemented.
- Electric Energy savings: **405,801 kWh**
- Fuel reduction: **14,425 gallons**
- Water reduction: **1,914,095 gallons**
- Wastewater minimization: **1,224 m³**
- CO₂ gas emissions reductions: **180 tons**



Nicaragua

(CADIN and APEN)

- Economic savings achieved: **\$298,245**
- Investments realized: **\$103,990**
- Energy savings: **456,540 kWh**
- Fuel reduction: **43,979 gallons**
- Water reduction: **2,997,680 gallons**
- Wastewater minimization: **9,775 m³**
- CO₂ gas emissions reductions: **693 tons**

Source: World Economic Center

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 July 2, 2013 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.

Enhancing the environmental performance of MSMEs in Honduras



Fourteen MSMEs signed the participation agreement for the WEC program in Honduras, with seven companies representing the Federation of Agroexporters of Honduras (FPX) and seven companies representing the Federation of the Poultry Sector of Honduras (ANAVIH). When the project started in March 2012, twelve of the selected companies did not have environmental management systems (EMS), controls to reduce pollution, or even basic controls to measure water or energy consumption. The CP/EE audit reports identified opportunities to implement that were customized to each MSMEs based on their assessments, such as materials and product recovery, water consumption reduction, and the efficient use of electrical and thermal energy. Overall, a total of 115 recommendations were made (materials: 7, product: 3, water: 45, electric energy: 28, thermic energy: 15, solid waste: 4, wastewater: 6, emissions: 0, others: 7), of these recommendations, 64 (56%) were implemented. Seventy-five percent of the implemented options were related to water and energy, while the rest primarily focused on materials, product, and solid waste. In the case of the 51 (44%) recommendations that were not implemented, 23 of these (45%) were related to water, 11 (21%) were related to electrical energy, six (12%) to thermal energy, and the rest focused on waste water and solid waste aspects. From these recommendations significant savings were achieved including: 5 tons of solid materials, 0.18 m³ of liquid materials, 1,049 tons of solid product, 14 m³ of liq-

uid products, 14,243 m³ of water, 163,025 kWh of electrical energy, 20,122 kWh of thermal energy, 87 tons of solid materials, 9,380 m³ of wastewater (volume), and 346 tons of direct emissions of CO₂. During the 21-month period of implementation (July 2012 to March 2014) the companies saved US\$257,838 and actual investment reached US\$222,498, which was only 48% of the projected investment. This reflects the fact that companies focused on investment opportunities that required no or very low investments; and some companies did not implement opportunities exactly as was suggested by the technical team, seeking alternative solutions to obtain similar or partial results (usually lower) with lower costs. Ultimately, companies saved a total of US\$35,340 after accounting for investment costs. Overall, the average saving was US\$19,830/company, and the average investment was US\$17,115/company. By sector the ratio of investment to savings during the life of the project was greater in the poultry sector (investment US\$126,992, savings US\$78,274) than in the agroindustry (investment US\$95,506, savings US\$179,565).

Small Grants Program

Country

Dominican Republic

Organization

Asociación de Empresas Industriales de Herrera y Provincia Santo Domingo, Inc. (AEIH)

Project

Energy Efficiency Project for SMEs and Homes of the Santo Domingo Province

Year: 2013

“By saving energy, we take care of our environment and therefore prolong the life of future generations.”

Vicente Almont, President of the “El Diamante” Neighborhood Council.

AEIH conducted a project in Santo Domingo to strengthen environmental awareness in SMEs and households and promote efficient energy use. The project focused on promoting public participation within the academic sector (elementary schools), private sector (SMEs), and citizens from El Diamante neighborhood. AEIH’s energy efficiency activities involved raising awareness campaigns, training workshops, and promoting the implementation of energy efficiency plans in SMEs and households.

With the support of the National Energy Commission, AEIH visited educational centers and homes to promote the project. More than 400 students learned about environmental conservation and efficient energy use. Afterwards, students were able to indicate necessary actions in their homes and schools to increase energy efficiency and apply these measures in their homes. Students formed five energy efficiency clubs to follow-up on the lessons learned. In El Diamante, 25 families benefited from awareness activities and actual energy use assessments. AEIH complemented the outreach activities with 1,000 copies of a brochure entitled “The ABCs of Energy Efficiency Measures” for distribution among stakeholders.

Academic and private sector join forces to support cleaner production

Universities are the most effective means for long-term sustainability of knowledge and raising awareness in new professionals, and future business leaders. Throughout the CAFTA-DR region, thousands of students graduate each year from environmental, industrial and chemical engineering, and business management programs with a focus on cleaner production. Most of these students have undertaken internships within MSMEs, where they have performed environmental audits, developed environmental management systems and proposed tangible solutions for reducing their impact on the environment, while increasing their profitability and competitiveness.

In the CAFTA-DR region, the cleaner production centers 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 younger generation is passionate about cleaner production as part of an emerging

culture of sustainable development and environmental awareness. Notably, the number of professionals trained to implement cleaner production practices is not keeping pace with the rising demand. To address this issue, WEC and Higher Education for Development (HED) launched the Pathways to Cleaner Production Initiative in 2012, with the goal of helping to build a modern workforce by emphasizing education and training and engaging the next generation of engineers and technicians in working with the private sector to develop responsible and sustainable business practices. HED supported academic institutions and helped build the capacity of students, faculty and local businesses in the areas of cleaner production and sustainable industrial development practices to MSMEs, and creating a forum for systematic collaboration and information sharing. HED also recruited MSMEs to participate in the practicum courses.

Programa de Pequeñas Donaciones HELVETAS DR-CAFTA
Participación Pública en la Gestión de Residuos Sólidos - 2019
Proyecto No. 03.PPD.HGA.2019

**"Saneamiento ambiental de 3 municipios aledaños
al Lago Enriquillo en la provincia Independencia"**
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   **HELVETAS**  **DR-CAFTA**
Programa de Cooperación Ambiental 

4. Impacts of the CAFTA-DR Environmental Cooperation Program

For this CAFTA-DR ECP 15th anniversary report, two electronic surveys—a Key Stakeholder Survey and a Community Survey—were launched to gather insights about the sustainability and impacts of the ECP to date. A total of 53 individuals (women: 58.5%; men: 39.6%) associated with at least 12 CAFTA-DR ECP implementing agencies, responded to the Key Stakeholder Survey. Two-thirds of respondents indicated that they are still working in the same organization where they participated in CAFTA-DR ECP implementing activities. The vast majority of respondents identified as implementers (83.0%), followed by beneficiaries (9.4%), and country Points of Contact (7.5%). Thirty-three individuals (women: 48.5%; men: 51.5%), responded to the Community Survey, which specifically asked about the skills, knowledge, or benefits (e.g., employment, safer/cleaner community environment, etc.) gained as a result of CAFTA-DR ECP assistance or activities.³

Strengthening government institutions for effective enforcement of environmental laws, regulations, policies, and norms

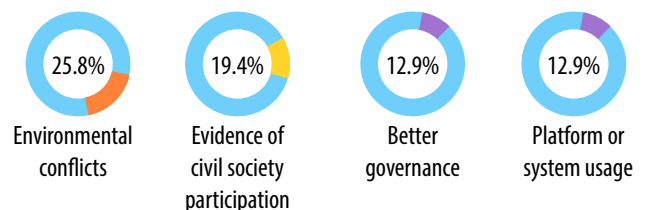
A total of 40 respondents participated in activities related to the strengthening of governmental institutions for effective enforcement of environmental laws, regulations, policies, and norms. Of these respondents, 77.5% felt that they are still utilizing skills/knowledge learned in the training(s) provided by the CAFTA-DR ECP day-to-day. The most common responses

³ Relevant findings are included throughout this section and are specifically highlighted as coming from the Community Survey. The vast majority of this section is based upon the Key Stakeholder Survey.

revolved around the continued use of improved management



practices, as well as the continued sharing of the Environment Chapter procedures and information related to



For instance, the updated platform of the Central American Integrated Fisheries and Aquaculture Registry System (SIRPAC version 2.0) is used by the countries as a tool for the registration of fishing vessels and production.

Evidence that government institutions or other institutions (private, academic, NGOs) have strengthened their capacity, especially for enforcing environmental laws, regulations, policies, and norms as a direct result of training and/or other activities has been observed by 82.5% of respondents. Most commonly, respondents reported increased capacity within government

organizations at either the national or municipal levels, followed by capacity improvements noted within academia, civil society, and NGOs. Survey respondent answers regarding how many people benefited directly from the project generally ranged between 15 and 9,000 (average of 1,016). Although one Helvetas project in the Dominican Republic reported benefiting more than 96,000 individuals. This specifically involved the Center for Popular Research and Education, Inc. (CIE-PO, in Spanish) that increased their capacity on solid waste management, and in turn trained and worked with six municipal governments. This project resulted in:

- 1 The municipalities learning to use planning instruments and developing comprehensive municipal solid waste management plans
- 2 Local governments assuming new attitudes and putting into practice actions that are more environmentally friendly
- 3 Students and teachers, as well as the media becoming multipliers of knowledge acquired through the project execution promoting the proper management of solid waste.

Evidence of institutional capacity strengthening included observing improved environmental management (40.0%), the utilization of action plans and management strategies (23.3%), seeing increased knowledge and awareness (23.3%), and improved inspection or enforcement capacities (16.7%). Specific examples include:

- The environmental committee in Santa Lucía Utatlán, Guatemala continues to be active in improving

the implementation of the regulations and waste management services implemented (Helvetas).

- The wastewater lab capacity building project was able to strengthen and improve the quality systems of 12 labs in the CAFTA-DR region. Among them, one regional and four national water labs were selected as wastewater reference labs and these labs can now produce reliable water sample results which can be used in courts to support enforcement cases or to confirm wastewater discharge is meeting permit standards. Additionally, regional and national wastewater reference labs are providing assistance and guidance to other water labs in the region/country to improve their quality systems (EPA).
- The Ministries of Environment of El Salvador and the Dominican Republic have instituted improved processes (e.g., converting it into an online platform) to expedite EIA permitting, consequently increasing their capacity to serve the public, increasing public access to information, and reducing time, by as much as 30%, for EIA permitting (EPA).
- The Ministry of the Environment (CONAP) in Guatemala has taken into consideration the procedures of the CAFTA-DR framework in its manual for the legal defense of biodiversity and protected areas (Universidad Mariano Gálvez de Guatemala).

A total of 52.5%⁴ of individuals reported that the work they were involved in through the CAFTA-DR ECP helped to improve or create environmental laws, regulations, policies, and/or norms. These included:

⁴ 10% no and 37.5% do not know or no response.

- Regulation OSP-01-08 of the Central American Integrated Fisheries and Aquaculture Registry System (OSPESCA).
- Regulation OSP-08-2014 to prevent, discourage and eliminate Illegal, Unreported and Unregulated Fishing (OSPESCA).
- Each country (fisheries agencies) enacted TED (turtle excluder devices) regulations and appropriate sanctions for non-compliant fishers (OSPESCA).
- Costa Rica's Ministry of Environment received the assistance of an EPA desalination expert who helped review and update the country's outdated desalination regulations. As a result, the Ministry was able to update the regulations and have them enacted by executive decree (EPA).
- El Salvador's Ministry of the Environment and Natural Resources was able to review and improve its emergency response program as a result of EPA's assistance related to the abandoned lead battery facility in San Juan Opico. Removal of hazardous waste and site remediation practices were updated and implemented (EPA).
- Guatemala's Ministry of the Environment and Natural Resources was assisted by the EPA during the environmental emergency of the La Pasión river's massive fish kill in Petén. The EPA team worked with the Ministry to monitor the impacted area and identify the possible sources of contamination. EPA recommended improvements to strengthen the Ministry's field sampling and monitoring programs (EPA).
- Guidelines for the reception and handling of waste generated in ships in port (COCATRAM).
- Guidelines for the chain of custody of ship waste until final disposal (COCATRAM).
- Guide for the elaboration of environmental policies under the precepts of the ISO 14000 2015 Standard (COCATRAM).
- Regulation of solid waste management and regulation of single-use plastics in the municipality of Esquipulas, Guatemala (Helvetas).
- Agreement between local authorities and civil society actors for the integral management of solid waste from the marine coast of the Barahona Province, Dominican Republic (Helvetas).
- The Municipality of La Reverend, Dominican Republic, created a resolution for the comprehensive management of solid waste (Helvetas).
- The creation of the solid waste regulation in the Cobano district, Costa Rica, allowing for fines to be applied to people who do not implement adequate management of solid waste in the district (Helvetas).
- Influenced Law 64-00 on Environment and Natural Resources (Helvetas, Dominican Republic).
- Influenced the Health Law 42-01; General Law of Public Health and Social Assistance 42-01; Law on the Municipal District and Municipalities 176-07; Law 120-99 on the prohibition of throwing waste of all kinds in public spaces; and the National Development Strategy, Law 1-12 (Helvetas, Dominican Republic).

Seventy-five percent of respondents⁵ reported that the work through the CAFTA-DR ECP created tangible environmental and/or economic improvements and 93.3% of these individuals believe that these are still being utilized. These tangible improvements most often included the

5 2.5% No and 22.5% do not know or no response; these were most from the Secretariat of Environmental Matters respondents.

creation of recycling points (e.g., Punto Limpio), waste collection programs, and the continued organization of waste collection events on coasts and river banks (50.0%); the utilization of environmental monitoring and management systems (e.g., port environmental management, garbage collection schedules) (14.3%); the production of guides, manuals, training, and educational materials (e.g., Environmental Teaching Guide on SWM has been developed for primary schools) (14.3%); and improvements in income generation (14.3%). For instance, Helvetas trained women’s organizations to make arts and crafts using recycled plastic, tires, and cardboard and they now have a catalog for marketing these products. Also, waste collectors in Nicaragua trained by Helvetas continue to use the safety and marketing knowledge generated from the project.

that these activities provided civil society with increased/improved access to quality environmental information. This was accomplished through Environmental Law Advisory Services or University Legal Clinics (72.7%; high participation of SEM representatives) and training (54.5%; legal clinics could also be considered a training).

When asked what actions they have seen being taken or have taken as a result of civil society having increased/improved access to quality environmental information, most individuals reiterated the question stating the publication of information or stating the importance of the population being able to access information; however, one individual noted an increase in civil society participation in environmental issues and another the improved quality of complaints made by civil society. One Community Survey respondent noted that she participated in a series of talks that were organized by the Free Legal Clinic at Universidad Nacional Autónoma de Honduras (UNAH) and through this became aware of the existence of this alternative mechanism for reporting environmental crimes and now knows that this legal route exists apart from the national routes.

In terms of observed environmental or social benefits, several respondents (36.4%) mentioned greater environmental commitment and awareness of institutions and the public, while a couple mentioned the submission and resolution of environmental cases, including a slaughterhouse not complying with environmental legislation, the regulation of noise pollution, and restricting the sale of Hawksbill turtle products in the Dominican Republic.



▼
Crafts with recycled material in the Dominican Republic.

Increasing public participation and transparency to support informed environmental decision-making

Thirteen individuals from COCATRAM, SEM, several universities, and a multiple agency⁶ undertook activities in this area. Overall, 84.6%⁷ felt

6 USAID, USAID-CCAD, WWF, WEC, National Cleaner Production Centers.

7 Two individuals stated that they did not know.



“As teachers, students and attorneys, we are empowering ourselves on environmental issues to provide the population with advice and attention with the support of the Secretariat for Environmental Affairs, which was not provided in the Free Legal Office of the FCJ/UNAH. Today the population has access to this new service and we are in a process of sensitization with different actors so that they can visit us with confidence and obtain access to justice in environmental matters for free. We have received complaints and these have been dealt with successfully. Cases that have been shared with us and received free legal consultation at FCJ / UNAH, include one the Island of Roatán, Cuyamel, Omoa, regarding the district slaughterhouse (butchering cattle) that did not comply with environmental legislation and did not have adequate processes for dealing with its wastes to protect people and the environment” **CAFTA-DR Secretariat for Environmental Matters (SEM) (2017-2020) – Honduras (translated)**

Generally, individuals felt (69.2% yes, 15.4% no⁸, and 15.4% did not know) that these activities worked to improve the public’s involvement in environmental decision-making. Once again, this was accomplished through the Environmental Law Advisory Services or University Legal Clinics (88.9%; high participation of SEM), and training (33.3%). Specific actions that were mentioned suggesting the public has become more involved in environmental decision-making, included stakeholders creating inter-institutional work-

8 COCATRAM

ing groups or making collaborative agreements to continue work in the future. One individual also noted that a Masters Diploma course in Environmental Law is being created in Honduras. Two individuals (COCATRAM, University Point of Contact) reported that this increased involvement continued after the ECP activities ended, one individual from Nicaragua felt that it did not, and the majority of others (55.6%) stated the project was still ongoing (all SEM). Additionally, several individuals reported that there is proactive participation of the academic community in the region, providing environmental legal advice through the SEM work.



“The improvements in port environmental management indicators made during the final stage of the project are proof of the environmental benefits resulting from this project. There is a universal increase in environmental awareness in the project actors.”
COCATRAM (2016-2020) (translated)

It appears that the few individuals answering this section that were not directly involved with the Secretariat of Environmental Matters were not aware of the work being done by the SEM. Two individuals (25.0%) reported their Project collaborating with another CAFTA-DR ECP agency to promote increased public participation in environmental decision making; specifically, one person stated supporting the creation of guides of good environmental practices.

Protecting and conserving wildlife and habitats for long-term economic and environmental development

Ten survey respondents from HSI, USFS, WCS, OSPESCA, and DOI reported working in the area of protecting and conserving wildlife and habitats. A total of 80% reported that the skills and/or knowledge learned during the training(s) provided through the CAFTA-DR ECP are still being used day-to-day. Responses were unique, except for the continued use of the training CD on CITES implementation. Most respondents mentioned the continued utilization of protocols, including the preparation of submissions for trade species; fire prevention; conservation and management of nesting areas of the scarlet macaw and the Hispaniola parrot; management of seed banks; plant nursery management and maintenance; soil and water conservation; and the handling confiscated wildlife. Others mentioned species identification guides and apps (Vida Silvestre); manuals and techniques (e.g., the Xylotron); and educational resources, such as the continued use of a curriculum (diplomado) on legislation and best practices for the application of wildlife law; and training modules on best practices for wildlife inspection. Additionally, it was mentioned that shrimp fishers throughout the participating CAFTA-DR nations are proficient in the use TEDs - sea turtle bycatch devices - and are still using them today.

Evidence that government institutions or other institutions (private, academic, NGOs) have strengthened their capacity for protecting and conserving wildlife and habitats as a direct result of training and/or other activities has been witnessed by 90% of respondents. The most common response was seeing increased knowledge and awareness (70%), observing the use of conservation measures and economic alternatives (40%), strengthened mechanisms/agreements (30%), and more environmental prosecutions (30%). Specific examples include:



Officials using the Wildlife app (Vida Silvestre app) to inspect and verify wildlife permits and shipments (species recognition and knowledge of laws and regulations) (DOI).



Individuals using the knowledge on how to care for, handle, and transport confiscated wild animals (HSI).



Improving controls to reduce illegal timber trade, by providing the necessary tools for the reliable and scientific identification of timber species to scientifically support administrative and criminal processes carried out by the corresponding institutions. One Community Survey respondent noted USFS trained many government officials on illegal logging in Honduras and the Institute for Forest Conservation created an office for illegal logging (USFS).



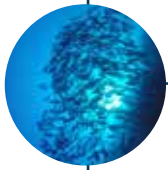
Strengthen knowledge and tools used to deal with fire management (USFS).



Duplication of a university training given on the topics of seed bank management and forest health with other students from related programs (USFS).



Better protection of sea turtles through increased awareness, knowledge, and use of sea turtle bycatch devices and by providing communities livelihood alternatives (e.g., ecotourism guides) (OSPESCA and USFS).



Strengthen mechanisms being used to prevent Illegal, Unregulated, and Unreported (IUU) fishing (OSPESCA).



Trained judges and prosecutors are prosecuting more environmental cases (DOI).



Commitments acquired from communities and their community authorities through agreements with government agencies (i.e., CONAP in Guatemala) are favoring the conservation of wildlife and habitats (WCS).

A total of 60%⁹ reported that their work through the CAFTA-DR ECP helped to improve or create environmental laws, regulations, policies, and/or norms to help protect and/or conserve wildlife and habitats. These included:

- National TED regulations (OSPESCA).
- Regulation OSP-08-2014 to prevent, discourage and eliminate IUU Fishing (OSPESCA).
- Update of regulations and laws to apply the CITES Convention in Honduras, Costa Rica, El Salvador, and Guatemala (DOI).
- Policy updates for the prosecution of wildlife crimes in Costa Rica (DOI).
- Manuals and Protocols (Compendium of Jurisprudence) (DOI).
- National Biodiversity Policy Costa Rica 2013 -2030 (HSI).
- National Biodiversity Strategy Costa Rica 2016 – 2025 (HSI).

⁹ 10% no and 30% do not know or no response.

- Regulations to the Wildlife Conservation Law (2017) (HSI).
- MINAE Decree 40548 (HSI).

All respondents reported that the work through the CAFTA-DR ECP created tangible improvements and 90% believe that these are still being utilized. Many of these improvements were already mentioned above, but a few additional tangible improvements include:

- The many manuals and identification guides produced for wood identification, especially for Rosewood species (USFS).
- The Ecotourism Manual for Guides of the Chacocente Wildlife Refuge (USFS).
- The information library on laws and regulations of the region on the CAWEN website (www.roavis.net) (DOI).
- The social media platform created on Facebook with more than 100,000 followers has served to communicate and raise awareness about the impacts of species trafficking, as well as serve as a mechanism where information on potential illegal acts has been shared (WCS).
- CD curriculum and guide for the management of confiscated wild animals (HSI).
- Field manual for the management of confiscated wild animals (HSI).



Several individuals mentioned environmental and/or economic benefits from the changes discussed above. A great example was provided by DOI, indicating that when species trade is sustainably enhanced under the technical regulations of CITES this allows for:

- 1 The sustainable use of the species;
- 2 The recognition of the benefits of species conservation, thus avoiding its extinction;
- 3 Better economic benefits to the communities where the species are managed;
- 4 Payment of tax obligations to the government by exports.

Other individuals mentioned:

- Improved control of illegal logging and improved forest management (USFS).
- The use of turtle excluder devices and circle hooks means that wild-caught shrimp can enter the United States market and also improved the protection of sea turtles. Participating nations initiated and have sustained a TEDs outreach and enforcement program to meet the United States trade requirements (NOAA and OSPESCA).
- Improvements due to ecotourism practices and agricultural-friendly techniques (discussed below).
- The better management of confiscated wild animals means that they can be seized alive, giving them the possibility of returning to the wild and contributing to the conservation of populations.

“A large number of people now have information to guide their decision-making regarding the acquisition of wildlife, taking into account the legality/ sustainability of their origin, as well as their interest in reporting possible crimes. This contributes to reducing the pressure on taxa with high demand (i.e., true parrots, primates) and generates another source of information on possible illegal activities that the competent authorities can monitor. Likewise, communities committed and convinced of the benefits of science-based, sustainable practices tend to have fewer environmental conflicts, less environmental degradation, and greater species richness (ecosystem resilience). This can lead to increased benefits in the long term, especially when community members recognize the present and future benefits of coordinated, regulated, and agreed-upon approaches with the authorities to meet their needs and conserve their resources.” – WCS (2016-2020), Dominican Republic, Guatemala, Honduras, Nicaragua (translated)

Improving management and conservation of the environment to support economic growth. Ecotourism practices

Three respondents were involved in the implementation of ecotourism activities within the ECP framework, with two from USFS stating their work strengthened community-based ecotourism practices, whereas the one respondent from WCS said theirs did not. It was confirmed in both USFS cases that at minimum some of the ecotourism practices are still in use. Specifically, it was mentioned that some community groups (fish-

eries cooperatives) are still offering either whale watching or sea turtle observation services; a community group of forest rangers is still operating; and at least pre-COVID-19 pandemic, the sustainable Tourism Cooperative COSERTUCHARCO was still functioning. Evidence of environmental and social benefits from these strengthened ecotourism practices include a decrease in the illegal collection of turtle eggs because the community members who previously collected the eggs were trained in community-based tourism to be park rangers and guides. Now they are the ones who protect the resource, due to the short-, medium- and long-term economic benefits that it generates.

Supporting environmentally friendly agricultural and forest product practices

Two USFS respondents worked to support environmentally friendly agricultural and forest product practices and in both cases, it was stated that some of these practices are still in use. Producers were provided with farm plans, which to date they continue to use because they saw improvements in their farms and their production, which in turn led to increased income. Environmental benefits of the continued use of these practices include improved soil and water conservation, increased forest cover, and decreased use of agrochemicals.

A Community Survey respondent from Nicaragua noted that as a field technician in the SAF Miraflor Esteli project, she later observed that project beneficiary producers achieved better organization, greater awareness regarding the care and management of the environment, and greater reforestation of areas where it was required using both fruit and timber trees. The latter helped contribute to the livelihoods of the producers, improving their income and their diet.

Improving private sector environmental performance

Five survey respondents were involved in improving private sector environmental performance; four¹⁰ (USAID, WWF, and WEC) said that private sector businesses trained during CAFTA-DR ECP activities still made use of the cleaner production and energy efficiency practices.

Unanimously, respondents reported that enterprises continue to make use of energy efficiency practices (e.g., boilers combustion processes, equipment improvement to reduce energy consumption, etc.), especially because of the rapid and significant savings that can be achieved. One individual mentioned the continued use of processes to improve the consumption of resources (mainly raw materials, thus helping to reduce costs), while a couple of individuals mentioned the continuation of solid waste and wastewater management, as these reduce visible waste and decrease contamination of water bodies.



“Three years after having executed the projects, we carried out a new one to evaluate impacts and the continuity of recommended measures. Overall, 65% of supported companies continued to make improvements and had even expanded their scope. This resulted in accumulated annual improvements that continued generating economic savings and improvements in the environmental performance of the companies.” WEC (2008-2015) (translated)

Similarly, the four respondents (WWF and WEC) stated that others trained during the ECP activi-

10 The fifth provided the option no response.

ties still train on, accredit and/or certify cleaner production (CP) and Environmental Management Systems (EMS). Specifically, WWF mentioned that participating universities and the National Cleaner Production Centers (NCPCs) have established relationships to replicate the courses, while NCPCs continue to work with MSMEs in on-site evaluations and have incorporated integrated watershed management into their discourse. WEC, through new programs, continues to provide technical assistance (e.g., audits of water, energy, and general improvements in CP design), allowing for the expansion of impacts that WEC generates in the region.

Two survey respondents (40%) reported their work included the improvement/promotion of courses and/or research activities on CP practices within universities, research centers, and other institutions of higher learning. Both reported that these courses and/or research activities have become more popular, as well as that several students have been hired in the companies where they completed their internships.



“As one of the most recent programs of CP, we carried out the Pathways to Cleaner Production project, where we developed internship programs for university students in companies. Given the success of the opportunity to learn about the operations in the companies, several students were selected by them and managed to be hired.” WEC (2008-2015) (translated)

One individual from WEC and one from WWF were aware of public-private partnerships and/or voluntary agreements that have occurred after the CAFTA-DR ECPs finished. For instance, the work and support provided by WEC to the dairy

sector served as the basis for developing the CP agreement between the government and the dairy sector. WWF reported that the universities in the countries where they worked were interested in continuing to implement the CP course as a tool for integrated watershed management (COVID-19 has restricted this).

Priorities

Individuals were asked in the 2020 CAFTA-DR online survey what they believed should be the priority areas for future CAFTA-DR ECP work. Expectedly, many individuals mentioned their specific areas of work. However, several priority areas were mentioned more often than others, with wastewater management/water quality (23.5% of respondents), public participation/community organization (23.5%), and solid waste management (21.6%), being the most common, followed by focusing on improving laws/norms (17.6%), improving environmental compliance (13.7%), and environmental education (11.8%). The heavy focus on wastewater management/water quality is important considering that only 5.7% of individuals said that was one of their areas of work. A couple of individuals also focused on more practical priorities, such as creating a virtual repository of all the technical guides or other documents, as well as promoting sustained engagement and investment to ensure lasting impacts and decrease repetition of activities.

Challenges posed by the COVID-19 pandemic

The most commonly mentioned challenge due to the COVID-19 pandemic was that activities either needed to be changed or were canceled (66.7% of respondents). Several individuals (23.3%) specifically mentioned that certain evaluations, inspections (e.g., ports), and training sessions (e.g., that required hands-on aspects, such as working with live animals) were not possible. Other com-

mon responses were connectivity and/or lack of knowledge on how to use virtual platforms (30.0%), lack of a physical presence (33.3%), and difficulties working at a distance at the community level (20.0%).



“Most of the activities considered in our project are in the field and with communities that generally lack the internet or electronic means of communication, so the organization of meetings/key forums/virtual trainings is not an option.” **WCS (2016-2020) (translated)**



“All face-to-face activities were affected and a transition to virtual had to be made to undertake workshops and trainings.” **Helvetas (2018-2020) (translated)**

One interesting comment that was geared towards actual environmental results was that in the case of waste management, recycling activities decreased during the pandemic due to negative fluctuations in the price of crude oil (and thus plastics).

Opportunities arising from the COVID-19 Pandemic

An opportunity that emerged because of COVID-19 was the realization that some activities (e.g., conferences, meetings, training) could be done virtually and be more efficient (25.8% of respondents), including decreasing costs (e.g.,

less travel, logistics) (12.9%), and allowing for increased participation and representation (19.4%). Moreover, the digitization of information or the recording of seminars, modules, and workshops (12.9%) allow for this material to reach more individuals over more time. Many individuals also mentioned that COVID-19 led to virtual innovation (25.8%) and pushed them to learn how to navigate virtual platforms (32.3%). One individual also importantly noted that COVID-19 highlighted the problem of inappropriate wildlife management and wildlife trafficking.



“One of the positive aspects that we can highlight as a result of the design and implementation of virtual modules was the increased number and variety of participants. Approximately, 90 individuals participated in each module, including government officials, academia, and the private sector; for a total of 960 participants. Additionally, the diversity of participants at the country level allowed for complex and diverse discussions.” **USFS (2008-2020) (translated)**



ANNEX 1

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.

The tables presented below show the number of submissions by year and by country, respectively. Up to December 2020, forty four (44) submissions have been filed.¹¹

Year	Number of submissions
2007	1
2008	2
2009	1
2010	10
2011	8
2012	2
2013	5
2014	2
2015	3
2016	3
2017	1
2018	3
2019	2
2020	1

Country	Number of submissions
Guatemala	17
El Salvador	6
Honduras	7
Dominican Republic	10
Costa Rica	2
Nicaragua	2
United States	0

¹¹ See also <http://www.saa-sem.org/en>

Registry of Citizen Submissions

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2007	CAALA/07/001 TORTUGAS MARI- NAS RD	Dominican Republic	May 9, 2007	Factual Record Published	May 16, 2011	The Submitter (Humane Society International) asserts that the Dominican Republic is not effectively complying with its environmental legislation by not carrying out the inventory of products derived from Hawksbill turtles which would allow separating the products made before the ban from those that were produced during the validity of the ban is illegal.
2008	CAALA/08/001 EX- TRACCIÓN DE ARE- NA EN LAS CANAS RD YELLEN	Dominican Republic	November 17, 2008	Archive	March 6, 2009	<p>The Submitters (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.</p> <p>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.</p>
2008	CAALA/08/002 EXTRACCIÓN DE ARENA EN LAS CANAS RD YELLEN	Dominican Republic	December 2, 2008	Archive	March 6, 2009	<p>The Submitter (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.</p> <p>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.</p>
2009	CAALA/09/001 URBANIZACIÓN EL ESPIÑO ES	El Salvador	April 24, 2009	Suspended	February 26, 2010	<p>The Submitter (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.</p> <p>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.</p>
2010	CAALA/10/001 RESIDENCIAL VILLA VERANDA ES	El Salvador	January 14, 2010	Factual Record Published	August 13, 2012	<p>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.</p> <p>The Secretariat works on the preparation of a Factual Record.</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2010	CAALA/10/002 INCUMPLIMIENTO DE LA LEY DE CAZA GALAS GT	Guatemala	February 3, 2010	Suspended	April 27, 2010	<p>The Submitter (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.</p> <p>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.</p>
2010	CAALA/10/003 LOS COBANOS FUNDARRECIFE ES	El Salvador	February 4, 2010	Suspended	October 11, 2010	<p>The Submitter states that the area referred to as Los Cóbános Reef, which has been declared the Los Cóbános 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 Submitter 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 [...]"</p> <p>The Secretariat has determined not to request a response from the Republic of El Salvador.</p>
2010	CAALA/10/004 LACHÚA GT	Guatemala	February 15, 2010	Suspended	May 17, 2010	<p>The Submitter 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."</p> <p>The Secretariat has determined not to recommend the preparation of a factual record</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2010	CAALA/10/005 ATITLÁN GT	Guatemala	February 15, 2010	Suspended	May 19, 2010	<p>The Submitter (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.</p> <p>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</p>
2010	CAALA/10/006 LAGUNA DEL TIGRE FONPETROL GT	Guatemala	March 8, 2010	Suspended	June 27, 2012	<p>The Submitter 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 Submitter, 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 non-compliance with these regulations.</p> <p>The Secretariat is working on the preparation of a Factual Record according to the work plan submitted to the Environmental Affairs Council.</p>
2010	CAALA/10/007 OMOA HN	Honduras	March 8, 2010	Suspended	March 15, 2011	<p>The Submitter (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.</p> <p>The Secretariat, after analyzing both the Submission and the response from Honduras, recommended the preparation of a factual record to the Environmental Affairs Council</p>
2010	CAALA/10/008 HOSPITAL NACIONAL DE MIXCO-MONTE REAL GT	Guatemala	July 27, 2010	Review suspended	July 27, 2010	<p>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.</p> <p>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. (The Submitter had 30 days to file an expanded Submission).</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2010	CAALA/10/009 JARDINES DE TICK- AL II GT	Guatemala	September 3, 2010	Review Sus- pended	September 3, 2010	<p>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.</p> <p>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</p>
2010	CAALA/10/010 CONTAMINACIÓN AUDITIVA-ANTIGUA GUATEMALA GT	Guatemala	October 1, 2010	Suspended by submitter	January 23, 2011	<p>The Submitter (<i>Hotel Casa Florencia and 7th Avenue Neighbors Committee of Antigua Guatemala</i>) 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 the city.</p> <p>The submitter requested to the Secretariat the temporary suspension of their submission.</p>
2011	CAALA/11/001 SEA TURTLES CR	Costa Rica	January 10, 2011	Review sus- pended	March 6, 2011	<p>The Submitter (Association Sea Turtle Restoration Program –PRETOMA) 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.</p> <p>The Secretariat determines that the Revised Submission was presented after the 30-day time limit had already passed and concludes review of the case</p>
2011	CAALA/11/002 NATIONAL MIXCO HOSPITAL II GT	Guatemala	April 4, 2011	Review Suspended	April 4, 2011	<p>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.</p> <p>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</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2011	CAALA/11/003 DE-FORESTATION LOS AMATES GT	Guatemala	May 4, 2011	Review Suspended	May 4, 2011	<p>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.</p> <p>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</p>
2011	CAALA/11/004 WEST BAY ROATAN HN	Honduras	May 16, 2011	Factual record published	April 10, 2013	<p>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.</p> <p>The Secretariat for Environmental Matters has notified the Environmental Affairs Council of a time extension for issuing determinations.</p>
2011	CAALA/11/005 SEA TURTLES-TED II-CR	Costa Rica	August 27, 2011	Suspended	June 6, 2012	<p>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.</p> <p>The Secretariat for Environmental Matters has notified the Environmental Affairs Council of a time extension for issuing determinations</p>
2011	CAALA/11/006 OMOA II – HN	Honduras	September 28, 2011	Suspended	February 7, 2012	<p>The Submitter (FUNDAMBIENTE) 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 [...]”</p> <p>The Secretariat is currently analyzing the Submission to determinate whether it fulfills requirements of Article 17.7.2 of the CAFTA-DR.</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2011	CAALA/11/007 AGUA CALIENTE RIVER ES	El Salvador	November 14, 2011	Suspended	January 30, 2012	<p>The Submitter (Environmental Management Committee of Ciudad Arce) 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.</p> <p>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</p>
2011	CAALA/11/008 MAYA BIOSPHERE GT	Guatemala	November 14, 2011	Suspended	May 1, 2012	<p>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.</p> <p>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</p>
2012	CAALA/12/001 "OMOA III-HN"	Honduras	July 27, 2012	Suspended	September 11, 2012	<p>The Submitter (FUNDAMBIENTE) claims that there have been a series of irregularities and non-observance 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.</p>
2012	CAALA/12/002 NOISE POLLUTION II – ANTIGUA GT	Guatemala	October 2012	Suspended	June 12, 2012	<p>The Submitter (casa Florencia Hotel) 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</p>
2013	CAALA/13/001 LAKE MASAYA NI	Nicaragua	February 28, 2013	Suspended	April 2, 2014	<p>The Submitter (Democratic Federation of Public Service Workers) 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.</p>

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2013	CAALA/13/002 HAZARDOUS WASTE DR	Dominican Republic	May 23, 2013	Suspended	July 8, 2013	The Submitter (Green Eco Recycling Industrial S.A.) points out the lack of effective enforcement of the environmental legislation regulating the treatment of hazardous wastes and their disposal in the Dominican Republic.
2013	CAALA/13/003 EMISIONES CONTAMINANTES LOS ALCARRIZOS RD	Dominican Republic	June 19, 2013	Active	July 10, 2013	The Submitter (Board of Neighbors Amor y Fe) claims that there is non-compliance with environmental legislation due to the alleged irregular operations of a biodiesel plant in the Los Alcarrazos 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	Factual record published.	May 21, 2017	The Submitter (Environmental Law Institute) claims that the Republic of Honduras is failing to effectively enforce environmental legislation concerning the legality of the authorizations for constructing a hydroelectric project located in the Cuyamel River micro basin.
2013	CAALA/13/005 HAZARDOUS WASTE DR	Dominican Republic	October 23, 2013	Suspended	November 20, 2014	The Submitter (Green Eco Recycling Industrial S.A.) points out the lack of effective enforcement of the environmental legislation regulating the treatment of hazardous wastes and their disposal in the Dominican Republic.
2014	CAALA/14/001 Dixon Cove Bay – HN	Honduras	September 10, 2014	Factual record published.	June 6, 2019	The Submitter (Environmental Law Institute) claims that the Republic of Honduras is failing to effectively enforce environmental legislation regarding the legality of the authorizations for constructing a cruise terminal port in the island of Roatán, Honduras.
2014	CAALA/14/002	Guatemala	October 14, 2014	Suspended	November 6, 2014	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
2015	Colonia Centroamerica	Guatemala	October 14, 2014	Suspended	November 6, 2014	The Submitters (Group of neighbors of Colonia Centroamerica) claim that the Republic of Guatemala is not effectively enforcing environmental legislation regarding the operations of a restaurant in the neighborhood.
2015	CAALA/15/001 Landfill ES	El Salvador	February 6, 2015	Suspended	June 1, 2015	The Submitter (Las Chinamas Limpia y Saludable Association – ACHINAMAS) claims that the Republic of El Salvador is not effectively enforcing environmental legislation regarding the construction of a landfill in a community located in the Chinamas village in the department of Ahuachapan in El Salvador.

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2015	CAALA/15/002	Guatemala	April 6, 2015	Suspended	June 1, 2015	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.
2015	CAALA/15/003 Sierra de Bahoruco	Dominican Republic	November 9, 2015	Suspended	June 1, 2015	The Submitters (Group of lawyers of Puerto Barrios, Izabal) claim that the Republic of Guatemala is not effectively enforcing environmental legislation regarding the operation of a slaughterhouse located in Puerto Barrios Izabal.
2016	CAALA/16/001 Oakland GT	Guatemala	May 18, 2016	Suspended	October 10, 2016	The Submitter (Association of Oakland neighbors) claims that the Republic of Guatemala is not effectively enforcing environmental legislation regarding the construction of two apartment towers in Guatemala City.
2016	CAALA/16/002 Protección Animal	Dominican Republic	August 5, 2016	Final Factual Record submitted to the EAC	November 6, 2020	The Submitter (Dominican Society for the Prevention of Cruelty to Animals) asserts that the Dominican Republic has failed to effectively enforce its environmental legislation derived from the alleged situation of the animals housed in the Moca Zoo, Espaillat province.
2017	CAALA/17/001 Contaminación Río Motagua	Guatemala	April 4, 2017	Suspended	May 23, 2017	The Submitter (Neighborhood Association of Cabo Tres Puntas) asserts that the Republic of Guatemala has failed to effectively enforce its environmental legislation derived from the alleged contamination of marine waters, reefs and beaches as a result of large quantities of plastic and other solid waste that the Motagua river throws to the Caribbean Sea.
2018	CAALA/18/001 Contaminación Auditiva - ES	El Salvador	June 13, 2018	Suspended	August 13, 2018	The Submitters (group of residents of the "Escalón" neighborhood) affirmed that the Republic of El Salvador is not complying with the effective enforcement of its environmental legislation due to the excessive noise produced by an unnamed disco located in the "Escalón" municipality of San Salvador, which pollutes the environment and puts the health of neighbors at risk.
2018	CAALA/18/002 Sierra de Bahoruco II - RD	Dominican Republic	June 19, 2018	Determination 17.8.1 recommending the preparation of a factual record	July 27, 2020	The Submitters (SOS Ambiente RD) resume the communication CAALA/15/003 in which they asserted the breach of the General Law on Environment (64-00) and the Sectorial Law of Protected Areas (202-04) due to the deterioration caused by the deforestation of the Sierra de Bahoruco National Park.

Year	Submission Code	Party	Date Filed	Current Status	Most Recent Activity	Summary
2016	CAALA/16/003 San Ángel	Guatemala	August 10, 2016	Suspended	February 7, 2018	The Submitters (Associations of several neighbors) assert that the Republic of Guatemala has failed in the effective enforcement of its environmental legislation derived from the alleged approval of projects that have created an alleged deforestation of the sector's forests and elimination of fauna without consulting or listening to the neighbors.
2019	CAALA/19/001 Rastro Distrito Central - HN	Honduras	May 24, 2019	Withdrawn by submitter	November 20, 2019	The Submitters (group of citizens accompanied by the Free Legal Office of UNAH) state that the Republic of Honduras is not complying with the effective enforcement of its environmental legislation in the case of pollution caused by the operation of the slaughterhouse located on the road to Olancho in Tegucigalpa MDC.
2019	CAALA/19/002 Vertedero Las Terrenas - RD	Dominican Republic	May 24, 2019	Party Response	February 21, 2020	The Submitter (Samana Smiles Foundation) asserts that the Dominican Republic is not complying with the effective enforcement of its environmental legislation due to the pollution produced by the landfill located in Las Terrenas, Samana Province, Dominican Republic.
2020	CAALA/20/001 Cuenca del Río Motagua - GT	Guatemala	September 23, 2020	Suspended	November 07, 2020	The submitter (Allan David Ramos Molina, mayor of Puerto Cortes, Honduras) asserts that the Republic of Guatemala has failed to effectively enforce its environmental law resulting from the alleged pollution caused by the waste that is carried by Motagua River into the Gulf of Honduras and the Honduran coastline.

Annex 2 - Performance Measurement Framework of the CAFTA-DR Environmental Cooperation Program

Indicators	Cumulative Progress
Number and type of public institutions that have stronger capacity to enforce environmental legislation and preservation and ensure effective stakeholder compliance	<p>More than 116 public institutions have strong capacity to enforce environmental legislation and preservation and ensure effective stakeholder compliance</p> <ul style="list-style-type: none"> • <i>Existence of procedures of EIA certification and registration.</i> • <i>3 technical guides were prepared with EPA leadership, to support the revision of EIA in the metallic and non-metallic mining, energy and tourism sectors.</i> • <i>Every country in the CAFTA-DR region has implemented an improved procedure for EIA review.</i> • <i>Workshops, field visits, and technical visits to improve the capacity of public institutions in EIA.</i> • <i>6 new and/or improved procedures for EIA review and environment permits and 6 countries implement a system of follow-up and control of environmental complaints.</i> • <i>EPA provided technical assistance to the CAFTA-DR countries in the development of a regional model wastewater regulation.</i> • <i>Countries have a greater institutional capacity in the regulatory and technical assessment process of wastewater treatment plants.</i> • <i>Improved capacity of regional laboratories to determine the quality of wastewater discharge.</i> • <i>CAFTA-DR ECP collaborated with countries to improve and harmonize environmental regulations, policies, and procedures related to solid waste management practices.</i> • <i>Costa Rica: Law for Integrated Solid Waste Management (Ley de Gestión Integral de Residuos Sólidos, in Spanish) approved.</i> • <i>El Salvador: National Solid Waste Policy being updated (as of 2016).</i> • <i>Guatemala: National Regulation of the law on solid waste management.</i> • <i>Nicaragua: updating of the national policy for solid waste management and elaboration of technical norms in solid waste.</i> • <i>Dominican Republic: feasibility study on the modification of a solid waste dump and a study on the capture and reuse of methane gas, as part of a pilot project carried out in the municipality of San Cristobal.</i> • <i>30+ institutions have had training in emergency management of spilled harmful substances.</i> • <i>More stringent and harmonized air quality/fuel emissions standards are used.</i> • <i>Enhanced capacity of government institutions to receive, process and respond to public complaints about violations of environmental laws.</i> • <i>Updated the Fisheries Register of the Integrated Registration System of Fisheries and Aquaculture of Central America (SIRPAC).</i> • <i>Established a program of inspection and selection of inspectors to improve the mechanisms and resources in place to ensure compliance with the binding regulations of the Central American Integration System (SICA).</i>
Number of people trained within public institutions in institutional strengthening for effective compliance and enforcement of environmental legislation and preservation	<p>87,242+ individuals trained (e.g., port operators, judiciary, inspectors, community leaders, environmental managers) within public institutions in institutional strengthening for effective compliance and enforcement of environmental legislation and preservation.</p>

Indicators	Cumulative Progress
Number of laws, policies, strategies, plans, agreements, or regulations addressing climate change (mitigation or adaptation) and/or biodiversity conservation officially proposed, adopted, or implemented as a result of CAFTA-DR ECP.	261 laws, policies, strategies, plans, agreements, or regulations addressing climate change and/or biodiversity conservation officially proposed, adopted, or implemented.
Number of people reached through education and training activities that foster communication between civil society and governments to facilitate public participation in environmental decision making	128,010+ individuals (8,384 trainers) reached through education and training activities that foster communication between civil society and governments to facilitate public participation in environmental decision making .
Number of individuals that have potentially been reached through campaigns and outreach material on public participation mechanisms and environmental information	2,111,098+ individuals have potentially been reached through campaigns and outreach material on public participation mechanisms and environmental information .
Number of new or improved tools used by public institutions in charge of enforcing CITES to enhance wildlife protection and forestry species conservation (training, plan, studies, monitoring, community initiative, standards, list of species, etc.)	<p>42 new or improved tools used.</p> <ul style="list-style-type: none"> • <i>Strengthened legal and operational framework to improve CITES implementation in CAFTA-DR countries.</i> • <i>Established and strengthened the Central American and Dominican Republic Wildlife Enforcement Network (CAWEN).</i> • <i>Animal rescue centers have improved their management system for rehabilitation, confiscation, and possible liberation of species taking into consideration national legislation and CITES principles.</i> • <i>Development of a CD with an interactive course that contains administrative, legal and technical aspects of the implementation of CITES.</i> • <i>An interactive training CD on animal handling was developed, including field guides and references to CITES regulations.</i> • <i>An economic valuation study of CITES species in CAFTA-DR countries was undertaken, as well as a study to analyze the behavior of trade in CITES species in the region.</i> • <i>Development of a digital trafficking map with information about wildlife trafficking in Central America.</i> • <i>Regional wood identification workshop (2016) for CITES officials, government agencies, researchers and non-profit organizations in CAFTA-DR countries (25 participants).</i> • <i>New laws and regulations have been adopted to strengthen the CITES legal framework and foster biodiversity protection, including legislation in Costa Rica, El Salvador.</i> • <i>Taxonomic guides have been developed for Tillandsia identification (Guatemala), and forest species.</i> • <i>More than 300 government officials trained in systems and methodologies to prevent and combat illegal logging.</i> • <i>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.</i>

Indicators	Cumulative Progress
Number of people reached and sensitized by public awareness campaign on wildlife protection or conservation	<p>More than 31 million people have been reached through outreach campaigns (social media and in person) throughout the region.</p> <p>DOI-ITAP continues to support CAWENS communications the CAWEN website and Facebook pages, used to disseminate information regarding their activities, enforcement actions, training events, and outreach as well as their participation in regional and international events.</p> <p>Open mobile App for wildlife identification and a closed component allowing designated government officials to receive wildlife violation and trafficking reports from the public and other officials and respond to these accordingly materials.</p>
Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of CAFTA-DR ECP	<p>Over 1,858,464 million ha of biological significance are under improved natural resource management as a result of CAFTA DR ECP.</p> <p>Over 131.7km of perimeter (e.g., delimiting and cleaning, fire breaks, capacity building patrols, etc.) under improved natural resource management as a result of CAFTA DR ECP.</p>
Number of people trained in wildlife protection and their habitat for long-term economic and environmental development	<p>7,687+ individuals trained in wildlife protection and their habitat for long-term economic and environmental development (e.g., trained to improve CITES implementation and enforcement, wildlife legislation and economic alternatives to poaching, prevent and combat illegal logging, ecological risk assessment methodologies etc.), including custom officers, other officials Government representatives, judiciary, forest guards, community members and leaders, indigenous representatives and leaders, scientists and NGO representatives.</p>
Number of people trained in the development of ecotourism and or sustainable agricultural practices	<p>31,476+ individuals from 28+ communities have attended best practices events, workshops, and trainings on ecotourism, sustainable or environmentally-friendly agricultural practices, food alternatives, organic certification, school garden management, composting and organic fertilizer production, natural resource management and/or biodiversity conservation.</p> <p>42 micro, small and medium enterprises have completed the Green Deal Tourism Certification and are applying Sustainable Tourism Good Practices.</p>
Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of CAFTA-DR assistance	<p>8,150+ individuals have increased economic benefits derived from sustainable natural resource management and conservation, including ecotourism, the growth of certified crops, food alternatives, organic fertilizer production and school/home gardens.</p>
Number of farmers (or farms) using improved production methods which benefit the environment	<p>20,923+ farmers are using improved technologies or management practices.</p> <p>20,700+ farmers in CAFTA DR countries were certified between 2007 and 2013.</p> <p>9 fields of organized farmers were certified covering different products (fruits, vegetables and fish).</p>
Number of hectares under improved technologies or management practices as a result of CAFTA-DR ECP assistance	<p>At least 190,755 ha are under improved technologies or management practices (e.g., certified crops, mangrove management and native and endangered tree planting) as a result of CAFTA-DR ECP operations, including 44,745 ha of high biological significance.</p>

Indicators	Cumulative Progress
Type of improved production practices being used by farmers	<p>12 general improved practices being utilized.</p> <ul style="list-style-type: none"> • Protection of shade trees • Planting of additional native shade trees (fruit and forest trees) • Planting of native and endangered tree species • Maintenance of wildlife corridors • Utilization of organic fertilizers • Application of green manure during the fallow period • Reduction of reliance on pesticides in favor of biological and natural alternatives • Prohibited use of any banned pesticides • Optimization of water use for irrigation • Improvement of food safety practices • Micro-grafting of superior cacao clones, resulting in better yields and fewer disease-infested crops • Improved mangrove management
Change in SMEs' GHG emissions [measured in tons of CO2]	16,000+ ton decrease in yearly greenhouse gas emissions.
Ratio between cost savings (per year) through the adoption of cleaner production practices and technologies and total investments realized by MSMEs (after one, two and three years)	Approximately US\$3,324,471 million in Savings have been generated since 2007.
Number and % of SMEs that have adopted new technologies or practices to respond to environmental standards	870+ MSMEs have adopted new technologies or practices to respond to environmental standards.
Number of people trained in cleaner production and increased private sector's environmental performance	Over 2,289 individuals (e.g., students, teachers, CPC persons, and SME personnel) have been trained in cleaner production and Environmental Management Systems (EMS).



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