
ENVIRONMENTAL LAW ENFORCEMENT AND COMPLIANCE IN CENTRAL AMERICA

MAURI, CAROLINA

Environmental Attorney, EcoConsulta, P.O. Box 4743/1000, San Jose, Costa Rica

SUMMARY

Environmental Enforcement and Compliance is a critical issue for Central American countries. The Central American countries have a number of laws that attempt to address different environmental problems. In practice, however, they cannot be effectively implemented because they are not clear, not flexible, and do not have effective mechanisms for achieving their stated goals. Existing legal and institutional mechanisms have not helped to solve many of the environmental problems and in some cases have caused additional obstacles to protect natural resources and the environment. Environmental law enforcement and compliance in the region is very weak in general due to many different factors. Some of the main limitations include: lack of political will; inefficient legal frameworks that do not address environmental issues in an appropriate manner; failure to include environmental issues in the national policy plans and planning processes; and lack of financial and human resources. This paper provides a general overview of the environmental law and policy process in Central America and some of the most important environmental provisions in the legal frameworks of each of the countries in the region. It also examines main obstacles and limitations for an efficient enforcement and compliance of environmental legislation in the region.

1 INTRODUCTION

Central American countries have been rapidly depleting their natural resources. Population growth is a major problem in all countries, increasing pressure on natural resources and creating pollution problems, particularly in urban areas. Continuing high indices of poverty in the region exacerbate natural resource depletion. Legal and political institutions do not at present provide an effective framework for environmental protection.

Although Central America has great biological diversity (about 8% of all biodiversity of the planet) the rate of biodiversity loss is rapid and many species are disappearing even before being discovered. For about 40 years, between 1950

and 1990, the region lost more than 70% of its forest cover and along with it valuable wildlife and environmental benefits. Air and water quality is also decreasing due to increasing industrial activities in the region, ineffective treatment facilities for solid and liquid waste, as well as weak laws and enforcement.

The principal environmental problems in Central America can be summarized as follows:

- Deforestation caused by expansion of agricultural frontiers for increased pastureland, subsistence agriculture, and agricultural production. This situation leads to deterioration of watersheds, loss of habitat, reduced biodiversity and soil erosion.
- Loss of biological diversity due to habitat

loss, illegal hunting and trade, and perhaps global climate change effects.

- Increased levels of chemical pollution from input-intensive agriculture, aquaculture operations, industrial production and growing urban populations.
- Increased logging and mining causing significant social and environmental impacts.
- Over-fishing by industrial vessels causing severe deterioration of fish stocks.
- Sewage and pesticide residue runoff transported to streams, beaches and coral reefs
- Population growth leading to increased demand on limited resources, more concentrated urban areas and pollution problems.

The end of the 1980's and the decade of the 1990's were very important because of the legal and institutional building in Central America. Countries adopted constitutional provisions to include the right of a healthy environment, enacted specific laws for environmental protection such as General Environmental Laws, Environmental Impact Assessment law, Biodiversity Law, Forestry Law, and creation of new institutions such as Environmental Prosecutors in the Attorney General's Office.

However, existing legal and institutional mechanisms have not helped to solve many of the environmental problems and in some cases have caused additional obstacles to protect natural resources and the environment. Environmental law enforcement and compliance in the region is very weak in general due to many different factors. Some of the main limitations include:

- Lack of political will.
- Inefficient legal frameworks that do not address environmental issues in an appropriate manner.
- Environmental issues that are not includ-

ed in the national policy plans and planning processes.

- Lack of financial and human resources.

This paper provides a general overview of the environmental law and policy process in Central America and some of the most important environmental provisions in the legal frameworks of each of the countries in the region. It also examines main obstacles and limitations for an efficient enforcement and compliance of environmental legislation in the region.

1.1 Regional Environmental Policy

In 1989 the Presidents of the Central American countries created the Central American Commission for Environment and Development (CCAD, Spanish acronym), to design and implement regional coordination of environmental policy. This initiative is part of the Central American System for Integration that also includes other secretariats on economic, cultural and parliamentary affairs. In August 1994, the Central American Presidents agreed to issue a joint declaration calling for the creation of an "Alliance for Sustainable Development," as a "comprehensive Central American initiative that addresses political, moral, economic, social, and environmental issues."

1.1.1 Central American Alliance for Sustainable Development

On October 12, 1994, the Central American Presidents met in Nicaragua to sign the Alliance for Sustainable Development (ALIDES).¹

ALIDES defines sustainable development as "a process that pursues progressive change in the quality of human life and which targets human beings as the central and primary target of development. It is achieved through economic growth with social equity and changes in production and consumption patterns, based on

ecological equilibrium and the support of the region.” This implies respect for regional, national and local ethnic and cultural diversity, and the enhanced and full participation of all citizens, living together in peace and harmony with nature, not jeopardizing but rather guaranteeing the quality of life of future generations”.

ALIDES main principles include:

- Respect for all life forms;
- Improvement in the quality of human life, including explicit mention of democratic participation, cultural diversity, and social equity;
- Respect for sustainable use of the vitality and diversity of the earth, including protection of biodiversity, pursuit of regeneration, and sustainable management of natural resources;
- Promotion of peace and democracy, including explicit reference to the struggle against violence, corruption, and impunity;
- Respect for cultural plurality and ethnic diversity, including explicit reference to the overlap between indigenous peoples and the location of sites with great biodiversity;
- Pursuit of greater economic integration, including a call for incorporation of Central America in broader regional trade blocs; and
- Explicit recognition of the intergenerational equity issues that underlie sustainable development.

1.1.2 Agreement between Central America and the United States (CONCAUSA)

During the Summit of the Americas, held in Miami in December 1994, the U.S. joined Central America in its ALIDES² commitment when the Central American Presidents and Vice-President Albert Gore signed the Agreement between

Central America and the United States (Convenio Conjunto Centroamerica-USA, best known by its Spanish acronym CONCAUSA). The Agreement consists of a Plan of Action that establishes individual responsibilities for the US and the Central American countries.³

CONCAUSA's plan of action includes the following areas:

- Biodiversity conservation: Identification, preservation and sustainable use of the unique biodiversity of the region;
- Energy: Promotion of clean and efficient energy use;
- Environmental legislation: Strengthening of the legal and institutional frameworks and improvement and harmonization of environmental laws and regulations; and
- Sustainable economic development.

In addition to the specific components of the plan of action, CONCAUSA also supports and promotes the implementation of the Alliance for Sustainable Development. In order to implement its obligations under CONCAUSA, the US Government (through USAID) established the Regional Environmental Program for Central America (PROARCA), a 5-year 24 million dollar program that was extended in the fall of 2001 for 5 more years and with an additional 25 million dollars. This program is presently managed from the USAID regional office in Guatemala City.

1.2 Regional Environmental Law

Central American Countries have developed a regional legal framework to address some of the most pressing environmental issues in the region such as climate change, biodiversity and transboundary movement of toxic wastes. These regional agreements provide an important framework that help countries enact domestic legislation in order to implement and comply with international and regional agreements. All of these agreements that

have been signed and ratified by all Central America countries have entered into force. The secretariat of these agreements is the Central American Commission on Environment and Development.

1.2.1 Regional Agreement on Climate Change

Central America's largest contribution to climate change is from loss of forest cover. Reducing the rate of loss of forest cover, or growing additional forest will help contribute to mitigating global climate change. The Regional Agreement on Climate Change was signed in Guatemala on October 1993 as a regional effort to address the impacts of climate change.

The Agreement provides that "[s]tates must protect the climatic system for present and future generations based on equity and in conformity with their responsibilities and capacities to ensure that food production is not threatened and to allow economic development."

According to the Agreement, Central American countries must develop conservation and development strategies that include climate protection measures as a priority (Article 13). It is important to note that countries must implement economic and legal measures, as well as incentives to promote research on climate change and protection measures. In addition, countries must also promote the creation of a law on climate protection (Article 15).

The implementing institution is the Central American Commission on Environment and Development in coordination with the Regional Committee on water Resources and the Meteorological Institutes in each country.

1.2.2 Central American Agreement for Biodiversity Protection and Priority Wild Areas Protection

The exploitation of wild species for commercial purposes is a major threat to

global biodiversity. Central American countries have established as a priority helping to conserve biodiversity and ensuring that illegal trade in endangered species is reduced in the region. The Central American Agreement for Biodiversity Protection and Priority Wild Areas Protection was signed in Nicaragua, in June 1992 during the Central American Presidential Summit.

The objective of the Agreement is to "ensure conservation of biological, terrestrial and coastal-marine diversity for present and future generations" (Article 1). The Agreement also requires Countries to develop conservation and development strategies to ensure biodiversity conservation and establish as a priority the management of protected areas (Article 14). Furthermore, countries must create a national Biodiversity Law to implement at the domestic level measures for conservation and sustainable uses of biodiversity.

In addition, the Agreement directs countries to implement economic and legal measures to ensure conservation and sustainable use of biodiversity (Article 13). Countries should also establish permit procedures to regulate and control access and collection of biodiversity resources from natural habitats and regulate commerce of biological resources at the national level (Article 27). The Agreement also recognizes the importance and value of traditional knowledge and practices from local groups that contribute to conservation and sustainable use of biodiversity resources.

The Agreement creates the Central American Council for Protected Areas responsible for coordinating regional policy efforts related to the regional system of protected areas.

1.2.3 Central American Agreement on Transboundary Movements of Toxic Wastes

There is an increasing awareness about disposal of toxic wastes in Central

America, and Presidents of the region signed the Central American Agreement on transboundary Movements of Toxic Wastes in Panama in December 1992.

The Agreement requires Parties to enact specific dispositions in their legislation to impose criminal sanctions to anyone that plans or participates in illegal transport of toxic wastes. In addition, each Party must identify a national authority to implement this Agreement that must be informed to the Central American Commission on Environment and Development.

1.2.4 Regional Agreement on Management and Conservation of Natural Forestry Ecosystems and Forestry Plantations Development

Deforestation is a serious threat to ecosystems and biodiversity with secondary impacts on economic development. Forests provide important and in many cases valuable ecological services such as carbon fixation, protection of watersheds, biodiversity, and tourism attraction. The Regional Forestry Agreement was signed on October 29, 1993 and provides a regional framework for sustainable management and conservation of natural forestry ecosystems and promotes the development of forestry plantations.

The objective of the Agreement is to prevent land-use change in forestry areas or to recover these areas that have been deforested. The Agreement also establishes set of principles and guidelines for institutional, judicial and economic policies to achieve this objective. Dispositions include rehabilitation of degraded forests, management of natural forests, reforestation and maintenance of forestry inventories.

At the institutional level, the Agreement promotes the strengthening of National Forestry Action Plans in each country, establishment of an "Environmental Ombudsman", and creation of the Central American Forestry Council that

includes the Directors of forestry Services from each country and coordinators of the National Forestry Action Plans.

2 ENVIRONMENTAL LAW IN CENTRAL AMERICA

Most of the economic activities in Central America depend largely on natural resources, for example: forestry production, agriculture and tourism. Industrial activities are sources of pollution that have a negative impact on the environment and natural resources. In the past most of the externalities from productive activities were ignored, placing a significant burden on natural resources.⁴

During the 1960's and 1970's, Central American countries enacted laws and regulations to address existing problems in areas such as hunting, fishing, logging, and health, which were spread among many different codes and legal instruments.

During the 1980's, countries in the region sought to regulate environmental problems in a more systemic manner. They adopted specific laws and institutions that expanded the authority and size of the State but also created conflicts between the laws and institutions because of the lack of integration and coordination among them and previous laws and regulations. These laws were based on a command and control approach but the Governments lacked the capacity to establish specific regulations and norms to monitor compliance.

The decade of the nineties included some important changes to previous approaches to environmental legislation to create more general and integrated legal frameworks through the adoption of "General Environmental Laws."

This section includes a brief review of the environmental legal framework in each of the Central American countries that addresses main dispositions in their

Constitution, General Environmental Law and other relevant laws and regulations, as well as the institutional structure for environmental compliance and enforcement.

2.1 Costa Rica

Environmental Law in Costa Rica is spread among specific laws, regulations, and decrees. In some areas, these norms are not well integrated because they were created at different times to address emerging situations.

2.1.1 Constitution

The Constitution of the Republic of Costa Rica was amended in 1994 to include a provision on the right to a healthy and ecologically balanced environment. The Constitution establishes, among civil rights that “The State will ensure the overall well-being of all inhabitants of the country, organizing and stimulating production and adequate distribution of wealth. Every person has the right to a healthy and ecologically balanced environment, and is empowered to denounce acts that violate this right and to recover damages for caused harm. The State will guarantee, defend and preserve this right. Legislation will determine responsibilities and corresponding sanctions”.⁵

The objective of the constitutional provision is to ensure a healthy environment and protect against any infraction to such right that would directly affect human beings, their health and their right to enjoy a clean environment. It is important to note that the Constitution establishes that the “standing” is broad and includes any citizen even if he or she was not directly involved in the harm or dispute. The constitutional Court had established on several occasions that “the preservation and protection of the environment is a fundamental right and the transgression of this right is a constitutional violation.”⁶

2.1.2 Organic Environmental Law

The Organic Environmental Law ⁷ provides a general framework law or umbrella that aims to integrate and coordinate the different environmental norms spread through the legal framework. The Law includes general environmental principles and regulates a broad range of issues such as environmental impact assessment, biodiversity, pollution and the establishment of new institutions, among other issues. This Law is very general and does not provide specific implementing mechanisms.

The Organic Environmental Law defines the environment as “common patrimony of all the inhabitants of the nation” and determine that the “State and individuals must participate in its sustainable conservation and use, that are of public use and social interest.” In addition, it states that everyone, in order to develop, has the right to enjoy a healthy and ecologically sustainable environment, as well as the duty to maintain it, consistent with Constitutional Article 50.

The Law also includes dispositions on the National Technical Environmental Secretariat (known as SETENA, its acronym in Spanish), which is the agency responsible for reviewing; evaluating and monitoring environmental impact assessments in Costa Rica. SETENA has the authority to order the interruption of works when there is harm to the environment. SETENA has a specific implementing regulation that includes guidelines on the EIA process, the scope of SETENA’s jurisdiction and creates a special unit for environmental monitoring.

Unfortunately, SETENA is one of the most criticized environmental agencies because it is seen as an “obstruction” to development. This criticism is based on the fact that all procedures within SETENA take a long time and in many cases investors and developers are not happy

with either the delays, or the recommendations made. SETENA's main limitation is the lack of a stable work team due to a continuous rotation of staff. In addition, the office has a very limited budget and little technical equipment to carry out a heavy workload.

The Organic Environmental Law has faced many limitations to its effectiveness because its language is not always clear, depends solely on the Central Government for its implementation and there just very few recent regulations that provide more specific guidelines for its implementation.

Other important Laws include the Wildlife Conservation Law of 1992, the Forestry Law of 1996, the Biodiversity Law of 1997, the Water Law of 1942, Law of the Coastal and Maritime Zone, Soil Conservation Law, Fishing and Hunting Law and the General Health Law of 1973.

2.1.3 Main Institutions with Environmental Responsibilities

- Ministry of Environment and Energy: The Ministry of the Environment and Energy (MINAE by its Spanish acronym) is responsible for implementing the Organic Environmental Law. Its principal obligations include design, planning and implementation of national policies related to natural resource, energy, mining, and environmental protection. In addition, the Ministry must direct, control, supervise, promote, and develop programs in those areas. Through the National System for Protected Areas (SINAC by its Spanish acronym) the Ministry carries out, in a decentralized manner, its policies on the conservation of protected areas.
- National System of Conservation Areas: The National System of Conservation Areas was established to coordinate the creation and implementation of policies related to the use and management of

natural protected areas. In Costa Rica, there are 11 conservation areas, divided by bioregion. Each Area has a director, Technical Council and a local committee that are responsible for preparing and implementing Sustainable Development Plans.

- The Geology and Mines Direction: The Geology and Mining Direction is an office within the Ministry of the Environment responsible for issues related to the use of river bed materials, exploration and extraction permits for underground mineral extractions.
- National Technical Environmental Secretariat: The National Technical Environmental Secretariat (SETENA) is an independent agency within the Ministry of the Environment responsible for reviewing, evaluating and monitoring the environmental impact assessments. SETENA must also analyze the environmental impact assessment (EIA) and recommend necessary actions to minimize negative impacts on the environment.
- Ministry of Health: The Ministry of Health is responsible for undertaking all actions, activities, and general and specific measures towards the conservation and improvement of the environment, seeking the protection of the public health.
- Ministry of Agriculture: The Ministry of Agriculture and Livestock is responsible for monitoring and imposing land use limitation types according to their geographical conditions, classifying them in zones for agriculture, livestock, and forestry production.

2.1.4 Mechanisms for Environmental Enforcement and Compliance

The Organic Environmental Law created two new important institutions: the Environmental Attorney and the Administrative Environmental Tribunal. The Environmental Attorney is responsible for

prosecuting any violation of environmental laws to the Attorney General's Environmental Office, as well as participating in national environmental programs such as the ecological vehicle registration and the Ecological Flag (a program to recognize companies with good environmental performance).

The Administrative Environmental Tribunal is an independent office within the Ministry of the Environment that receives administrative complaints and makes administrative decisions. The Tribunal is comprised of three Judges that are responsible for enforcing sanctions established in the General Law. They are the last administrative procedure before moving into Judicial Courts, and its resolutions are obligatory. Its jurisdiction is to hear and resolve all administrative complaints against all public or private parties that violate environmental and natural resource protection legislation, and accusations referring to actions or omissions that violate or threaten the legislation, and to establish administrative indemnities for damages.⁸

The Tribunal is responsible for imposing administrative sanctions for violating environmental laws, or causing harm to the environment. Some of the protective measures and sanctions include: execution of a compliance guarantee provided in the environmental impact evaluation; partial or total restriction of activities; immediate cessation order for the activities causing harm; or total, partial or definite closure of facilities; and, partial, total or temporary cancellation of permits and patents.⁹

At the Judicial level the Environmental Prosecutor's Office, within the General Prosecutor's Office is responsible for building the case when there is an environmental violation bringing responsible parties to court. In Costa Rica, the Environmental Prosecutor's Office is based in San Jose and is comprised of three prosecutors for the entire country. They face

many limitations, especially when they have to travel to distant locations to gather evidence, due to limited resources and technical support, and a lack of field experts. The Environmental Prosecutors are playing a key role demonstrating to the judges how to analyze evidence and to impose jail sentence to violators of environmental laws.

2.2 El Salvador

2.2.1 Constitution

The Political Constitution of El Salvador¹⁰ has two general dispositions related to the environment. As a general statement, the Constitution provides that Citizens' health is a public good and that the State and individuals are responsible for its protection. The Constitution also establishes that natural resources are of public interest. Specifically, Article 117 establishes that "The protection, restoration, development and use of natural resources are declared to be of public interest. The state will create the economic incentives and provide the technical assistance necessary for the development of adequate programs. The protection, conservation and improvement of natural resources will be subject to specific legislation."

2.2.2 General Environmental Law

The Environmental Law of El Salvador¹¹ includes general principles for the sustainable use of natural resources, and states that the State, the Municipalities and the society in general are responsible for a sustainable environmental management. The Law establishes rights and responsibilities for citizens, and the society in general, and for the State, which is mainly responsible for public environmental management through the Central Government or Municipalities.

The first part of the Law establishes definitions, principles and rights for the

citizens including, among others, the “right of all people to a healthy environment in ecological equilibrium” (article 2,a) and the right of public participation (article 8). In addition, the Law states the responsibility of society, the State, and legal and physical persons to compensate or replenish natural resources used in their activities (article 2, d); and the responsibility to compensate or restore environmental damages to the State or individuals (article 2,e). The State has the responsibility to adopt measures to prevent, avoid and control environmental disasters (article 53) and to protect natural resources in coastal-marine areas, in coordination with Municipal Councils and competent authorities.

The second part of the Law sets up a framework for the protection of renewable and non-renewable natural resources and introduces the environmental component as mandatory in all proposed development or use of these resources. The third part establishes legal, judicial and administrative procedures to enforce environmental violations.

Other important environmental laws include the General Health Law, Forestry Law, Irrigation and Drainage Law, Wildlife Conservation Law, General Fishing Activities Law, Mining Law and Hydrocarbons Law.

2.2.3 Main Institutions with Environmental Responsibilities

- **Ministry of Environment and Natural Resources:** The Ministry of Environment and Natural Resources has the Constitutional mandate to promote environmental protection, conservation and recovery, sustainable use of natural resources, and to promote a high quality of life for present and future generations. The Ministry is responsible for making national environmental policies and enforcing environmental laws.

- **Ministry of Health:** The Ministry of Public Health and Social Assistance is responsible for controlling the quality of chemical, pharmaceutical, and veterinary products. In addition, the Ministry must monitor and control the quality of nutritional food products and environmental conditions that may affect human health.
- **Ministry of Agriculture:** The Ministry of Agriculture and Livestock is mainly responsible for developing sectoral laws, especially regarding natural resources such as forests, wildlife and water for agricultural and livestock uses.

2.2.4 Mechanisms for Environmental Enforcement and Compliance

The Environmental Law establishes sanctions for environmental misdemeanors committed by individuals or corporations, as well as by the State and the municipalities. There are also provisions regarding civil liability to compensate those who suffer harm to their health or a risk to the environment. Civil liability will be set through compensation, restoration of the environment or ecosystem, or fines.

“It is an obligation of the State, decentralized entities, and of all legal or physical persons, which by action or omission deteriorate the environment, to restore and repair damages caused to the environment.”¹²

The Environmental Law also states that civil actions for environmental damages to the community could be initiated by any individual or corporation directly or indirectly affected by such damage; by five citizens members of a community; or by the Attorney General.

The Criminal Code was amended to be more consistent with the Environmental Law and cover crimes related to environmental pollution, deforestation, depredation of protected flora and fauna, burning of waste, and transport of toxic substances. The common sanction for

these crimes is imprisonment and in some circumstances just fines.

The Environmental Law calls for certain preventive measures to avoid foreseeable damages to the environment and ecosystems (Article 83).

At the Judicial level, there are 17 Environmental Prosecutors in the General Prosecutor's Office responsible for building environmental cases. They cover the entire country and receive financial and technical support from Multilateral Organizations such as the Inter-American Development Bank through Cooperation Agreements.

2.3 Guatemala

2.3.1 Constitution

The Constitution contains a statement on environmental policy that establishes rights and obligations for the State and its citizens. Article 97 establishes that "The State, the municipalities and the inhabitants of the national territory are obligated to propagate the social, economic and technological development that prevents environmental pollution and maintains the ecological balance. All the necessary rules will be dictated in order to ensure that the usage and the exploitation of fauna, flora, soil and water, are made rationally, avoiding its waste."

2.3.2 Environmental Protection and Improvement Law

The Environmental Protection and Improvement Law ¹³ states as its main objective that State, municipalities and individuals must promote social, economic, scientific and technological development to prevent environmental pollution and to ensure an ecological balance through the rational use of natural resources.¹⁴

In addition, the Law establishes specific responsibilities of the National Environmental Commission (CONAMA by its Spanish acronym) which includes

among others: protection, conservation, and improvement of natural resources; prevention, regulation and control of activities that cause harm to the environment and pollution to ecological systems; design of the national environmental policy, and creation of incentives for protection, improvement and restoration of the environment.

The agency responsible for implementing the Law is CONAMA. The Law is comprised of general principles and measures to prevent pollution, manage waste, environmental impact assessment and protection of natural resources. The Law requires CONAMA to enact specific regulations for its implementation.

Other important environmental laws include the Protected Areas Law, Hunting Mining Law, Health Law and the Criminal Code. Some specific regulations include the Regulation of Minimum Requirements and Maximum Permissible Limits for the Disposal of Waste Waters, Regulation for the Evaluation of Environmental Impact and Regulation of the Protected Areas Law.

2.3.3 Main Institutions with Environmental Responsibilities

- **National Environmental Commission:** The National Environmental Commission is responsible for coordinating actions in the development and implementation of the national environmental policy. The CONAMA is responsible for implementing the Law of Protection and Improvement of the Environment. CONAMA's main responsibility is to review and approve Environmental Impact Assessments. However, this responsibility is beyond CONAMA's current capacity because of insufficient staff and inadequate resources.
- **National Council of Protected Areas:** The National Council of Protected Areas (CONAP by its Spanish acronym) has the lead responsibility for promoting con-

servation and improvement of the natural patrimony of the country; organizing and directing the Guatemalan System of Protected Areas, SIGAP. In addition, CONAP must coordinate the administration of the resources of wild flora and fauna and biological diversity; implement dispositions regarding conservation of biological diversity, and build a national fund for the conservation of natural resources in Guatemala.

- **Ministry of Public Health and Social Assistance:** The Ministry of Public Health and Social Assistance is responsible for coordinating actions to protect human health and implement actions to ensure basic environmental sanitation, protection of water resources, especially for human consumption.
- **Ministry of Agriculture, Livestock and Food:** The Ministry of Agriculture, Livestock, and Food is responsible for developing and implementing policies for agriculture and cattle ranching development, water irrigation and sustainable use of renewable natural resources.
- **Ministry of Energy and Mines:** The Ministry of Energy and Mines formulates the national energy policy and proposes the regulation and supervision of the exploration, and extraction of hydrocarbon and “mineral commercialization systems.”
- **Ministry of National Defense:** The Ministry of National Defense is responsible for controlling and patrolling protected areas in border zones.

2.3.4 Mechanisms for Environmental Enforcement and Compliance

CONAMA is responsible for imposing administrative sanctions for violations to the Environmental Protection and Improvement Law that comprises of warnings, fines and confiscation of equipment. The sanctions are imposed according to

the seriousness of the violation, the environmental impact, harm to individuals and the background of the offender. In addition, CONAMA implements “environmental audits” as an instrument of control. These are submitted by interested parties for a periodical evaluation.

At the Judicial level there are four National Environmental Prosecutors in the General Prosecutor’s Office and one auxiliary Environmental Prosecutor in each of the Judicial Districts of the country. The Environmental Prosecutor’s Office is responsible for conducting criminal investigations for crimes against the environment.

The Attorney General’s Office has an environmental division that provides advice to the State entities on legal environmental matters and represents the State in civil actions.

2.4 Honduras

2.4.1 Constitution

The Political Constitution of the Republic of Honduras ¹⁵ establishes a basic obligation of the State to protect the environment and natural resources. Specifically, Article 145 states that “the State shall preserve the environment appropriately to protect human health.”

Furthermore, the Constitution calls for the rational uses of natural resources in Article 340: “The technical and rational exploitation of natural resources are declared of public utility and necessity. The State shall regulate their use according to public interest and shall establish the conditions to grant such exploitation to citizens. Reforestation and conservation of forests are declared of national convenience and collective interest.”

2.4.2 General Environmental Law

The main objective of the General Environmental Law ¹⁶ is the protection, conservation, restoration and sustainable

management of the environment and natural resources that are of public utility and social interest. The State and its agencies are responsible for the defense of the environment and for undertaking measures to prevent environmental degradation.

In addition, article 10 of the Regulation for the General Environmental Law recognizes the citizen's right and duty to participate in all activities aimed at the protection, conservation, and restoration of the environment implemented by the State and its agencies. Public standing is recognized in the administrative and judicial when there is environmental degradation or harm to natural resources.

The Law also includes dispositions regarding the environmental impact assessment for private or public activities that involve use of natural resources or might have a negative impact on the environment and natural resources. In addition, the Law establishes dispositions for pollution prevention, waste management and prohibits importation of toxic waste.

The Public Health Secretariat and the Environmental Secretariat are responsible for the implementation of the General Environmental Law and other environmental laws regarding sanitation, air, water, and soil pollution.

The Law also creates the System of Protected Areas that includes biosphere reserves, national parks, wildlife refuges, natural monuments, and biological reserves. These areas are subject to Management Plans.

Other important environmental laws include the Forestry Law, Fishing Law, Mining Code, Health Code, Phyto-zoo-sanitary Law and the General Transportation Law. Some of the regulations include the Regulation for the Environmental Law and the Decree for the Creation of Protected Areas.

2.4.3 Main Institutions with Environmental Responsibilities

- Secretariat for Natural Resources and the Environment: The Secretariat for Natural Resources and the Environment (SERNA by its Spanish acronym) is responsible for implementing and enforcing environmental legislation, and the development, coordination, and monitoring of compliance with national environmental policies.
- Honduran Corporation for Forestry Development: The Honduran Corporation for Forestry Development (COHDEFOR by its Spanish acronym) is an independent agency within SERNA. The Natural Resources Secretary appoints the General Manager. COHDEFOR is responsible for implementing national forestry policies, and monitoring the use of natural resources, while ensuring their protection and conservation.
- Secretariat for Agriculture, Livestock and Food: The Secretariat for Agriculture and Livestock is lead by the Minister of Natural Resources. The main functions of the Secretariat include coordination of the agriculture sector, and promotion of the agriculture and forestry development.
- Secretariat for National Defense and Public Safety: The Secretariat for National Defense and Public Safety, in coordination with the Public Health and Natural Resources Secretariat, is responsible for monitoring continental and coastal waters.

2.4.4 Mechanisms for Environmental Enforcement and Compliance

The Secretariat for Natural Resources and the Environment is responsible for enforcing provisions established in the General Environmental Law for actions or omissions against the environment through criminal or administrative sanctions. Penalties include incarceration, fine,

closure, suspension, seizure, cancellation, compensation, and when possible, replacement or restoration of the affected areas to their previous state.

The Regulation to the General Environmental Law also states the Secretariat's duty to conduct inspections and monitoring, and also to impose preventive and corrective measures at the national level. At the local level, municipal governments have authority to implement inspection and monitor actions within the "scope of their power and jurisdiction."

The Criminal Code imposes imprisonment as a penalty for crimes against public health. At the Judicial level, there are thirteen Environmental Prosecutors; eight are located in Tegucigalpa and five in different departments. In addition there are Technical Environmental Units in three of the country's regions.

2.5 Nicaragua

2.5.1 Constitution

The Political Constitution of Nicaragua ¹⁷ contains provisions regarding environmental protection. Specifically, the Constitution states in Article 60 that "Nicaraguans have the right to a healthy environment. The State has the obligation to ensure the preservation and conservation of the environment and natural resources."

Furthermore in its Article 102 states that "Natural resources are part of the national heritage. The State is responsible for the preservation of the environment and the conservation, development and rational exploitation of natural resources; the State may enter into contracts for a sustainable exploitation of these resources, when there is a national interest."

2.5.2 General Environmental and Natural Resources Law

The General Environmental and Natural Resources Law ¹⁸ is comprised of a

series of general principles on conservation and use of natural resources. The Law includes general dispositions on environmental management, natural resources, environmental quality, jurisdiction of governmental institutions and sanctions.

The main objectives of the Law are: to prevent, regulate and control causes or activities that deteriorate the environment or pollute ecosystems; to establish measures for a rational exploitation of natural resources in the National Planning Policy; to promote conservation and sustainable use of water resources; and, to promote a healthy environment.

The Law is very general and is supported by more specific legislation such as the Regulation on Permits and Environmental Impact Assessment. The Ministry of the Environment and Natural Resources implements this Regulation through the Office for Economic Activities Control. The list of activities that require an EIA is very extensive, however, it leaves out some activities. Environmental permits are granted after the interested party presents the required documentation and officials of the Ministry make a site visit. The EIA processes are registered in a computer system that allows better control of the developed activities.

2.5.3 Main Institutions with Environmental Responsibilities

- Ministry of the Environment and Natural Resources: The Ministry of the Environment and Natural Resources (MARENA by its Spanish acronym) is responsible for the implementation and enforcement of environmental legislation, and to develop, coordinate, and monitor compliance with national environmental policies.
- Ministry of Agriculture and Livestock: The Ministry of Agriculture and Livestock is responsible for coordination of the agriculture sector, and promotion of the

agriculture and forestry development.

- Ministry of Health: The Ministry of Health (MINSAs by its Spanish acronym) is responsible for coordinating actions to protect human health and implement actions to prevent pollution to the environment. The MINSAs is required to protect human health from risks of air, soil and water pollution as consequences of transport, storage or disposal of toxic waste. In addition the MINSAs must control hygiene and sanitation for drinking water.

2.5.4 Mechanisms for Environmental Enforcement and Compliance

The Ministry of the Environment and Natural Resources is responsible for enforcing sanctions established in the General Environmental and Natural Resources Law. Sanctions include warning, fine, temporary or permanent cancellation of permits, partial, total or temporary closure or suspension of activities.

The Regulation of the General Environmental and Natural Resources Law includes more specific dispositions on actions or omissions subject to administrative sanctions and contains a classification of minor, serious and very serious violations. The Regulation also establishes some criteria to apply administrative sanctions such as harm caused to human health, valuation of damages, economic benefit received by the violator of the law, and type of violation.

The General Environmental and Natural Resources Law created the Office for Environmental and Natural Resources Defense, within the Attorney General's Office. There are six Environmental Officers that represent and defend the interest of the State and society on environmental issues.

2.6 Panama

2.6.1 Constitution

The Political Constitution of the Republic of Panama¹⁹ establishes the obligation of the State to guarantee a clean environment. Article 15 of the Constitution states that "It is a fundamental duty of the State of Panama to guarantee its people a healthy, pollution-free environment, and an environment in which the quality of the air, water, and food meet the standards for appropriate development and maintenance of human life."

2.6.2 General Environmental Law

The General Environmental Law²⁰ establishes that the State is responsible for the management of the environment. In addition, the Law states that all individuals or legal entities are also responsible for preventing environmental damages and for controlling environmental pollution.

Law creates the National Environmental Authority (ANAM by its Spanish acronym) as an independent agency responsible for coordinating with other agencies on natural resources and environmental protection and environmental management issues.

The Law states that ANAM is required for coordinating the national environmental policy comprises of measures, strategies, and actions, as well as to provide guidelines for actions and conducts of the public and private sector, and individuals on environmental issues. ANAM is also required to develop national environmental policies and plans for the sustainable use of natural resources. These policies and plans shall be coordinated with the development plans of the State.

The National Environmental Authority is also responsible for directing, supervising, and implementing national environmental policies, strategies, and programs. The National Environmental Authority is also responsible for drafting environmental laws and regulations to be submitted to Congress

through the President.

Other important environmental laws include the Forestry Law, the Law of Wild Flora and Fauna and the Regulation on the Use of Water Resources.

2.6.3 Main Institutions with Environmental Responsibilities

- **National Environmental Authority:** The National Environmental Authority is required to ensure that the laws, regulations and national policy on the environment are complied with and enforced.
- **Ministry of Agrarian Development:** The Ministry of Agrarian Development is responsible for promoting a rational use of natural resources, identification of lands for agriculture use through a rational use of water and irrigation systems. The Ministry is also responsible for controlling introduction of exotic species and compliance with importation permits and inspection and quarantine requirements.
- **Ministry of Health:** The Ministry of Health is responsible for implementing health and occupational health measures and for implementing norms related to disposition of waste waters and implement measures to protect human health for environmental degradation.

2.6.4 Mechanisms for Environmental Enforcement and Compliance

The General Environmental Law establishes the mechanisms to achieve compliance with and enforcement of environmental laws and regulations. The Law includes administrative sanctions that are imposed by the National Environmental Authority such as written or verbal warnings, temporary suspension of operations, closure of facility, and fines.

In addition, the National Environmental Authority has authority to order the offending party to pay for the cost of clean

up, mitigation and compensation for the environmental damages.

The Forestry Law includes several dispositions on ecological crimes against natural resources such as forest fires, illegal logging, unauthorized change of land use, and changes in the flow of natural waters. Sanctions include seizure of equipment, fines, and imprisonment from 6 months to 5 years.

3 OBSTACLES TO COMPLIANCE

3.1 Issues related to authority

The general environmental framework for environmental enforcement and compliance in Central American countries is not very effective. Existing laws do not establish the necessary control mechanisms for successful implementation. In addition, environmental norms have not yet been effective in preventing environmental harm and authority is generally limited to sanctions to punish illegal conducts.

The institutions tasked with ensuring environmental compliance in the region face many challenges and obstacles. The primary responsibility falls on the environmental ministries. In Central America, these ministries tend to be under funded and have unclear lines of authority and responsibility. In addition, they face obstacles from unclear laws and regulations, as well as numerous contradictory mandates and objectives.

In spite of these difficulties, the ministries of the environment play a key role in environmental enforcement and compliance. Their main responsibility is to watch over the compliance with minimum environmental standards in the realm of economic activities. However, many environmental problems are not just a responsibility of the ministry of the environment but other ministries as well. For example some agricultural practices and subsidies promote the use of chemicals products that

cause harm to the environment and human health, but there is little coordination between the Ministries of Environment, Agriculture and Health. Another example is the conflict over land use planning and designation of forestry of agricultural lands for rural development.

Countries in the region have many environmental laws, however these are not always enforced due to different circumstances. Some laws are not very clear, many do not have specific implementing regulations, and others are in conflict with other laws. And, as a general rule, the ministries do not have personnel to review compliance or otherwise enforce the laws.

The most critical issue is the clarity of the laws. Environmental laws seek to prevent harmful actions against the environment and natural resources or to impose a sanction if harm is caused. Some laws have very detailed descriptions of their objectives, definition of terms, implementing agencies, but do not include specific mechanisms to achieve results, such as enforcement authorities, or specific definitions of infractions. Governmental agencies such as the ministry of the environment and the ministry of health are responsible for developing the specific strategies to implement and enforce legislation. These agencies have the task of developing specific regulations that include the guidelines on how to apply the law. These regulations are the basis for an effective enforcement.

Most of the Central American countries do not have appropriate regulations to implement their environmental legislation. Most environmentally related laws in the region have little or no implementing regulations, making enforcement a difficult and sometimes impossible task. This lack of clarity of the legal frameworks creates a lot of uncertainty for enforcers, the private sector and the general public. In addition, these laws become subject to interpretation

that will vary depending on the interests of the administration or the influence of specific sectors. For example, all the countries in the region have General Environmental Laws that create new institutions, however, not all countries have adopted regulations or coordination mechanisms to implement these laws.

Governmental agencies responsible for enforcing environmental laws and regulations have many limitations because of their legal structure. If there are no specific regulations that establish and determine the scope of a norm, it will be the task of governmental agencies to determine when a conduct has caused harm and carry the burden of proof to bring violators of the law to court or to face administrative sanctions. This case-by-case approach is cost-prohibitive in developing countries.

As mentioned earlier, the evolution of environmental legislation in Central America went through different phases and in general developed new legal instruments to address new environmental issues that in some situations were adopted as copies from other countries. The result is a lack of integration of previous laws and authorities, which leads to conflicting mandates. In particular, sectoral laws (forestry, hunting, fishing, and waters) are frequently in conflict with each other because they were drafted without coordination. For example, in Costa Rica the Wildlife Law protects all species of wild flora and fauna however, it does not include forestry species. On the other hand, the Forestry Law does not include specific provisions to protect forestry species that are endangered or threatened.

Some of the limitations for compliance with environmental laws in the region are related to government programs such as subsidies and incentives that influence the private sector's motivation to comply with environmental laws. In several cases, especially in the agriculture sector, the government provides tax breaks or other sub-

sidies for agrochemical products that are used in an inappropriate manner, causing environmental pollution, water contamination and health related problems. In addition, some incentive programs do not promote a better environmental conduct because they reward harmful conducts. For example the Forestry Law of Costa Rica provides the highest incentives for reforestation of pasturelands, but the lowest incentive for preservation of natural forests.

In some instances laws and regulations require the implementation of measures or equipment that involve investment of financial resources, but which do not provide tax benefits. For example, the importation of wastewater treatment plants and pollution control equipment is subject to duty tax (that in Costa Rica is up to 100%). In addition, the financial sector applies a higher interest rate for this type of investment because it is classified as a “non-productive asset”.

Environmental legislation in the region tends more towards application of sanctions for violations instead of promoting more prevention measures to avoid environmental damages. The regulated sectors always look for existing loopholes in the legislation and choose the least expensive alternative. For example, if the law establishes low fines for dumping untreated wastewater into water bodies, the option of paying a fine is frequently less expensive than buying an expensive wastewater treatment plant. In this situation, an effective measure will be to provide an incentive to promote cleaner environmental conduct and at the same time establish a higher sanction if there is a negative conduct.

3.2 Financial and Human Resources Issues

Environmental institutions in Central America face a critical situation due to a lack of financial resources and quali-

fied staff. In addition, there are personnel constraints in nearly all countries of the region because of the reduction in the size of the State and its budget—largely a result of structural adjustment programs. Countries have enacted numerous environmental laws and created many new institutions, but the governments do not allocate new resources or staff to carry out such tasks. For example, the Organic Environmental Law of Costa Rica of 1995 created 9 new institutions but the Government has not provided any additional resources or personnel to help in its successful implementation.

Most of the governmental officials and employees that work on environmental issues do not have a formal training in this field and are entrusted with a wide variety of responsibilities and tasks that they are not capable of undertaking. In other cases, even where there are many public officials with sufficient experience to carry out an efficient performance; they encounter many infrastructure limitations to carry out their job. For example, many institutions do not have technical equipment, monitoring equipment, vehicles or travel budgets.

Furthermore, some of the problems of the implementation of environmental laws are the lack of control and monitoring mechanisms, frequently attributable to budget or human resource limitations. For example, monitoring of national parks is a task that requires qualified and trained personnel, equipment (cars or boats depending on the location of the park) and knowledge of poaching regulations to provide all necessary information and evidence when they find a person violating the law. Some of the countries have support from other governmental agencies and non-governmental organizations to help carry out this task. For example, in El Salvador, the NGO SalvaNatura carries out management and monitoring responsibilities in El Imposible National Park. In Honduras, El Salvador

and Nicaragua, the Ministry of Defense provides support to the Ministry of the Environment in monitoring national parks and protected areas.

It is obvious that many of the existing laws in Central America were designed without considering the financial costs of their implementation. Many laws establish strict measures and controls but cannot be implemented because responsible institutions do not have the appropriate budget and have a lack of resources, equipment and staff. There are laws that promote fiscal incentives but the Treasury does not respect the legal mandate. Consequently, resources are not allocated in environmentally sound or conservation activities.

4 EVALUATION OF OBSTACLES AND OPPORTUNITIES

4.1 Structure, Authority and Political Will

Effective enforcement and compliance of environmental laws depends on the structure and effective functioning of the government and its national environmental policy. Such a policy must focus on environmental monitoring and control, but also include a system of economic instruments that helps eliminate overexploitation of natural resources and rewards more sustainable activities.

In addition to command and control mechanisms, the adoption of economic incentives could help as a support to involve the private sector in environmental responsibilities that in many situations the government does not have the capacity to handle effectively.

Governments should empower the environmental ministries with more financial and technical resources. In addition, it is necessary to clarify jurisdiction of all agencies responsible for environmental issues. At present, coordination between governmental institutions is not always

effective and there is very little coordination among the agencies that oversee the implementation and enforcement of environmental laws. This situation causes confusion among the responsible agencies that in many cases are not sure about the extent of their responsibility. For example in most of the countries, water issues are regulated by the Ministry of Health (safety and quality standards for drinking purposes), the Water Agency (quantity, distribution and fees), Ministry of Environment (protection of water resources) and the Ministry of Agriculture (irrigation for agricultural purposes).

The governmental structure should provide appropriate resources and mechanisms for effective enforcement and compliance with environmental legislation, for example: programs or plans for enforcement and compliance in the different agencies involved in environmental issues, training of staff and provide technical equipment and infrastructure.

The environmental law-making process requires additional political support to address pressing environmental issues. Laws need to be more consistent with socio-economic realities and environmental issues should be consistently reflected in other legislation. In addition, national development planning should include a stronger environmental component and reflect the economic costs of enforcement and compliance with environmental laws.

4.2 Needs for decentralization and its benefits

Many of the responsibilities of the ministries of the environment are being decentralized to provide better outreach. This process allows the Ministries to take on more of a coordinating role of the environmental policies in each country and become a better enforcer.

Decentralization of administrative responsibilities could have positive results,

but could bring problems in some areas. Decentralization should be done just when the regional offices have the experience and technical resources to address the issues. Since the current limitation is one of staff and financial resources, decentralization will only be as effective as allocated resources allow. On the other hand, municipal and other local authorities could prove to be more efficient and cost-effective, particularly when supported by local citizens and environmental groups.

4.3 Importance of Collaboration with Ministries, NGO's, Universities

Private NGO's, universities and international organizations have experienced staff, technical knowledge and resources to address specific environmental problems more directly and support the work of the Ministry of the Environment. Certain activities could be delegated to these organizations to relieve some of the heavy load of the government's bureaucracy, reduce discretionary decisions and perhaps make the fight for environmental quality more effective.

5 CONCLUSIONS

Environmental law is an evolving field that tries to adopt norms to redirect negative conduct. It is a fact that command and control mechanisms are not sufficient by themselves for an effective enforcement and compliance with environmental laws in developing countries such as those of Central America. The Central American countries have a lot of environmental laws that attempt to address different environmental problems. In practice, however, they cannot be effectively implemented because they are not clear, not flexible, and do not have effective mechanisms for achieving their stated goals.

The basic principle for environmental protection is the "polluter pays principle"

that is included in many of the laws of Central American countries. However, this principle in practice is more of an enunciation that is not provided of mechanisms for a real implementation. For example, environmental legislation in the region needs to promote a conduct that internalizes environmental costs and prevents environmental and natural resource degradation. Legal frameworks should include more flexible mechanisms to prevent environmental damages and more effectively incorporate the polluter pays principle.

The reliance on the role of the State is very strong and most of the enforcement and compliance actions are highly centralized. All the different actors of a society could contribute to a more decentralized structure, which could achieve more effective compliance with environmental legislation. Local governments need to be empowered to carry out more of these responsibilities and to have a higher impact in their communities. The private sector needs to take new and innovative challenges to mitigate their environmental impact by improving their environmental performance even though they have to adopt voluntary measures that are beyond the legal requirements of the country. In addition, public participation is very important to give the opportunity to interested parties to participate in the law-making and decision-making processes, perhaps as well as environmental enforcement and compliance.

Information and education are key elements to redirect negative environmental conducts. In Central America, there is little awareness about the consequences of current damages to the environment and natural resources and the options that civil society has to demand actions from the government or carry out activities to support the government's tasks. There is also little investment in programs to correct this deficiency.

There are very important initiatives that support efforts to improve environmental enforcement and compliance in the region. For example, the Central American Commission on Environment and Development in coordination with the US Environmental Protection Agency are already working to facilitate the creation of a regional network of legal and enforcement experts in Central America. This network focuses on transboundary environmental problems or violations of law, achieving greater compatibility of national laws at higher levels of protection, and improving implementation of international commitments to protect the environment. They also assist their members in identifying capacity-building priorities and potential cooperative projects that promote compliance with environmental requirements and sustainable development.

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The author wishes to give a special acknowledgement to Durwood Zaelke, President of the Center for International Environmental Law (CIEL) in Washington DC, who contributed his substantive comments and valuable suggestions throughout the development of this case study.

Special recognition is also due to Adriana Bianchi, Senior Institutional Development Specialist, The World Bank Institute, Washington DC.