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Protection of the Environment of Flora and Fauna in Mexico

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Abstract

Mexico is a megadiverse country and full of ecosystems that allow the great diversity of animals and plants that it has, it is also a country that is at risk of suffering a lot of damage because people do not seek environmental care, although there is a moral duty that must motivate to take care of the environment, this has not been enough over the years, so that even so there has been serious damage to the ecosystems. The flora and fauna have presented havoc from pollution, requiring the regulation of human activities for the preservation of the environment, therefore, efforts to reduce damage have been to generate and apply laws that make the protection and preservation of the environment mandatory. environment for people, likewise, as well as the use of applicable international instruments in environmental matters.

Keywords: Pollution, Human Right, Environment, Legislation.

INTRODUCTION

Currently, the efforts to maintain, preserve and conserve nature and the environment are a challenge, as every time there is evidence of contamination by action or omission to the environment. In view of this, the State must foresee a system of administration of justice that establishes a normative and legitimate basis as a way of promoting, respecting, protecting and guaranteeing the achievement of the human right to a healthy environment.

Such obligatory nature provided by means of a legal, juridical and international framework was not the result from one day to the next, nor did it happen overnight, it has been a process of integrating the recognition of rights and obligations of the state entities, private sector and civil society in accordance with the natural resources, it has also been part of the necessity when the environmental damage began to be reflected, Mexico configures an immense range of flora and

fauna in all its geographical and territorial extension, some have been catalogued as natural reserves derived from their importance, as well as created or reformed laws and competent codes to the matter of environmental law and its interdependence and indivisibility with other areas of the law according to the case of right or obligation.

Diverse laws help us with the definition of environmental law and allow us to know what they regulate and protect, the fact that Mexico has many laws that promote environmental protection and the care of the flora and fauna, allows us to see the applicable legal instruments in the cases in this respect.

This document describes some essential elements of the recognition and regulation of environmental law in Mexico from the internal and international normative framework, serving as a means of dissemination of the matter, as well as pointing out the scope and impact of the recognition of the right to a healthy and ecologically balanced environment.

1. Environmental damage and pollution

Mexico is a country with a great quality of ecosystems such as aquifers, mangroves, coastal areas, forests, jungles, deserts, mountains and prairies, it is a mega diverse country, which has manifested situations of vulnerability, risks and damages by action or omission of human intervention.

As a general example, Mexico has 2.7 million square kilometers of sea, only 11.04 km² are protected (INEGI, 2021) in addition and to give a specific case of an ecosystem, for example, Mexico is losing 10 thousand hectares of mangroves per year (Laureles, 2020), (Santana, 2021) even though they represent coastal protection, fisheries production, protection from hurricanes and floods, regulates atmospheric carbon, nutrient exchange, sediment between land and oceans (Government of Mexico, 2020).

Based on the data collected, air pollution has been increasing due to carbon dioxide emissions known as CO₂. Table 1, shows this increase in the amounts of air pollution period 2017-2021, for the COVID-19 boom period there was a decrease due to the decrease in human activity in the various sectors.

Tabla 1. Air Pollution per metric ton 2017-2021.

YEAR	2017	2018	2019	2020	2021
AIR POLLUTION PER METRIC TON	Air Pollution per metric ton: 501,224	Air Pollution per metric ton: 484,649	Air Pollution per metric ton: 481,464	Tonelada métrica: 401,126	Air Pollution per metric ton: 418,348

Fuente: Own elaboration “México-Emissiones de CO₂” recuperado de <https://datosmacro.expansion.com/energia-y-medio-ambiente/emisiones-co2/mexico>

Guillermo Foladori (2001) in his book *Controversias sobre sustentabilidad la coevolución sociedad naturaleza* mentions the following:

"The high degree of environmental deterioration is, nowadays, widely recognized, but the causes are not so clear given that all societies in the history of mankind have faced problems of pollution and depredation of resources, it may be thought that this is a behavior intrinsic to human beings and this statement could be extended to other living beings, which within their possibilities also pollute and deplete the environment" (pp. 147).

It should be noted that animals and plants act with their surroundings in a natural and unconscious way, that is, they perform the functions that their instinct and their system has assigned to them or impels them to do, their activities are in any case done in a natural and inevitable way because they cannot reason or fully understand the situation, unlike human beings, because having the ability to reason and understand, they have the options and the ability to choose and can, therefore, take action.

Therefore, beyond the needs that we as human beings have, the magnitude, the situation and the affectation can be reduced because most of the times the actions against nature have motives or reasons that involve economy, power and politics, exploiting or overexploiting the natural resources generating the abuse/damage to ecosystems and environments, before emergent situations of damage, environmental deterioration and contamination, it is necessary to distinguish how the Mexican State catalogues these categories, for this, diverse laws give us concepts of what some aspects related to the environment mean, for example what is understood by contamination, flora, fauna to which they add the term wild, that is to say wild flora and wild fauna, environmental damage and environmental law.

For the first concepts indicated in the General Law of Ecological Equilibrium and Environmental Protection and in order to be able to apply it and to have dimensions to which each aspect of nature refers and what is defended or protected, the same helps us by giving us or providing us in its article 3° fractions XVIII and XIX the definitions to three of the concepts already mentioned being these the following ones:

Contamination: The presence in the environment of one or more pollutants or any combination of them that causes ecological imbalance.

Flora: Plant species, as well as fungi, that subsist subject to the processes of natural selection and that develop freely, including populations or specimens of these species that are under human control.

Fauna: Animal species that subsist subject to the processes of natural selection and that develop freely, including their minor populations that are under human control, as well as domestic animals that through abandonment become wild and are therefore susceptible to capture and appropriation.

While for the same effect and to be able to be applied the article 2° fraction III, of the Federal Law of Environmental Responsibility to give us the meaning of what is environmental damage, although it indicates it as damage to the environment it is the same and tells us the following:

Environmental damage: Loss, change, deterioration, impairment, impairment, adverse and measurable affectation or modification of habitats, ecosystems, natural elements and resources, of their chemical, physical or biological conditions, of the interaction relationships among them, as well as of the environmental services they provide.

For the term Environmental Law the laws do not provide a definition as such, since it is understood that the law is contained by the laws and therefore do not provide a concept or definition of the same, but for the purpose of this article and in order not to leave without explanation or definition we can base ourselves on the understanding that the term environmental in a very basic sense comes from environment and this term is important to understand what environmental law is. The meaning of environment is established in the General Law of Ecological Equilibrium and Environmental Protection in its article 3° section I and it tells us that environment is:

"The set of natural and artificial or human-induced elements that make possible the existence and development of human beings and other living organisms that interact in a given space and time".

To integrate our definition of environmental law we can simply take into account the common definition that Law is the set of laws, norms, regulations, precepts, statutes, decrees and guidelines based on collective correctness, justice, organization and order to regulate the actions and conduct of human beings with the purpose of protecting, respecting and living in harmony with one another and to maintain the harmony of the environment, living in harmony with each other and maintaining the balance between human relations we can obtain our own concept of what environmental law is, therefore having both ideas or definitions we can integrate our own definition of environmental law to better understand what it is and what it is for and why it is necessary to have a regulation that obliges and motivates the preservation of the environment, being in this way the definition of environmental law is the following:

Environmental law: Environmental law is the law that seeks the defense, respect, harmony and balance of the set of natural and artificial elements or those induced by man so that they continue to exist and develop with human beings and other living organisms that interact in a given space and time.

All the elements mentioned and mentioned beyond that by concept are somehow linked or linked, also in reality these are related and interact with each other, the environment, flora and fauna are the elements that make up the nature and therefore must be protected and preserved by those who have the ability to think, reason and measure the magnitude of the environment, reasoning and measuring the magnitude of the actions they perform know the consequences of their actions (Olivo, 2016), therefore actions that cause pollution and environmental damage coming from acting without measuring the consequences of human acts, which in theory by the simple fact that harm the world where we live, should be enough as a moral duty to protect and preserve, avoid damage and pollution, however, since the moral duty is not enough to prevent the negative actions of

polluting and damaging the environment, we resort to the existence of environmental law which by regulating the actions to be avoided and those that can be allowed to a certain degree, It is also worth mentioning that there are international laws that promote, foster and encourage governments to take care of the environment.

2. Mexican laws that protect the environment, flora and fauna

With the international measures taken, Mexico managed to regulate and regulate the protection of the environment using various laws (Álvarez, 2021), among them we find the following:

General Law of Ecological Equilibrium and Environmental Protection.

Law to Prevent and Control Environmental Contamination.

General Law for the Prevention and Integral Management of Wastes.

General Law for Sustainable Fishing and Aquaculture

General Law for Sustainable Forestry Development

Federal Law of Environmental Responsibility

Soil and Water Conservation Law

General Wildlife Law

Federal Hunting Law

Federal Law of the Sea

Federal Penal Code

Mexican Official Standards

All these laws, focused on different areas and in their different articles, motivate, provide a duty and in other situations oblige the individual and/or legal entity in a coercive manner not to damage the environment (CONABIO, n.d.), governs the State to create the conditions for the human right of access to justice through courts and competent authorities in environmental matters and in those that are involved, the laws in Mexico are diverse and protect both animals and plants and their ecosystems, Among them we find those already mentioned, that although they all deal with different things there is a common point that unites them, which is the search to regulate human activities that cause environmental damage and contamination, as well as to prevent the generation of imbalances between flora and fauna that end up causing damage to ecosystems, plagues, lack of control of animals and extinction of species that have an important role in their environment (SEMARNAT, n.d.).

The fact that these laws exist has allowed the implementation of programs that make wildlife can be preserved, in fact at the beginning when these laws were implemented as the law of hunting or wildlife helped a lot to regulate these situations and later were given reforms that abounded more

on this issue, Until finally several Mexican laws emerged, such as those mentioned above, which managed to regulate the environmental law that includes the environment, animals and plants and allowed and still allow today that the planet is not damaged, of these the General Law of Wildlife at the beginning was not accompanied by its regulations, but with time and later obtained one from 2006.

This regulation allowed to specify more points and solve doubts that were not clear in the law, as well as to develop a greater order when executing the law, for example this indicated that funds, permits or authorizations that in one way or another destroy or threaten certain wild areas should not be approved, Although it lacked other aspects or other situations that should be regulated, the 2006 regulation was an advance in environmental protection. In 2014 the regulation was reformed and allowed a better regulation of aspects not previously mentioned by the 2006 regulation and today it is very important for the General Wildlife Law to have its own regulation and to regulate in a better way.

3. International means to protect flora and fauna

In the international sphere there are treaties that allow the protection of the environment, flora and fauna, as we have seen throughout history the protection of the environment began in other countries and with time Mexico opted and adopted to take measures for it as well, but the environmental protection through the law is not currently limited to each State, This need arises from the fact that the environment is everyone's task and the environmental consequences can affect the different territories of the world.

The legal and juridical importance has international relevance, therefore treaties were created and even a part of public international law focuses on the environment as a global concern because environmental care is something relevant to the world because it affects everyone, because it is the world in which we live and it is our duty to take care of it, in the international scenario we can find international instruments with competence in environmental law, such as the following: Ramsar Convention on Wetlands, Convention on the Protection of the World Cultural and Natural Heritage, Convention on International Trade in Endangered Species of Wild Fauna and Flora which is known as CITES and Convention on Biological Diversity.

International treaties are important because they are the international means that allow us to take the seriousness that is required to deal with environmental issues because although many countries already have laws that protect the environment, flora and fauna, in many occasions these conflicts cross to international fields as it is precisely the international trade of species that usually involves more than one country and therefore it usually covers not only the legislation of a country but it also impacts in the matter that other countries also have their rules, but the existence of a common agreement on how to deal with these matters allows both countries to agree on the procedure to be taken in environmental matters, For Mexico, being subject to international treaties that protect the environment and that include flora and fauna, makes it possible to comply with greater scope and progress with Article 4 of the Political Constitution of the United Mexican States that already establishes the right to a healthy environment, the respect that must be guaranteed by the state and

that generates responsibilities for those who cause damage to the environment, This establishment makes it consistent with international instruments and reinforces compliance with the laws that Mexico already has to protect the environment and creates a collaboration between nations, including Mexico, to guarantee compliance to protect, conserve, defend and preserve the environment, flora and fauna internationally.

Having international means is a great tool that allows countries like Mexico to collaborate with others to stop environmental threats (Revuelta, 2022) such as the example of animal and plant trafficking, the excessive hunting of exotic species and also to avoid the extinction of animal and plant species, as well as to solve in a better way the environmental situations that usually harm countries, In fact, the existence of international treaties reaffirms the internal obligation of countries and governments such as Mexico to comply with this duty to their citizens and help them to comply with and respect the human right to a healthy environment and that the world is not destroyed or degraded any further, since avoiding pollution and environmental damage has become so serious that it is now necessary for these laws to continue and motivate their international protection.

Conclusion

The environmental movements were necessary in the world to provide the means to protect nature and the environment, without those initiators of the movements and countries that perceived such environmental needs, it would not have been possible to have organizations and laws whose focus is precisely the environment, plants, animals and their protection, conservation and preservation. Mexico, being a megadiverse country, is one of those that most need laws and institutions that promote and force people to conserve their environment, although there are also many laws in Mexico to achieve this task and most of them are well drafted, however, it is useless to have many laws if they are not respected at any time, it is the moral values that will allow the country to face the environmental challenge by taking late measures to preserve it.

In addition to the above mentioned, not only people as individuals have responsibility but also the officials who have the power to enforce the legal obligation are the ones who determine compliance with environmental law, because if they do not influence the citizen to feel the need to avoid a penalty for breaking the environmental law, it will not be possible to achieve the expected result of caring for nature, Perhaps in the future more rigorous laws and people more determined to enforce these rules will be required, since this is what will guarantee that the law and the law will be the engine that generates the legal change to protect the environment and not just empty and vain words that achieve the improvement that has been fighting for nature and the environment through the years and times, also the international regulation was a great help and impulse to allow that in truth these norms of environmental care are fulfilled, as much in the States part of an international treaty as in a group of countries that inhabit the same world, because we share the same resources we need the same healthy environment, for that reason it is required that the human beings take seriously what the law in relation to the nature regulates and that in truth the environment is taken into account, Therefore, it can be said that today environmental law and legislation are an important part if we want to achieve a dignified life and a good future for the generations that come after us and that can grow in a naturally well-balanced and healthy world.

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