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Unlawful acts against the rights of nature and environmental impact

Atos ilegais contra os direitos da natureza e o impacto ambiental

Actos ilícitos contra los derechos de la naturaleza e impacto ambiental

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ABSTRACT

The evolution of mankind, driven by developments in society, science, and technology, has had a significant impact on Mother Earth or nature, resulting in serious effects on the environment, ecosystems, and biodiversity. This research critically analyses illicit acts that violate the rights of nature and assesses their environmental impact. To achieve this, we employed an approach that incorporates inductive, dogmatic, historical-logical, and descriptive legal methods through a non-experimental design. The research results show a concerning lack of respect for the rights of nature in Ecuador. Furthermore, the inadequate control of illegal acts, including the endorsement of deforestation and the illegal and irresponsible extraction of natural resources, are causing a substantial negative impact on the environment, ecosystems, flora, and fauna.

Keywords: nature and environmental impact, rights of nature, unlawful acts.

RESUMO

A evolução da humanidade, impulsionada pelos avanços na sociedade, ciência e tecnologia, teve um impacto significativo na Mãe Terra ou na natureza, resultando em sérios efeitos sobre o meio ambiente, ecossistemas e biodiversidade. Esta pesquisa analisa criticamente os atos ilícitos que violam os direitos da natureza e avalia seu impacto ambiental. Para alcançar isso, empregamos uma abordagem que incorpora métodos legais indutivos, dogmáticos, histórico-lógicos e descritivos por meio de um design não experimental. Os resultados da pesquisa mostram uma preocupante falta de respeito pelos direitos da natureza no Equador. Além disso, o controle inadequado de atos ilegais, incluindo o endosso ao desmatamento e a extração ilegal e irresponsável de recursos naturais, está causando um impacto negativo substancial no meio ambiente, ecossistemas, flora e fauna.

Palavras-chave: impacto ambiental da natureza, direitos da natureza, atos ilícitos

RESUMEN

La evolución de la humanidad, impulsada por los avances en la sociedad, la ciencia y la tecnología, ha tenido un impacto significativo en la Madre Tierra o la naturaleza, lo que ha resultado en graves efectos sobre el medio ambiente, los ecosistemas y la biodiversidad. Esta investigación analiza críticamente los actos ilícitos que violan los derechos de la naturaleza y evalúa su impacto ambiental. Para lograrlo, empleamos un enfoque que incorpora métodos legales inductivos, dogmáticos, histórico-lógicos y descriptivos a través de un diseño no experimental. Los resultados de la investigación muestran una preocupante falta de respeto por los derechos de la naturaleza en Ecuador. Además, el control inadecuado de los actos ilegales, incluida la deforestación y la extracción ilegal e irresponsable de recursos naturales, está causando un impacto negativo sustancial en el medio ambiente, los ecosistemas, la flora y la fauna.

Palabras clave: impacto ambiental de la naturaleza, derechos de la naturaleza, actos ilícitos.

INTRODUCTION

The primary focus of this investigation is to assess the environmental impact of unlawful acts against the rights of nature. According to the United Nations (UN, 2019), global emissions are reaching unprecedented levels, and the last four years have been the hottest on record. Winter temperatures in the Arctic have increased by 3°C since 1990. Consequently, it becomes imperative for all nations to fulfil their mandatory international environmental commitments. Particularly, in the aspect of climate change, detrimental effects on existence are evidenced on droughts, water shortages, forest fires, floods, and polar ice melting. Additionally, the World Health Organization (WHO) stresses that air pollution and global warming are the leading causes of diseases worldwide.

Nature plays a crucial role in ensuring the well-being and survival of both humans and non-human animals. It provides essential natural resources, including clean water, air, food, and shelter, all of which are vital for the survival of various species. Additionally, nature contributes significantly to climate regulation, soil conservation, and protection from natural disasters, among other essential ecosystem services. Recognizing the rights of nature ensures the preservation, conservation, and sustainability of not only our natural environment but also the well-being and prosperity of both current and future generations.

According to Márquez (2020), environmental damage serves as a mechanism to the forced displacement of a certain population. While acts constituting crimes against humanity are not limited to the use of force and can include the threat of force or coercion. On the other hand, Iglesias (2019) claims that environmental damage by itself is not directly employed as a mechanism to the forced displacement of a population. However, in many cases, environmental deterioration and degradation contribute to the necessity of population displacement. For example: factors such as climate change, deforestation, water and land pollution, and large-scale extraction of natural resources lead to environmental damage that directly affects people's habitats, finally forcing them to abandon their home residences.

In several Hispanic American countries, including Mexico, Bolivia, Colombia, Ecuador, laws and policies are intended to protect nature, preserve the environment and ecosystems. They are thought to guarantee access to water and promote environmental conservation and sustainability. However, the implementation of the rights of nature in the mentioned countries currently faces challenges such as the lack of resources, the resistance of some economic sectors and the lack of environmental awareness, which negatively have impacted environmental objectives and the rights of nature. In the same vein, Hincapié (2023) considers that there is an intrinsic relationship between the protection of nature and natural heritages and common goods as strategic ecosystems in order to guarantee water for future generations.

Ecuador holds the distinction of being the first country in South America to recognize nature as a subject of rights, a provision enshrined in the Constitution of the Republic (2008). This recognition stems from the understanding that nature is a vital element for life itself. Consequently, nature is endowed with the right to exist, maintain its integrity, be respected, protected, and restored. Unfortunately, violations of these rights occur due to activities for instance forest fires, improper disposal of garbage, industrial chemicals into rivers, unauthorized tree cutting in protected areas, and soil contamination, which result in irreversible environmental damage.

Based on Storini (2019), the development of rights can be observed in two directions. Firstly, it involves the evolution of the content of rights, encompassing various aspects. Secondly, it includes the transformation of rights through a democratic transition, integrating historically distinct entities. In the Ecuadorian case, the recognition and protection of the rights of nature, from a legal perspective, aim to acknowledge the inherent rights of ecosystems and natural elements such as rivers, mountains, animals, and plants, which are deep-rooted in the ancestral worldview of respecting nature. These rights play a crucial role in promoting peaceful and harmonious coexistence and guaranteeing a pollution-free environment, thereby ensuring life continuation.

The Ecuadorian constitution (2008) grants rights to nature, demanding respect and protection against activities causing natural damage and requiring restitution when its rights are violated. Despite these constitutional provisions, nature in Ecuador has faced constant threats and has experienced the loss of countless forests and endemic species, leading to a deteriorating environmental situation. It can be said that one of the primary challenges lies in the lack of awareness regarding the care of Mother Earth or Pachamama in Kichwa language. This lack of awareness is reflected in the insufficient accomplishment of programs promoting environmental development within the social and educational spheres. Campaña (2013) emphasizes the need for economic objectives to align with the laws of natural systems, all while upholding human dignity and prioritizing the quality of human life. Consequently, the laws of nature must take on a political dimension to facilitate urgent and meaningful changes.

The idea of the rights of nature emerged as a response to the global environmental crisis and the increasing degradation of ecosystems. It is considered that the current human-centered legal and economic approach has led to the overexploitation and destruction of nature. Hence, there is a need to shift towards an approach that recognizes the rights of

nature. In short, the rights of nature seek to change the relationship between human beings and nature, recognizing that nature has its own rights that must be protected and respected. This implies a paradigm shift in the way we understand and treat nature. In other words, it represents a new approach towards sustainability and respect to ecosystems.

Based on the Ecuadorian legal system, there are provisions, constitutions and legal obligations that guarantee the effective enjoyment of the right to life, health and personal integrity, all of them become a dead letter; especially when the acts of the public power overlook rules and allow national and international companies to carry out illegal acts. They are against the fundamental rights of human beings and nature. Martínez, Zúñiga, C& Barrera (2023) assure that the lack of control by the Ecuadorian state promotes the proliferation of illicit activities seeking mining material appropriation. Therefore, illegal mining generates a considerable social and environmental impacts since it negatively effects on the integrity of nature and human rights.

In the Comprehensive Organic Penal Code (2014), crimes against nature are addressed in its fourth chapter, with penalties that include the destruction of heavy machinery used in the commission of these infractions. However, this illicit activity "is on the rise, involving the use of heavy machinery and unauthorized chemicals like mercury, known for its high contamination levels. This destructive practice not only harms the environment but also becomes a part of illegal activities, mainly the trafficking of weapons, explosives, and money laundering" (Ordoñez, 2023). These acts not only violate the rights of individuals but also the rights of nature."

The most frequent committed illegal acts causing the violation of the rights of nature are located in the Ecuadorian Amazon. It is a place where ecosystems with a unique biodiversity on planet Earth are located. Unfortunately, this territory is threatened by the theft of the intellectual property of ancestral wisdom and knowledge. Similarly, deforestation, illegal mining and inadequate oil exploitation by transnational corporations evidence a lack of control and follow-up by national and international organizations in addressing these fraudulent and illegal actions.

Unlawful acts against the rights of nature

According to Cabanellas (2012), an unlawful act is "one that is reprobated or prohibited by the legal system, the opposite of a legal norm or an acquired right" (p. 40), that is, the act that is against a norm because it violates a legally recognized right. It is an action that, for the most part facts, the person or people know what they are doing and do it intentionally. In this sense, illicit acts against the rights of nature are all those actions that damage or degrade the environment and go against the legally recognized rights of the Mother Earth.

The most common illegal acts committed by human beings against the rights of nature are the pollution of air, water and soil, which materialize with the emission of polluting gases, the irresponsible disposal of solid and liquid waste, the indiscriminate use of pesticides and chemical products, among others. Those acts affect the quality of natural resources and the health of ecosystems. In this context, "it is the responsibility of governments, industries, communities, and individuals to address the environmental crisis through the adoption of sustainable practices, the implementation of policy reforms, the incorporation of technological advances, and the creation of awareness" (Echavarría, et al., 2023, p. 5).

The indiscriminate cutting of trees and the destruction of natural forests, known as deforestation, are considered as illegal acts against the rights of nature. They negatively affect biodiversity, contributing to climate change and destroying natural habitats. Forests, through the evolution of society and technology, have been classified as useful objects for socioeconomic development, hence the reason for their excessive cutting. It "constitutes a problem that affects climatic conditions, causing imbalances in the stabilization of the climate, since it reduces their capacity to store large proportions of carbon" (Saavedra, 2023, p. 923). Thus, these problems will lead to an unprecedented environmental catastrophe in the future.

Irresponsible extraction of natural resources is a crime against nature and the environment. It not only affects ecosystems, but also the human population. Among these crimes are the illegal exploitation of minerals, oil, gas and other natural resources without complying with environmental regulations, and without considering the social and environmental impacts. It constitutes an illegal act against the rights of nature. In Ecuador, "the proliferation of illegal activities in the framework of mining exploitation is evidence of serious setbacks in terms of protection and respect for human rights, collective rights of indigenous populations and the rights of nature" (Martínez, Zúñiga & Barrera, 2023, p. 620). Irresponsible extraction evidence a real disrespect for constitutional provisions and international obligations.

Other issue causing violations of the rights of nature is excessive noise produced by helicopters, light aircraft, planes, vehicles, and other technological equipment, resulting in what is commonly known as noise pollution. This is considered an illegal act against the rights of nature because it disrupts the natural balance and the quality of life for living beings. According to a study conducted by González (2021), the worldwide vehicle fleet has become one of the primary sources of noise pollution in both urban and rural areas. Therefore, excessive noise levels from vehicular traffic have negative impacts on

the health and well-being of the population, leading to stress, sleep disorders, and hearing problems. Unfortunately, noise pollution doesn't only affect human animals; it also has adverse effects on non-human animals, particularly on urban wildlife. Even during festive times like Christmas, when should be days of peace and tranquillity, noise pollution causes torment, anguish, despair, and stress in dogs and cats, for instance, they "show signs of anxiety and overwhelm that intensify as they are unable to escape from the sound" (Blackwell, Bradshaw, & Casey, 2013). Furthermore, the "noise from firecrackers can even lead to tachycardia and death in birds" (Schiavini, 2015).

Similarly, mistreatment and cruelty towards animals, such as poaching, sport hunting, and the exploitation of animals in the agricultural and livestock industries, as well as shows involving animal suffering and death constitute unlawful acts that infringe upon the rights of nature. Campi et al. (2023) have pointed out that people unfortunately engage in various forms of violence against animals. Despite existing laws designed to protect and punish crimes against non-human animals, mistreatment and cruelty continue to persist. It appears that rules and penalties alone do not guarantee the legal security of these sensitive beings.

Violation of the rights of nature and environmental impact

Human actions have significantly damaged natural ecosystems and the planet's natural resources. These actions not only violate the rights of nature but also have a detrimental impact on the well-being and integrity of both human and non-human animals. Such damage occurs through the destruction of natural habitats and the pollution of air, water, and soil, eventually leading to the extinction of natural resources and species, among other consequences. In response to this global catastrophe, several countries worldwide have recognized Mother Earth as a subject of rights. However, some individuals still view Mother Earth as an object of exploitation to fulfil their immediate and individual needs, without considering the inherent rights of ecosystems and the species within them. This lack of awareness has resulted in the loss of biodiversity, climate change, the erosion of ecosystem services, and environmental degradation. Despite the implementation of rules, policies, and measures by states, they have not proven to be effective in protecting the environment. Pollution and environmental destruction persist, along with the continued violation of human rights.

As mentioned earlier, illegal activities perpetrated by humans not only infringe upon the rights of nature but also have a detrimental environmental impact on life, health, and integrity. This environmental impact becomes evident through the degradation of the natural environment, which includes the depletion of natural resources, pollution, soil degradation, and the loss of biodiversity. "To address these issues and ensure the integral conservation of nature's rights, various protective actions and constitutional precautionary measures have been proposed" (Soria & Cáceres, 2022, p. 1653).

Also, the violation of nature's rights and its subsequent environmental impact have repercussions on all living beings, including humans, as our survival is intricately linked to the health of ecosystems. One of the problems that has been detected and given rise to the violation of rights is "the transgression of the rules that regulate mining and the procedure such as the Constitution, COIP, the Mining Law" (Soria & Cáceres, 2022 p. 1654) In addition, "environmental exploration permits are granted without adhering to the legal requirements specified in these governing bodies" (Ibid.). These concerning developments demand crucial measures to prevent and mitigate their impacts, thereby, fostering a more sustainable and respectful relationship with nature. This entails the adoption of environmental policies, the promotion of sustainable practices, the conservation of biodiversity, and the advancement of clean technologies.

MATERIALS AND METHODS

This study is conducted in Ecuador, specifically in the Chimborazo province, where illicit acts against the rights of nature are the subject of investigation and analysis. The researchers employed a mixed-method approach (Hernandez-Sampieri et al., 2018), combining qualitative and quantitative methods, and applied inductive, dogmatic, historical-logical, and descriptive legal methods to their research. The study encompasses its defined objectives and research methodology. Eventually, this research can be classified as dogmatic, historical, legal, and juridical descriptive, employing a non-experimental design (Varga, 2008).

The study population consists of Judges of Constitutional Guarantees and environmental defenders. To collect data, a survey was chosen as the research technique, and a questionnaire containing seven Likert scale questions was developed and administered. The data processing in this study involves four key phases:

- 1.- Data Tabulation: This phase consists of both quantifying and qualifying the results collected in the research instruments.
- 2.- Information Processing: we employed the accounting software package Excel to transform the collected information into statistical data.

- 3.- Analysis of Results: we employed the technique of induction to interpret the information and statistical data.
- 4.- Discussion of Results: finally, we applied techniques such as analysis and synthesis, aiming to support the findings of our research by integrating them with previous studies.

RESULTS AND DISCUSSION

The results are presented below, following the order of the research questions presented in the introductory section.

Table 1. Synthesis of results of the questionnaire applied to Constitutional Guarantee Judges and environmental defenders

Results of the questionnaire applied to Constitutional Guarantee Judges and environmental defenders											
QUESTION	TD		GIVES		N		ED		TDE		
QUESTION	f	%	f	%	F	%	f	%	f	%	
1. Is there a culture of respect	1	10%	1	10%	2	20%	5	50%	1	10%	
for the rights of nature in	1	10%	1	10%	0	0%	7	10%	1	70%	
Ecuador?											
2. Is there an effective											
mechanism in place to control	0	0%	3	10g	2	20%	4	40%	1	10%	
unlawful acts committed by											
individuals that impact the	0	0%	2	20%	0	0%	5	50%	3	10%	
rights of nature?			_								
3 Does deforestation result in	8	80%	2	20%	0	0%	0	0%	0	0%	
the loss of habitat for flora and	10	100%	0	0%	0	0%	0	0%	0	0%	
fauna species?	1		+_		+		+		+		
4 Is the extraction of natural	0	0%	0	0%	0	0%	2	20%	8	80%	
resources conducted in a legal	0	0%	0	0%	0	0%	2	20%	8	80%	
and responsible manner?		201	-	201	+	201	1	100/	-	500/	
5. Do the sanctions and	0	0%	0	0%	0	0%	4	40%	6	60%	
penalties imposed on		00/		00/		00/		200/		000/	
individuals for committing unlawful acts effectively ensure	0	0%	0	0%	0	0%	2	20%	8	80%	
the protection of nature's											
rights?											
6 Are the Ecuadorian	0	0%	0	0%	0	0%	2	20%	8	80%	
government and regulatory	<u> </u>	070		070		070		2070		0070	
bodies effectively ensuring the											
conservation and preservation	0	0%	0	0%	2	20%	0	0%	8	80%	
of the environment and		0,0	ľ	0.70	-	2070		0,0	ľ	0070	
ecosystems?											
7 Are the rules, policies, and	0	0%	0	0%	3	10%	2	20%	5	50%	
measures implemented to											
protect the environment and	0	0%	0	0%	0	0%	3	10%	7	70%	
nature's rights proving to be											
effective?											

Source: own elaboration with the research data (2023) TD = Strongly agree; DA = I agree; N = Neutral; ED = Disagree TDE = Strongly Disagree

Respect for the rights of nature represents a relatively new concept, aimed at granting ecosystems and natural elements legal rights to protect their integrity and promote preservation. This approach fundamentally challenges the notion that nature is purely a resource to be exploited by humans. The nature's rights approach emphasizes its intrinsic value and the need for respectful consideration instead. Ávila (2021) highlights the importance of cultivating an environmental culture that enables harmonious coexistence with Mother Earth, even in the face of ongoing violations of nature's rights resulting in environmental mutilation. By acknowledging and upholding the rights of nature, the aim is to shield ecosystems from harmful practices like deforestation, pollution, and excessive resource extraction. In other words, this approach demands the implementation of measures aimed at preventing and rectifying environmental harm, alongside efforts to restore ecosystems that have suffered degradation. The Ecuadorian constitution (2008) remarkably recognizes Mother Earth as a subject of rights, imposing obligations on humans to preserve its integrity, practice precaution in activities that might harm it, and provide restitution in cases of rights violations.

Despite these legal foundations, Ecuador has faced ongoing threats to Mother Earth, leading to the loss of countless

forests, rivers, lakes, and endemic species. This unfortunate reality highlights the lack of a pervasive culture of respect for the rights of nature within the country.

To ensure the effective control of illicit acts that have adverse impacts on nature's rights, it is imperative to implement a comprehensive set of legal and political measures aimed at bolstering the protection and conservation of the environment. In this context, the Ministry of the Environment, Water, and Ecological Transition (2023) emphasises that "Crimes against Mother Earth align with illicit enterprises." Unfortunately, in Ecuador, natural resources are being extracted unlawfully without sufficient oversight, resulting in severe harm to life, the well-being of both human and non-human entities, species endangerment, and ecosystem degradation. This challenge becomes further exacerbated by the inadequate level of environmental education, hindering people from harnessing natural resources and wealth responsibly. Despite the presence of robust environmental protection regulations, illicit acts against nature continue to be alarmingly frequent, highlighting a critical lack of citizen engagement and participation in environmental care awareness. Consequently, it is evident that Ecuador currently struggles with the effective control of illegal acts perpetrated by individuals that infringe upon the rights of nature.

Above all, one of the main illegal acts against the rights of nature and environmental impact is deforestation. That is the destruction of forests caused by human activities and natural phenomena such as forest fires, pests, or droughts. Illegal logging, extensive agriculture, mining, livestock expansion, and urbanization are common activities that are leading to the loss of habitat for flora and fauna species. As stated by Garland, de la Torre & Basabe, "extensive livestock production practices in the Amazon region have resulted in the deforestation of primary forests" (p. 179). Certainly, deforestation not only impacts the environment and violates the rights of nature but also has numerous negative consequences, including biodiversity loss, soil degradation, reduced water availability, increased greenhouse gas emissions, and climate change. Deforestation may also have socio-economic implications, for instance habitat loss for indigenous communities and income loss for local populations, who dependent on forest resources. Concerning this issue, Barcos (2023) points out that the environmental impacts caused by deforestation have accelerated climate change, leading to soil erosion, the loss of native flora and fauna species, and the destabilization of groundwater, resulting in floods, droughts, and the expansion of desert areas, which are becoming more life-threatening.

To ensure a healthy and ecologically balanced environment, all countries worldwide, including Ecuador, have established regulations aimed at protecting the environment and, in some cases, guaranteeing the rights of nature. In this context, the extraction of natural resources should follow eco-friendly practices and procedures in accordance with government and regulatory bodies' laws and regulations. Therefore, the primary objectives of such regulations are to ensure the sustainability of ecosystems, the conservation of resources, the prevention of overexploitation and resource reduction, and the avoidance of adverse environmental impacts that could affect communities, who are mostly dependent on these resources. To achieve these goals, there is a call for the implementation of more "rigorous laws aimed at partially compensating for the damage perpetrated upon our natural environment, thereby upholding its right to restoration" (Bastidas, 2010). In the pursuit of protection nature's rights, responsible and lawful extraction of natural resources aims to minimize enduring adverse effects on both the environment and the economy. Based on these considerations, the responsible and legal extraction of natural resources aims to minimize negative impacts on the environment and the economy in the long term. Indeed, this forces the use of natural resources in a sustainable way to ensure their availability for future generations.

Along the same vein, the reduction of natural resources is becoming an increasingly critical issue, despite the fact that nature and ecosystems serve as essential sources of life. Human activities are driving species to extinction, including our own. Both nationally and internationally, norms and policies, such as the United Nations' Sustainable Development Goals (UN, 2030 agenda), are aimed at establishing sustainable communities, reducing environmental impact, and combating deforestation. In the Ecuadorian context, the government ensures its citizens' right to live in a healthy, ecologically balanced environment that is free from pollution, encouraging the harmonious coexistence of all natural elements and living beings. This includes meeting human needs without depleting resources or disrupting ecosystems. Living in a pollution-free environment means the absence of toxic substances, harmful chemicals, or any factors that harm human health and disrupt ecosystem balance. This encompasses preventing air, water, and soil contamination, as well as reducing greenhouse gas emissions that contribute to climate change. However, in certain regions of Ecuador, where resource exploitation is unsustainable, these ideals remain unfulfilled, suggesting that constitutional provisions, international obligations, and imposed sanctions are insufficient in protecting nature's rights."

As stated above, both nationally and internationally, sufficient regulations exist to ensure the rights of nature, environmental conservation, and ecosystem preservation. Various organizations, such as the United Nations Environment Program (UNEP), the Food and Agriculture Organization of the United Nations (FAO), and the World Wildlife Fund (WWF), promote these objectives by coordinating environmental activities, advocating for sustainable resource use, and supporting biodiversity conservation and ecosystem protection. In Ecuadorian case, several organizations oversee the formulation,

implementation, regulation, and enforcement of environmental policies thought to conserving biodiversity, sustainably managing natural resources, and preserving the environment and ecosystems. These include the Ministry of the Environment, the Agency for Regulation and Control of Biosafety and Quarantine for Galapagos (ABG), the Ministry of Agriculture and Livestock, the National Institute of Biodiversity (INABIO), and the National Environmental Fund (FAN). Despite the presence of these organizations and regulations, the efficiency of the Ecuadorian State and control agencies in effectively safeguarding the rights of nature, conserving the environment, and preserving ecosystems remains deficient.

Notably, the Ecuadorian Constitution published in 2008 affirms that Ecuador became the first country to recognize nature as a subject of rights. To support this constitutional provision and penalize offenses against the rights of Mother Earth and the environment, laws such as the Organic Environmental Code (COA, 2018) and the Comprehensive Penal Code (COIP, 2023) were enacted. These laws establish the legal procedures for environmental protection and the corresponding sanctions, "with the purpose of preventing and controlling nature's degradation" (Guanoquiza, 2019). Despite the existence of these regulations, as noted by Carrión (2015), "environmental crimes are clearly defined, with categorized offenses, penalties, and mechanisms for redress in cases of harm to Mother Earth". However, there is a lack of adequate monitoring of these offenses, resulting in impunity and a failure to take action to repair environmental damage. In a nutshell, the sanctions and penalties imposed on those who commit unlawful acts are not effectively ensuring the rights of nature. Molina (2023) argues that "the protection of nature relies on environmental regulation and the authorities' capacity to enforce it. It can be said that rules would be effective if applied in cases of environmental crimes and did not go unpunished". In short, the regulations, sanctions, policies, and measures implemented so far have not proven to be efficient or sufficient in protecting the environment and the rights of nature.

CONCLUSIONS AND FINAL REMARKS

To conclude, it is evident that Mother Earth is the cornerstone of life, providing essential resources for the existence and survival of all living beings that share this planet. Nevertheless, Mother Earth has suffered from exploitation and harm resulting from human activities, leading to the degradation and destruction of numerous ecosystems and species. This situation persists despite the presence of various organizations and comprehensive national and international regulations designed to secure its continued existence, protection, and the restoration of its life cycles.

Moreover, Mother Earth serves as the foundation of life, offering essential resources for the existence and survival of all beings cohabiting our planet. Lamentably, human activities have led to its exploitation and deterioration, resulting in the degradation and extinction of numerous ecosystems and species. This occurs despite the presence of organizations and comprehensive national and international regulations explicitly created to ensure its preservation, protection, and the rejuvenation of its vital cycles.

The last but not least, the illicit acts committed by humans against Mother Earth are reflected in the pollution of the air, water, and soil, deforestation and the loss of biodiversity, excessive exploitation of natural resources, and climate change. These actions delay the effective enjoyment of the right to live in a healthy, ecologically balanced environment, free from pollution and in harmony with nature. They also contradict the objectives of sustainable development outlined in the United Nations' 2030 agenda.

Main limitations of this study and a future research agenda

The main theoretical limitations of the article are related to the lack of doctrine and jurisprudence in relation to the rights of nature and this may be due to the fact that not all States in the world accept Pachamama as a subject of rights and even more so do not recognize its rights. On the other hand, methodological limitations are identified when processing the information collected in the research instruments, due to the poor mastery of digital tools related to descriptive and inferential statistics.

The proposed research agenda in Table 2, focuses on studying unlawful acts against the rights of nature through a global comparative study, case studies in Latin America, investigation of community perspectives, examination of corporate accountability, and analysis of policy and governance. These priorities aim to inform policy-making and promote sustainable environmental management by identifying best practices, understanding local dynamics, assessing corporate behavior, and evaluating policy effectiveness.

By comparing legal frameworks globally and conducting in-depth case studies in Latin America, researchers can identify challenges and successes in implementing nature's rights laws. Investigating community perspectives and corporate accountability sheds light on grassroots dynamics and responsible behavior, respectively, while analyzing policy and governance effectiveness evaluates the enforcement of laws and promotes sustainability.

Table 2. A research agenda for future studies in rights of nature context

Research Topic	Description
Global comparative study	Compare legal frameworks and implementation of nature's rights recognition globally to identify best practices and challenges.
Case studies in Latin America	Conduct in-depth case studies in Latin American countries to analyze challenges and successes in implementing nature's rights.
Community perspectives	Investigate local community perceptions and engagement in conservation efforts to understand grassroots dynamics of environmental governance.
Corporate accountability	Examine corporate practices and accountability mechanisms in addressing environmental degradation and violations of nature.
Policy and governance analysis	Analyze effectiveness of environmental policies and governance structures in enforcing laws and promoting sustainability.

Source: own elaboration with the research data

REFERENCES

Barcos Aguirre, K. S. (2023). Efectos de la desertificación como causa de la deforestación en suelos del Ecuador (Bachelor's thesis, BABAHOYO).

Bastidas, M. (2010). La explotación de los recursos naturales no renovables y el impacto ambiental frente a la renovación natural.

Bavikatte, S. K. (2014). Stewarding the Earth: rethinking property and the emergence of biocultural rights.

Blackwell, E. J.; Bradshaw, J. W. & Casey, R. A. (2013) "Fear responses to noises in domestic dogs: Prevalence, risk factors and co-occurrence with other fear related behaviour", *Applied Animal Behaviour Science*, 145, pp. 15-25.

Cabanellas, G. (2012). Diccionario de Ciencias Jurídicas. Editorial Helista. Buenos Aires, Argentina.

Campaña, F. (20 de febrero de 2013). Derechos de la naturaleza: ¿innovación trascendental, retórica jurídica o proyecto político? *Derechos de la naturaleza:* ¿innovación trascendental, retórica jurídica o proyecto político? Quito, Pichincha, Ecuador: Revista Iuris Dictio.

Campi, K. M. V., Franco, P. E. D. P., & Herrería, M. E. E. (2023). Análisis de la vulneración de los derechos y el maltrato animal. *Dilemas contemporáneos: Educación, Política y Valores*.

Carrión, M. M. A. (2015). Delitos contra el medio ambiente y la naturaleza o pacha mama en la legislación penal ecuatoriana. https://www.pensamientopenal.com.ar/system/files/2015/05/miscelaneas41117.pdf

Comprehensive Environmental Code (COA, 2018) Official Registry Supplement 983 of April 12, 2017. Ecuador.

Comprehensive Organic Penal Code. (2014). Law 0, Official Registry Supplement 180 of February 10, 2014, last modification: February 17, 2021. Ecuador.

Constitution of the Republic of Ecuador. (2008). Legislative Decree 0, Official Registry 449 of October 20, 2008, last modification: January 25, 2021. Ecuador.

Echavarría Heras, H., Leal Ramírez, C., Millán Núñez, E., Montiel Arzate, E., & Rodríguez Reyes, C. (2023). Introducción a la Crisis Ambiental: Temas Clave y Desafíos. Colección Sobre Epistemología De La Crisis Ambiental Y Economía. Ensayo, 1.

Garland, E. B., de la Torre, S. G., & Basabe, S. A. (2023). Ganaderos, colonos y la deforestación de bosques primarios en Morona, Ecuador. *Anthropologica*, *41*(51), 175-212.

González, J. (2021). Impacto del parque automotor en la contaminación acústica a nivel mundial. Revista Internacional de Medio Ambiente. P 25, 45-57.

Hernández-Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2018). *Metodología de la investigación* (Vol. 4, pp. 310-386). México: McGraw-Hill Interamericana.

Hincapié, S. (2023). Gobernanza ambiental global y derechos de la naturaleza en América Latina. Revista Derecho del Estado, (54), 277-305.

Iglesias, J. (2019). Estado de la situación jurídica ambiental y la corresponsabilidad con el ecosistema, de las comunidades del Río Chibunga, Riobamba-Ecuador. Obtenido de Estado de la situación jurídica ambiental y la corresponsabilidad con el ecosistema, de las comunidades del Río Chibunga -Riobamba, Ecuador: https://dilemascontemporaneoseducacionpoliticayvalores.com/index.php/dilemas/article/view/1430

Martínez, R. C. J., Zúñiga, C. P. C., & Barrera, D. A. M. (2023). Análisis de los factores que inciden en la vulneración de derechos de la naturaleza producto de la minería ilegal en la provincia de Napo. *Universidad y Sociedad, 15*(S2), 612-621.

Naciones Unidas. (2019). *Naciones Unidas - Acción por el clima*. Obtenido de Cumbre de la ONU sobre la Acción Climática ONU 2019: https://www.un.org/es/climatechange/2019-climate-action-summit

Pellow, D. N. (2014). Total liberation: The power and promise of animal rights and the radical earth movement. U of Minnesota Press.

Saavedra, J. A. S. (2023). Impacto de la deforestación en la pérdida del hábitat de vida silvestre amenazada en la Amazonía. Ciencia Latina Revista Científica Multidisciplinar, 7(2), 915-935.

Schiavini, A. (2015) *Efectos de los espectáculos de fuegos artificiales en la avifauna de la Reserva Natural Urbana Bahía Cerrada*, Ushuaia: Centro Austral de Investigaciones Científicas [referencia: 26 de junio de 2019].

Soria-Maldonado, F. E., & Cáceres-Romero, H. A. (2022). La minería ilegal y sus efectos en la vulneración de los derechos de la naturaleza. *Polo del Conocimiento*, 7(4), 1650-1664.

Storini, C. (2019). La naturaleza como sujeto de derechos en el constitucionalismo democrático. Obtenido de La naturaleza como sujeto de derechos en el constitucionalismo democrático: http://files.harmonywithnatureun.org/uploads/upload866.pdf

Swissinfo.ch. (2023). Ecuador declara a la minería ilegal como amenaza a la seguridad del Estado. https://www.swissinfo.ch/spa/ecuador-miner%C3%ADa_ecuador-declara-a-la-miner%C3%ADa-ilegal-como-amenaza-a-la-seguridad-del-

 $estado/48236560\#: \sim : text = Ord\%C3\%B3\%C3\%B1ez\%20explic\%C3\%B3\%20que\%20esta\%20actividad, explosivo\%20y\%20lavado\%20de\%20activos\%22dew20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20esta\%20explic\%C3\%B3\%20que\%20que%20que\%20que\%20que%20que$

Varga, C. (2008). Law and its doctrinal study: On legal dogmatics. *Acta Juridica Hungarica*, 49(3), 253-274.

Contribution of each author to the manuscript:

	% of contribution of each author					
Task	A1	A2	А3	A4		
A. theoretical and conceptual foundations and problematization:	25%	25%	25%	25%		
B. data research and statistical analysis:	25%	25%	25%	25%		
C. elaboration of figures and tables:	25%	25%	25%	25%		
D. drafting, reviewing and writing of the text:	25%	25%	25%	25%		
E. selection of bibliographical references	25%	25%	25%	25%		
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