THE PRINCIPLE OF PREVENTION AND THE PRECAUTIONARY PRINCIPLE, ENVIRONMENTAL SCOPE.

SANTANDER MORENO JESSICA JOHANNA¹, ROSERO MORÁN CRISTINA MERCEDES², CHUGÁ QUEMAC ROSA EVELYN³, MÉNDEZ CABRITA CARMEN MARINA⁴

Universidad Regional Autónoma de los Andes Tulcán. Ecuador.

¹E-mail: ut.jessicasm33@uniandes.edu.ec
ORCID: https://orcid.org/0000-0001-7346-5384

²E-mail: ut.cristinarm00@uniandes.edu.ec
ORCID: https://orcid.org/0000-0001-9618-3574

³E-mail: ut.rosachuga@uniandes.edu.ec
ORCID: https://orcid.org/0000-0002-1183-0427

⁴E-mail: ut.carmenmmc56@uniandes.edu.ec ORCID: https://orcid.org/0000-0001-8672-3450

ABSTRACT

The constitutional right to live in a healthy environment that people have is complex because over time it has been felt that the changes that nature has undergone are impressive, this is due to the actions of man to take advantage of resources in an unaware manner, which has led to evidence of adverse changes in the environment. In this sense, this article deals with the application of the principle of precaution and prevention in cases that refer to environmental law, how an exhaustive analysis is carried out for its application, which goes beyond just making a decision within the framework of the doctrine. Determining that the precautionary principle lies when there is doubt that an activity may cause environmental damage and in the face of this doubt, measures must be taken, and that the prevention principle lies when there is certainty that an action will cause some damage to the environment, then actions must be taken so that this damage is the least invasive with nature. In the development of the investigation, the qualitative method is applied that allows the documentary and doctrinal analysis of the raised subject, to have a vast knowledge about the environmental principles.

KEYWORDS: Principle; prevention; precaution; environmental law; nature.

INTRODUCTION

The study of this research is carried out with the foundation that nature is the axis for the development of human beings, understanding it as part of the forms of life, that is to say that nature is considered as a living being and from that perspective, at the international level it has been possible to evidence the damages that nature has suffered over time. For several factors that alter its natural development, among them the most invasive factor is undoubtedly the one that has suffered by the action of the human being, considering that nature is his property, without realizing rather that nature is part of human development and therefore it must be taken care of all those damages that it may suffer and everything that affects its vital cycles, An example of this is climate change that over time has put the whole world on alert, and that little by little adequate measures have been implemented to maintain the natural environment as much as possible.

In the Constitution of the Republic of Ecuador, article 71 establishes that: Nature or Pacha Mama, where life reproduces and realizes, has the right to have its existence fully respected and the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes. Any person, community, people or nationality may demand from the public authority the observance of the rights of nature. In applying and interpreting these rights, the principles laid down in the Constitution shall be observed, as appropriate. The State shall encourage natural and legal persons, and collectives, to protect nature, and shall promote respect for all the elements that make up an ecosystem. . (2008)(Ecuador. Asamblea Nacional Contituyente., 2008)

It is necessary to emphasize that nature has protection from the constitutional scope so that it is respected integrally, from all development processes, thus determining the protection of vital cycles, which is integrally and that it has natural evolutionary processes and fundamentally respect for the elements of the ecosystem. Faced with this worldwide problem that exists with respect to environmental damage, it is evident that Ecuador has implemented since the Constitution some measures and principles related to environmental care that must be taken so that man can enjoy living in a healthy and ecologically balanced environment.

Therefore, the research has the focus on the principles of prevention and precaution, how they should be applied in the environmental field, because they are indispensable in the analysis of the application either the principle of prevention when there is scientific certainty of causing environmental damage, as the precautionary principle when there is reasonable doubt that cause an affectation with a certain activity. In addition, it establishes the identification of those circumstances that must be taken into account for the application of the environmental principle.

In relation to the methodology has a development in a critical approach with doctrinal information, with normative foundation, in relation to the method used is the deductive because it allowed to carry out the analysis in a general way until reaching the particular application of environmental principles.

METHODS:

The article presented has an investigation that admits the development of an interpretation of a legal matter allowing to build results in the course of the investigation. Qualitative research was applied for the analysis of the information presented, with the support of bibliographic review. In relation to the design of the research, variables are not manipulated because it is based on legal theory and doctrine, with the analysis of the norms regarding the issue raised. The scope is analytic explanatory because it answers the questions that arise in the development of it.

The structure has a focus on review and documentary analysis in a deductive way, because it develops in a general way to the particular with the understanding of the principles of prevention and precaution and understand how its application is.

RESULTS

This research allowed to analyze the application of environmental principles, emphasizing the principles of prevention and precaution. It starts by mentioning the Constitutional protection that nature has, it is also compared with the right to live in a good healthy environment that people have; Article 10 of the Constitution of the Republic of Ecuador states: Individuals, communities, peoples, nationalities and groups are entitled to and shall enjoy the rights guaranteed in the Constitution and international instruments. Nature shall be subject to those rights recognized by the Constitution. .(2008)(Ecuador. Asamblea Nacional Contituyente., 2008)

It is justified that nature is a subject of rights by the need to protect it, and is framed within the scope of a protected legal good, consequently, that good is protected by law and therefore its protection must be given importance in order to repress actions or omissions that may affect and cause damage to nature. In addition, nature is considered with an intrinsic value, it has an end in itself and not to achieve other ends, and that is why it must be shared with all its elements.

Additionally, article 14 of the Constitution of the Republic of Ecuador establishes that: The right of the population to live in a healthy and ecologically balanced environment, which guarantees sustainability and good living, sumak kawsay, is recognized. The preservation and conservation of the environment declares of public interest, to achieve the good living of the population. (Ecuador. Asamblea Nacional Contituyente., 2008)

In the Constitution of the Republic of Ecuador, article 71 establishes that: Nature or Pacha Mama, where life reproduces and realizes, has the right to have its existence fully respected and the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes. It is understood with a systemic set of protection of natural processes because they are considered to

have life, and for this reason they deserve legal care and protection. (2008) (Ecuador. Asamblea Nacional Contituyente., 2008)

The same article also establishes who can sue on behalf of nature, as follows: Any person, community, people or nationality may demand from the public authority the fulfillment of the rights of nature. In applying and interpreting these rights, the principles laid down in the Constitution shall be observed, as appropriate. The State shall encourage natural and legal persons, and collectives, to protect nature, and shall promote respect for all the elements that make up an ecosystem. (Ecuador. Asamblea Nacional Contituyente., 2008)

From the above, it is established that there are two points regarding nature that must be analyzed, on the one hand, the right of all care to live in a healthy and ecologically balanced environment and on the other hand the rights of nature to have life and for that reason it must be protected and conserved.

Right to live in a healthy environment Art: Law of nature Article 71 14 It is necessary to prove an affectation to a It is not necessary to prove a human human being or to a group of human beings. affectation, but an affectation to nature The lawsuit must be filed by the human The lawsuit can be filed by anyone, i.e. by affected person(s) representatives Reparations: person or groups affected Repairs: ecosystems can be carried out, for example: the decontamination of a river, decontamination of the forest. They are interconnected rights

Table 1: Comparative Table

Source: Jessica Santander 2022

Table 1 shows the Constitutional difference of the right to live in a healthy environment, such as the rights of nature, then the analysis of the application of environmental principles is made, in a first point establishing the conceptualizations of the principles in the doctrine, later it is analyzed from the Constitution of the Republic of Ecuador, and finally, the practical application by the Constitutional Court of Ecuador in an emblematic case is detailed.

From the doctrinal review, the definition of the principle of prevention as the precautionary principle and understanding the aspects that individualize each one is detailed below. For Betancor: Environmental law is inspired by two groups of principles: those that seek the avoidance of damage and those that aim to repair or restore it, it is clear that the optimal way to protect the natural environment will be to prevent the negative impact from occurring, evading the circumstances that result in the unlawful act occurring. .(Betancor, 2014)

Principle of Prevention:

The principle of prevention is the application of appropriate measures to give the certainty that an activity causes environmental damage. Like this Andaluz mentions that Where there is certainty that an activity may cause environmental damage, measures should be taken to prevent, monitor and prevent environmental damage. .(Andaluz, 2004)

For Valls the principle of prevention, which imposes attention to the causes and sources of environmental problems in a priority and integrated way trying to prevent the negative effects that can occur on the environment. (Valls, 2016)

According to Towers: Both the frequent impossibility of achieving the repair of environmental damage once produced and the high costs that this implies in cases where it is feasible impose on environmental law a special effort for prevention, to avoid the production of damage (making valid the saying prevention is better than cure). . (Torres, 2018)

`````````

For López: the principle of prevention requires intervening at the source before pollution or an environmental problem is generated, because it is considered that the activity to be carried out is polluting nature. (Lopez, 2019)

For Garcia: Prevention implies carrying out a series of actions aimed at addressing early factors that have been identified by a subject as relevant to achieve a specific objective in the future. In environmental law, preventive action is considered a central principle, guide of action towards the avoidance of environmental damage and hermeneutic foundation of legislative, executive and judicial work. (García, 2020)

According to Protection The principle operates in situations in which there is full knowledge of the possibility of generating environmental damage by carrying out a project, work or activity. Thus, competent authorities should take measures to prevent the occurrence of the risk or damage or to mitigate or reduce its impact. .(Amparo, 2022)

Precautionary Principle:

For Cafferatta: the principle applies when there is a danger of serious or irreversible damage, the absence of information or scientific certainty should not be used as a reason to postpone the adoption of cost-effective measures to prevent environmental degradation. .(Cafferatta, 2004)

For Rodriguez & Vargas: The precautionary principle involves several dimensions, since, in addition to the legal level, it is necessary to address, within its understanding and application, edges related to scientific considerations and the design of public policies. This is how to (Rodríguez & Vargas, 2017)Grijalbo The precautionary measure requires taking measures to reduce the possibility of serious environmental damage, even when the precise possibility of it occurring is not known. (Grijalbo, 2017)

For Wieland: The principle of prevention refers to environmental management has as priority objectives to prevent, monitor and avoid environmental degradation. Prevention is the pillar of environmental law insofar as the protected legal right is finite and its repair does not necessarily return it to the initial situation. (Wieland, 2017)

For Torres: This principle constitutes a further reinforcement of the principle of prevention. It determines how to deal with the assumptions of uncertainty regarding the production of damage to the environment, with the aim of avoiding risky options. (Torres, 2018)

For his part, Sánchez mentions that the precautionary principle is the basis or the essential pillar of the existence of the institution of precaution, which is the attitude or measure to protect or care for the environment, based on the precautionary through norms, laws, rules or legal principles of acceptance not only national, but also of international acceptance, to prevent, protect or prevent the environment, which is constituted by the physical environment. . (Sánchez, 2018)

For Amaya the precautionary principle is evidenced when there is the possibility of serious or irreversible damage to the lives, property and rights of people, institutions and ecosystems as a result of the materialization of disaster risk, authorities and individuals will apply the precautionary principle by virtue of which the lack of absolute scientific certainty will not be an obstacle to adopt measures aimed at preventing, mitigate the risk situation. .(Amaya, 2020)

Principle of Prevention

Precautionary Principle

Uncertainty regarding causing environmental damage

Effectiveness of environmental damage

There are actions that will produce environmental damage, but it is about that damage being as little as possible.

Precautionary Principle

Uncertainty regarding causing environmental damage

There are actions that will produce environmental damage, but it is about that damage being as little as possible.

Table 2: Comparative Table Doctrine

Measures must be implemented to prevent	Measures necessary to prevent the risk from
damage	occurring
Interconnected principles	

Source: Jessica Santander 2022

Table 2 shows the doctrinal differences of the principles of prevention and precaution thus, the first has the main characteristic of the certainty of causing harm, and it is about minimizing this affectation with the implementation of established prevention measures; the second has the main characteristic of the uncertainty of causing damage to nature, and therefore any experimental and risky action with the environment is avoided and measures are taken to avoid an affectation.

Continuing with the analysis in relation to the Constitution of the Republic of Ecuador if the two environmental principles are established in article 396 and are detailed as follows:

With regard to the principle of prevention, it considers that the State will adopt the appropriate policies and measures to avoid negative environmental impacts, when there is CERTAINTY of damage. , that is, when there is certainty of producing environmental damage, appropriate measures or instruments must be taken to prevent that damage, an example may be the establishment of environmental management plans. (Ecuador. Asamblea Nacional Contituyente., 2008)

Regarding the precautionary principle, it considers that, in case of doubt about the environmental impact of any action or omission, even if there is no scientific evidence of the damage, the state will adopt effective and timely protective measures. , that is, there is no certainty that an activity will cause damage to nature, but I have reasonable doubt that an action can cause damage and that is why it is necessary to take the necessary measures so that this risk does not occur, an example may be prohibiting polluting activity or limiting the activity as much as possible. (Ecuador. Asamblea Nacional Contituyente., 2008)

Principle of Prevention

Certainty of environmental damage

Doubt about environmental impact

The State shall adopt appropriate policies and measures to avoid negative environmental impacts.

Even if there is no scientific evidence of harm, the state will adopt effective and timely protective measures.

Table 3: Comparative Table Constitution of the Republic of Ecuador

Source: Jessica Santander 2022

Table 3 shows the differences in the environmental principles embodied in the Constitution of the Republic of Ecuador that are consistent with the doctrine, so in the principle of prevention there is the certainty of causing environmental damage and in the precautionary principle there is doubt about the environmental impact that will be had when carrying out a certain activity.

Finally, the analysis of the environmental principles of prevention and precaution by the Constitutional Court of Ecuador in an emblematic case, called "Los Cedros Case", is presented below. Case No. 1149-19-JP/20, Review of guarantees, Constitutional Court of Ecuador

Subject: The Constitutional Court reviews the sentence of second instance issued by the Provincial Court of Justice of Imbabura within the protection action filed by the GAD of Santa Ana de Cotacachi in favor of the Los Cedros Protective Forest, in which the rights of nature, the right to a healthy environment, were alleged to have been violated, the right to water and environmental consultation; because mining activities were taking place. The Constitutional Court confirms the decision adopted, accepts the action proposed by the GAD of Cotacachi and develops binding jurisprudence on this issue. . (Corte Constitucional del Ecuador, 2021)

In the precautionary principle, the Constitutional Court of Ecuador determines: The essential idea of the precautionary principle is that, even in the absence of sufficient scientific evidence, it is

better not to assume certain risks when these could lead to serious damage that may even be irreversible.

The Constitutional Court of Ecuador develops the elements of the precautionary principle which are:

- 1. The potential risk of serious and irreversible damage to the rights of nature, the right to water, a healthy environment or health. In order to apply the precautionary principle, it is not sufficient that there is simply a risk, since it is necessary that this risk relate to serious and irreversible damage. Article 73 illustrates this situation well when referring to the extinction of species, destruction of ecosystems and permanent alteration of natural cycles, since all of them are such serious and irreversible damages that the Constitution has included them in the section on rights of nature, considering them a violation of them. (Corte Constitucional del Ecuador, 2021)
- 2. Scientific uncertainty about these negative consequences, either because they are still the subject of scientific debate, due to ignorance, or because of the difficulty of determining such consequences by virtue of the high complexity or numerous variables involved. This is the fundamental characteristic of the precautionary principle, and what differentiates it from the principle of prevention. Scientific uncertainty for the purposes of the precautionary principle consists of: the lack of scientific certainty, which refers to relatively clear or possible effects of an activity or product, but without adequate evidence to assign probabilities. (Corte Constitucional del Ecuador, 2021)
- 3. Adoption of timely and effective protective measures by the State. As there is a risk of serious and irreversible damage and precisely because of the uncertainty of scientific knowledge in this regard, it is necessary not to assume the risk and that the State in the appropriate time and effectively take certain measures to avoid these possible negative effects. That is, when there is no scientific certainty about the impact or damage that any action or omission implies for nature, the environment or human health, the State must adopt these effective and timely measures aimed at avoiding, reducing, mitigating or ceasing such affectation. . (Corte Constitucional del Ecuador, 2021)

Although it is true that the mining activity included the causing of environmental damage, in the present case, the precautionary principle is applied and not the principle of prevention, because it is based on the fact that there were species at the site of the mining operation of which little information was available in this regard and it was impossible to determine what environmental damage the mining activity could cause in the Los Cedros Protective Forest sector.

One of the arguments that justified this decision was that, in the case, the precautionary principle should be applied, in consideration of the possible effects on the right to water and that in the concessioned areas there is a cloud forest, specifically, the Los Cedros protected forest. In this argument, it was established that the determining requirement to apply the precautionary principle, scientific uncertainty, is verified by the lack of studies that establish the impact that mining activity could cause in the Los Cedros protected forest. . (Corte Constitucional del Ecuador, 2021)

Table 4: Comparative Table of the Constitutional Court of Ecuador

Principle of Prevention	Precautionary Principle
Scientific certainty of environmental damage	Scientific uncertainty of environmental damage

Source: Jessica Santander 2022

Table 4 shows The differences between the principle of prevention and that of precaution, then, lie in the scientific certainty and scientific uncertainty of environmental damage, respectively: the existence of the precautionary principle supposes an extension of the radius of protection given by the principle of prevention when scientific knowledge does not allow to assert with certainty that a certain activity would produce effects on nature or human health. (Corte Constitucional del Ecuador, 2021)

DISCUSSION

From the doctrinal point of view, environmental principles constitute the backbone of a legal system, as for the principle of prevention it will be applied to a specific case when it is certain that a certain activity will cause damage to the environment and there is the impossibility of repairing what was caused, but no additional guidelines are established to apply said principle; As for the precautionary principle that is applicable when there is uncertainty that an activity causes possible damage to the environment, and then it is avoided to carry out risky actions or, failing that, to prohibit such actions, always with the justification of indications of reasonableness. From the doctrinal analysis it follows that there is no broad development how to effectively apply the two environmental principles, the only thing that can be understood is the definition of each of them.

From the normative point of view, specifically the Constitution of the Republic of Ecuador as the supreme norm contemplates the two environmental principles in article 396; Thus, the principle of prevention establishes that it will be applied when there is certainty of causing environmental damage and necessary measures must be adopted to avoid that; The precautionary principle refers to the fact that when there is no scientific evidence of causing environmental damage, protective measures will be taken. From the normative analysis it is clear that there is no broad development on the environmental principles that are presented and how they would be applied in a specific case. From the point of view of the Constitutional Court of Ecuador in an emblematic case, called "Los Cedros Case", it follows that the precautionary principle that there is no scientific evidence of causing damage should therefore not assume environmental risks, because somehow they could become irreversible, determining certain elements that should be taken into account for a specific analysis, Thus: a) to apply the principle it is necessary that there is a risk that is considered irreversible, b) there is a lack of scientific certainty, c) the risk should not be assumed and in some way it is the State that avoids possible damage that causes damage to the environment; In relation to the precautionary principle that will be applied when there is certainty of causing environmental damage, in the casuistry presented in the Los Cedros Case, the Constitutional Court of Ecuador establishes a parameter that goes beyond doctrine and regulations because it bases its judgment that the precautionary principle must be applied because the activity that is intended to be carried out would cause environmental damage and in the mining area there was A lack of knowledge of the natural species and animals that lived and developed therefore the precautionary principle should be applied.

To finalize the application of the environmental principles regarding the principle of prevention and precautionary principle, the casuistry and all the components that are presented will always be analyzed, because it is necessary to carry out a complete analysis and thus apply what corresponds.

CONCLUSIONS

- Environmental principles allow nature to be protected from the damages that an activity may generate, so its applicability requires casuistic analysis.
- The results in the doctrinal and normative foundation include the definition of environmental principles themselves that have gaps in understanding and applicability.
- Specific parameters should be established for the application of environmental principles in future situations where their diligence merits.

REFERENCES

- [1] Amaya, A. (2020). Recognition of nature and its components as subjects of law. Bogotá: Universidad Externado de Colombia.
- [2] Amparo, G. (2022). Fundamentals of Colombian Environmental Law. Bogotá: Friedrich-Ebert-Stiftung.
- [3] Andaluz, C. (2004). Environmental Law Manual . Lima : Proterra.
- [4] Betancor, A. (2014). Environmental Law . Madrid: La Ley.
- [5] Cafferatta, N. (2004). Introduction to Environmental Law. Mexico City: National Institute of Ecology.
- [6] Constitutional Court of Ecuador. (November 10, 2021). Constitutional Court of Ecuador. Retrieved from Ecuadorian Constitutional Court: https://www.corteconstitucional.gob.ec/

- [7] Ecuador. Constituent National Assembly. (2008). Constitution of the Republic. Official Register N.445. Retrieved from https://www.oas.org/juridico/pdfs/mesicic4_ecu_const.pdf
- [8] Garcia, M. d. (2020). Environmental Law . Bogotá: Universidad Externado de Colombia.
- [9] Grijalbo, L. (2017). Prevention of environmental risks. Logroño: Training Tutor.
- [10] Lopez, F. (2019). Manual of environmental and urban law. Madrid: Presses of the University of Zaragoza.
- [11] Rodríguez, G., & Vargas, I. (2017). Precautionary principle challenges and discussion scenarios. Bogotá: Temis.
- [12] Sanchez, D. (2018). Introductory Study of National and International Environmental Law. Quito: Corporation of Studies and Publications.
- [13] Torres, A. (2018). Environmental Law . Madrid: Tecnos.
- [14] Valls, M. (2016). Environmental Law . Buenos Aires : Beledo Perrot.
- [15] Wieland, P. (2017). Introduction to Environmental Law. Lima: Background.