# PENDING INTERDISCIPLINARY AGENDA OF CONTEMPORARY ENVIRONMENTAL LAW

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#### **Abstract**

The global environmental scenario is in a very worrying state. This is a matter of urgent, profound, and unpostponable attention. Therefore, it obliges the States to carry out urgent policies, which represent the adoption of great and essential challenges. The challenges in environmental matters should not be assumed only from the world of law. This is because environmental issues and problems do not begin and are not agitated in the validity of the Law.

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Consequently, an interdisciplinary analysis is necessary. In the present work, the authors assume this commitment. Thus, they raise and develop the corresponding challenges that must be considered as a pending agenda.

**Keywords:** Environment, Interdisciplinarity, Environmental challenges, Pending environmental agenda

#### 1. Introduction

The protection of the environment is a point of utmost importance, given the worsening of threats and new threats, as recorded. While it is true that we acknowledge the receipt of new technologies, upcoming technologies, and smarter technologies, it is worrying that the great progress of technologies has not contributed decisively to counteract in a significant way the serious environmental situation of the world. In this issue, we unravel and develop, through its various aspects, the challenges that must be assumed to ensure a healthy environment, as well as the realization of the corresponding fundamental rights.

## 2. By Way of Situational Diagnosis

There is the end of certainty, the existence of a strong relationship between science and law, the creation of disruptive technologies, the influence of social networks, the emergence of new subjects of law, the emergence of health, environmental and economic crises, and the challenges of the post-agreement environmental issues. (Soto Rincón, 2021).

The challenge of achieving a fully inclusive and environmentally sustainable development model obliges us to take an in-depth look at development styles in the light of the reality of the 21st century. In this new scenario, growing inequality and increasing pressures on the environment and natural resources coexist with the emergence of new economic poles and powers, the explosion of new technologies, rapid urbanization and the greater importance of regional integration spaces, among other signs. In the face of this scenario and with a view to shaping a better future for all, policies and actions based on the holistic vision implied by sustainable development are needed. (Bárcena, 2015, p.7).

#### 2.1. Consumerism

It seriously threatens the environment, since it imposes a way of behavior aimed at consuming products that are harmful to the environment. However, it is also detrimental to the economy of consumers, since, basically, it is also a matter of systematic, uncontrollable and unnecessary purchases.

#### 2.2. Protection of new subjects of law.

This, in the understanding that the legal and mainly constitutional recognition of new subjects of Law is not enough (mother earth, nature, among others). Therefore, we aim at the materialization of the effective protection and safeguarding of new subjects of law. (Soto Rincón, 2021).

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#### 2.3. Transfer of environmental matters to the courts.

We cannot lose sight of the fact that not infrequently, the environmental administrative intervention, either through prevention or sanction, is not enough to achieve the forcefulness, efficiency and efficacy that environmental care requires. In this sense, it is urgent that the respective cases be brought to the attention of the judiciary. (Soto Rincón, 2021).

## 2.4. Principle of greater celerity

However, the observance of a correct environmental protection policy also involves considering the principle of celerity as scarce. Since it is a question of taking actions much more than speedy, due to the very important need that this entails, the principle of greater speed must be recognized in administrative and judicial courts.

## 2.5. Legal innovations

# 2.5.1. Legal design

Legal design is a human-centered approach that serves to facilitate legal problem-solving and promote innovation in this sector. It combines the legal expertise of the lawyer with the mindset and methodologies of the designer and the technological potential to create legal systems, services, processes, education, and environments that are more useful, usable, understandable and attractive to all. It could be argued that legal design is an approach that seeks to understand where the crucial flaws exist in the system at the moment, to help make the creative leap, defining what a better system could be. (Benedet, 2020). For digital transformation and environment, we present easy-filling fields to avoid unnecessary printing, physical signatures, waste of time, paper and resources. We create 100% digital documents with all the legal validity you need to make them enforceable. (Acosta, 2021);

### 2.5.2. Green nudge

The terms nudge and strategic use are the most common, although the latter may also have other definitions, although when applied to environmental matters in procurement it means using public contracts to pursue environmentally desirable objectives, which makes it a genuine promotional activity or nudge. Transversality, however, is a concept, obviously directly related, but with a different meaning. Rather, it refers to the fact that the environmental issue cannot be limited to the mere object of the contract or to the fulfillment of certain requirements by the bidders, but, on the contrary, it must be present throughout the entire process and all the steps of the contracting process. (Terrón Santos, 2019).

#### 2.6. New environmental principles according to Osses Garrido, 2019

The contemporary maelstrom, typical of the vicissitudes of new technologies and scientific and technological development, also brings the corresponding aggiornamento in the various disciplines and sciences of human knowledge. In addition, the current legal system, not only regional, is characterized by registering the Political Constitution as a new order of values, at the apex of the legal system, that is, the Constitutional State of Law. In addition, it should

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also be considered that the Law, in general, is going through a stage of greater reflection and compromise, since we speak of principles, as opposed to previous times when rights were commonplace. On the other hand, it is no secret that the environment is in an increasingly worrying situation. Therefore, the commitment and challenge of environmental justice become equally acute as a spectator.

The fact is that contemporary environmental law is not sufficient or sufficient to meet the new demands of the current situation. Therefore, the challenge of achieving a fully inclusive and environmentally sustainable development model obliges us to examine in depth the styles of development in light of the reality of the 21st century. In this new scenario, growing inequality and increasing pressures on the environment and natural resources coexist with the emergence of new economic poles and powers, the explosion of new technologies, rapid urbanization, and the greater importance of regional integration spaces, among other signs. In the face of this scenario and with a view to shaping a better future for all, policies and actions based on the holistic vision implied by sustainable development are needed. (DE Miguel Y Tavares, 2015, p. 7).

Therefore, we are of the opinion that it is imperative, very urgent, and unavoidable; the recognition of the principles, which we propose below.

#### 2.7. Inclusion of additional rights

The constitutional development of environmental protection has meant the consecration of other environmental rights, among which the rights of access to information, participation, and justice in environmental matters stand out. In this matter, the Escazú Agreement provides certain guidelines and standards that must be present in the constitutional debate. (Osses Garrido, 2019).

#### 3. New Principles

In the first place, we have the principle that we have called the environment as a higher purpose. This is characterized by prevailing over penalties, and determination of responsibilities, whether of public or private officials. Thus, although it is true that what is indicated in the second term is important, it is even more important to pay attention to what is specifically related to environmental preservation and care in the specific case.

Also, there is the preventive principle. This principle is characterized by advanced intuitiveness, that is to say, to anticipate what could become complicated or even irreparable in the environmental venue.

Next, the precautionary principle must be considered. This is based on granting environmental protection in the face of eventual scenarios which have not yet been scientifically proven to generate environmental damage. The rationale is that when in doubt it is better to take safeguard actions, as a sort of presumption juris tantum, in favor of the protection of the environment.

Next, we bring up the principle of sustainable development. In the present case, it must be understood that cultural progress in general cannot mean environmental impairment or affectation. Therefore, development should be understood jointly.

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Then, the principle of intergenerational equity. This principle establishes the obligation to take as a premise that the decisions taken must be focused on safeguarding the future. This is because the right to a healthy environment does not only belong to the current generation.

Likewise, it is necessary to take into consideration the principle of environmental justice. And what must be considered in this respect, is at the same time, the principle of specialization. This is inasmuch as in principle the creation and sufficient establishment of environmental courts are indispensable. But, furthermore, to consider that otherwise, that is, to have courts specialized in different matters also hear environmental law conflicts is not only not technical, but also violates the fundamental rights of the parties to have a specialized judiciary and to a natural judge.

In addition, the principle of progressivity holds that State policies must be oriented in a systematic manner, in a continuous, sustained, and gradual advance, of protection and safeguarding of the environment, until the maximum levels are reached. To this end, interinstitutional political will is essential.

Finally, the principle of non-regression, through which a minimum and non-negotiable level of environmental protection and safeguarding is recognized. But, at the same time, it maintains that there can be no regression in any way in the recognition of environmental regulations. This can also be understood in the light of the principle of prohibition of reform for the worse. It is not only a matter of ensuring environmental protection, but also of guaranteeing the legal certainty of not returning to a lower or inferior level of protection than that in force.

## 4. Essential Interdisciplinary Scenario

#### 4.1. Artificial intelligence

Artificial intelligence is an effective technological system for the application of sustainability in companies and for the fulfillment of some of the sustainable development objectives. Secondly, the tool with the greatest potential for the application of this artificial intelligence is data science, since it does not accumulate a large amount of data for analysis, but with little data, it is possible to make predictions and solutions to sustainability problems. Some companies such as IBM, Accenture, Ecopetrol, Coca Cola, which are in the market already make use of some artificial intelligence tools to contribute to sustainability and this has generated economic, political, and social benefits for the organizations that apply it. It can be said that the influence of the expansion of artificial intelligence in companies for the fulfillment of sustainability is of high impact since, according to the theories reviewed, the application of machine learning and data analysis tools allow sustainability to become more tangible in organizations. Likewise, this application of AI allows not only to obtain social and environmental benefits but also economic benefits for the company, and this is evidenced in the analysis of companies that have already applied AI in their processes. (Castañeda Murillo, 2020, p. 35).

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#### 5. Codification

It is also essential to consider the approval of an International Environmental Code. This, with the objective of strengthening the protection and safeguarding of the environment. We are talking about a specialized legal system, which does not only register constitutional recognition.

#### 6. Governance

This point becomes a first-order budget because in order to have first-hand knowledge of the place of the facts, it is necessary to consult with the population living in the affected area or the area to be affected. This will provide valuable information to understand and address their specific environmental problems.

## 7. Better right to a healthy environment

Although it is true that there is a well-known constitutional recognition of the fundamental right to a healthy environment, we consider that it is also essential to recognize the constitutional recognition of the best right to a healthy environment. This, inasmuch as the analysis and public policies must be approached from the primacy of said right, above the other fundamental rights.

## 8. Training and awareness

That is, the implementation of State policies aimed at including in the different levels of education a subject on the importance and transcendence of environmental law.

#### 9. Environmental displaced persons

The displacement of people due to climate change and the subsequent threat or violation of the human rights of the displaced population imposes very important challenges for environmental law and for jurists. For environmental law, there is a need to transform itself and advance in the forging of complex legal forms that combine different levels, scales, and institutes. It means then to resignify the current legal forms based on individual rights and to build legal forms that contain the rights and aspirations of all (at the national-international, generational-intergenerational, human species-interspecies level), where life is the a priori of protection. For jurists, the challenge means proposing legal institutes that respond to the new realities, from ethical stances towards life, based on a change of values that promote solidarity with all forms of life, cooperation and interdependence. It also means promoting spaces for inter- and transdisciplinary encounters to seek solutions to the problem of the environmentally displaced. The challenge for policy and government agencies is to generate the necessary policies and mechanisms so that people at risk or in a situation of environmental displacement due to climate change are attended to in the first instance by government agencies and that they have sufficient legal mechanisms for access to environmental justice, such as access to information, participation in decisions and access to administrative or judicial instances. (Valencia Hernández, 2015).

#### 10. Environmental justice

In order to achieve environmental justice, a political system capable of offering full and effective democratic participation must be guaranteed, not only to ensure the benefits and rights of the parties but also to decide on the processes, whose costs and benefits will then be experienced and distributed, this means that within the concept of environmental justice lies the distributive dimension of the incentives and disadvantages, which brings the interaction in environmental issues, between different individuals and groups. The dialogue between different disciplines and actors that work hard to generate this type of change, should focus or have as a challenge to define, in the different situations that arise and are related to environmental injustices, what should be understood by equity and justice, not only for the consequences that fall on those affected, but also for those who directly or indirectly use the natural resources, besides pondering the mechanisms that the countries or scenarios in which these cases occur, have to stimulate economic, political and citizen participation. In other words, to study which is the best way towards a fair outcome, which preserves and protects the fundamental rights of people, and the environment in the long term and at the same time encourages sustainable development and legal, economic, and political innovation, which is essential to address these new challenges. (Valencia Hernández, 2015).

## 11. Interdisciplinarity

In this item, we consider that environmental issues should not be seen only from the world of Law. This is because it does not originate or culminate in juridical quarries. Therefore, it deserves to be seen also from disciplines and sciences other than Law, such as sociology, sociology, economics, and philosophy, among others.

#### 12. Interinstitutionality

Likewise, the state and private vision is transcendental. But, it must be assumed as dialoguing, cooperating, between them. This will result in the best possible way for the expected effective effects.

## 13. Reversing climate change

It is necessary to establish: i) An International Court with jurisdiction also in climate change, ii) The conversion of Public International Law into International Environmental Law, iii) The introduction of institutions that have not yet been considered, or that imply the consecration of new and better Universal Environmental principles. (PIGRETTI, 2013, pp. 128-131).

#### 14. Hazardous polluting waste

In this regard, we bring up the case of damages caused by the export of hazardous waste from the United States to Mexico and for the purpose of holding the exporting company liable, it is feasible to apply the Comprehensive Environmental Response Compensation and

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Liability Act of 1980 (CERCLA) retroactively and objectively, since it was the generator of the hazardous substances and because the conditions under which the export took place allowed the realization of potential damage that directly affects the territory, the atmosphere and the consumers of the exporting State. (PIGRETTI, 2013, p. 132).

#### 15. Forest loss in the Amazon

It is important that the State maintains the strategy of ensuring the protection of large areas of forests, mainly in indigenous territories under the mechanism of Conditional Direct Transfers (CDT), a payment system for indigenous peoples for their commitment to the conservation of their forests. But he also believes that there is a need to move towards more sustainable agriculture. Planning has to be aimed at this. We cannot continue to lose forests instead of having more productive agriculture in the same areas that are already dedicated to this activity. There are two problems of deforestation in Peru: illegal logging and the change of land use to convert forests into farmland, a conversion that is often also surrounded by illegality. (SIERRA PRAELI, 2021).

#### 16. Artisanal mining

The proposal to formalize artisanal mining has been delayed for at least eight years. On December 29, two days before the end of 2020, the Ministry of Energy and Mines (Minem) issued a Supreme Decree that again modified the deadlines for submitting the Environmental Management Instrument for the Formalization of Small Mining and Artisanal Mining Activities (IGAFOM), an indispensable requirement to advance in the formalization process. According to the Minem decree, the deadline for the presentation of the IGAFOM was extended in some cases until April 30, 2021 and in others until July 31, 2021. This is an environmental management instrument, therefore, it must have the opinion of the Ministry of the Environment. When these deadlines are met, those who approved this extension will no longer be in place. We will have new authorities. And so, possibly, it will be extended to infinity", says Ipenza about this process initiated in 2012. Ipenza adds that we should not reach the bicentenary with informal mining in perpetuity. (SIERRA PRAELI, 2021).

#### 17. Urgent ratification of the Escazú Agreement

Six environmentalists were murdered in 2020 in Peru. The last of them was Jorge Muñoz Saavedra, who had disappeared on Saturday, December 19 after leaving home to go to the forest when he heard a chainsaw. Three days later, on December 22, his body was found in a trail in the Batán Grande sector, in Lambayeque. (Sierra Praeli, 2021). Muñoz Saavedra had received threats from mafias dedicated to the trafficking of forest species and the depredation of archeological heritage. In the previous months, three indigenous leaders, a park ranger, and an environmental defender had been murdered. Despite this situation, Peru did not ratify the Escazú Agreement, a regional treaty that promotes access to information, public participation, and environmental justice in Latin America and the Caribbean. The document includes an article dedicated to human rights defenders in environmental matters. The Congress of La Republica shelved the agreement, even though Peru had been one of the first countries to sign it in September 2018. The Escazú Agreement must be insisted upon. It needs to be debated

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again in the new Congress. The Congress that is installed this year should address the Escazú Agreement and ratify it so that it becomes part of our internal policy. This is an important issue that should be addressed by the political parties in the electoral debate. Peru was one of the countries that promoted the Escazu Agreement to be binding. What remains is to continue raising awareness about the importance of the agreement. The greatest rejection was on the issue of environmental defenders and that is why we must disseminate more information. (Sierra Praeli, 2021).

#### 18. Marine conservation

By 2020, Peru should achieve the protection of 10% of its marine area according to the commitment adopted by the Convention on Biological Diversity, also known as the Aichi Targets. This commitment also requires ensuring the representativeness of all Peruvian marine ecosystems, taking into account the proposal to create marine areas of ecological or biological importance. However, this is probably one of the most complex challenges for Peru. The country has so far not exceeded 0.5% protection of its ocean, while the creation of new marine protected areas has been waiting for several years. The proposal for the Mar Tropical de Grau National Reserve and the Dorsal de Nasca National Reserve is the most advanced, but so far they have not materialized. A Ministerial Resolution issued by the Ministry of Environment on December 29, 2020, extended by two months the term of the multi-sectoral working group responsible for compiling, analyzing, and systematizing the information for the establishment of the Nasca Ridge National Reserve. We have a debt with coastal marine protection, both the Grau Sea and the Nasca Ridge. What happened with the creation of these marine areas? In the conservation of marine ecosystems, we are doing very badly. We have not complied with the Aichi Targets and research for the conservation of coastal marine areas is still a priority.

This topic goes beyond the conservation and management of Peruvian marine resources. We must start thinking about the Ministry of Fisheries, which we lost in 2004. Why does agriculture have a ministry but fisheries does not? Marine management cannot continue to be a sub-chapter of the Ministry of Production, there is an absence of fisheries policy. What we have de facto is to produce fish for export. A holistic vision of the sector is required. The fight against illegal activities is also a pending issue for 2021. There is a huge illegal fishing traffic in the country. (SIERRA PRAELI, 2021).

#### 19. Concluding Remarks

The very urgent legal recognition of the environmental principles mentioned (preferably in the corresponding Code, since in some cases its jurisprudential recognition is not enough), also implies objective, concrete, and timely actions, both at administrative and judicial levels. This, inasmuch as it would be of no value the materialization of the same when in practice they simply do not turn out to be applied. Consequently, we consider that more than a legislative modification or the aggravation of penalties for crimes against the environment, it is necessary to recognize new environmental legal principles, such as, for example, those developed in this paper. It also merits the training and awareness of the actors in the administration of environmental justice.

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