



## THE GLOBAL ENVIRONMENTAL CRISIS AND ENVIRONMENTAL PRINCIPLES: A CRITICISM REGARDING PRINCIPALISM AND ITS APPLICATION IN RELATION TO CASUISTRY

*A crise ambiental mundial e os princípios ambientais: uma crítica quanto ao principialismo e a sua aplicação junto à casuística*

**Gerson Neves Pinto**

UNISINOS

ORCID: <https://orcid.org/0000-0002-4595-708X>

E-mail: [gerson.p@terra.com.br](mailto:gerson.p@terra.com.br)

**Debora Cristiane Korndorfer**

ORCID: <https://orcid.org/0000-0001-5723-2978>

E-mail: [dckorndorfer@gmail.com](mailto:dckorndorfer@gmail.com)

Trabalho enviado em 6 de outubro de 2023 e aceito em 26 de fevereiro de 2024



This work is licensed under a Creative Commons Attribution 4.0 International License.



Rev. Quaestio Iuris., Rio de Janeiro, Vol. 17, N.03, 2024, p. 151-175

Gerson Neves Pinto e Debora Cristiane Korndorfer

DOI: [10.12957/rqi.2024.79432](https://doi.org/10.12957/rqi.2024.79432)

## ABSTRACT

This study seeks to delve deeply into pivotal environmental principles, shedding light on their critical role in preserving an ecologically balanced and health-promoting environment for both current and future generations. The investigation unveils recurring clusters of moral dilemmas, underscoring the paramount significance of these principles in resolving specific ethical quandaries. At its essence, the research tackles the central problem of navigating conflicts between principles in the absence of a shared reference point. In response, the argument posits that judgments in virtue ethics are not universal or prescriptive but rather nuanced and ethical, guiding decision-making through a meticulous analysis of contextual intricacies surrounding each action. The chosen approach for this research is the deductive method, meticulously crafted through a comprehensive review of relevant literature. This review involves an analysis of publications extracted from scientific articles and books. Consequently, the study's contribution lies in the strategic application of principlism, its valuation, and the integration of the concept of the just mean within the realm of bioethics. This relevance is particularly underscored in the face of escalating global warming and the consequential environmental degradation on a global scale.

**Keywords** - Environmental Principles; Principlism; Casuistry; Golden Mean; Bioethics.

## RESUMO

Esta investigação tem como objetivo realizar uma análise aprofundada de principais princípios ambientais, esclarecendo sua importância na preservação de um ambiente ecologicamente equilibrado e propício à saúde para as gerações presentes e futuras. Esta pesquisa revela agrupamentos recorrentes de dilemas morais, destacando o papel preeminente dos princípios na resolução de questões éticas específicas. Em seu cerne, o estudo aborda o problema central de resolver conflitos entre princípios na ausência de uma base de referência comum. Em resposta, será argumentado que os julgamentos na ética das virtudes não são universais nem prescritivos, mas sim éticos e singulares, promovendo a tomada de decisões por meio de uma análise minuciosa das nuances contextuais que envolvem cada ação. Optou-se pelo método dedutivo como abordagem para esta pesquisa, o qual foi elaborado a partir de uma revisão bibliográfica descritiva. Tal revisão foi conduzida por meio da análise de publicações, as quais foram extraídas de artigos científicos e obras doutrinárias. Desta forma, a contribuição do estudo será a utilização do principlismo, sua valoração e a incorporação do conceito do meio justo no âmbito da bioética, sendo que essa relevância é particularmente destacada no contexto do aumento do aquecimento global e dos danos ambientais resultantes em escala global.

**Palavras-Chave** - Princípios Ambientais; Principlismo; Casuística; Justo Meio; Bioética.



## INTRODUCTION

Today, no one can deny that the environmental situation and climate change in which we find ourselves is worrying and extremely urgent, being one of the main challenges for us today. The complex web of consequences brought on by global warming has been thoroughly laid out in a plethora of carefully edited publications and authoritative declarations. This complicated scenario of effects covers a wide range of crucial areas, including the geopolitical environment, the dangerous factory of public health, the complex working of economies, and the fundamental pillars of societal systems. Following the loss of biodiversity and changes in the climate, these interconnected problems have become stark realities and have been emphasized on both the national and international levels.

In this sense, in terms of geopolitics, climate change, rising sea levels, and resource depletion have acted as drivers of migration, strained international relations, and resource-related conflicts. The delicate balance between countries, ecosystems, and economies is under jeopardy, demanding a recalibrating of diplomatic strategies and international partnerships.

Moreover, as it is understood that the societies in which we live depend on the environment to survive and thrive, the protection of the biosphere has become a top political priority. In addition, this protection is closely related to other national characteristics, such as security and reducing inequality in local and global communities that are affected by catastrophes and climate change on a daily basis. Equally, the fact that not all communities suffer the same impact from natural disasters and climate change outcomes should also be emphasized. The repercussions of these disasters, such as floods, droughts and sea level rise, are felt disproportionately in the most vulnerable communities around the world, usually the poorest and most marginalized. Therefore, the elimination of social injustice and the increase of climate justice are directly linked to the guarantee of environmental protection.

Still, when faced with an extremely relevant issue, such as climate change, it is important to highlight the significant role of globalization in the development of society and the world economy. However, with the arrival of the Industrial Revolution, globalization played a decisive role in increasing climate change and the lack of climate justice for vulnerable communities and regions around the world. In this way, these communities daily suffer from constant and increasing of extreme events, as a consequence of the uncontrolled emission of greenhouse gases, which contributes significantly to global warming.

Globalization, on the one hand, as a process of interconnection between countries and regions, has brought with it technological advances, greater economic integration and access to resources on



a global scale. Similarly, these advances have promoted social and economic improvements for many countries, enabling the development of new industries and the growth of international trade between nations. However, on the other hand, the development model adopted during the Industrial Revolution and amplified by globalization had very serious negative environmental consequences, especially regarding climate change. Thus, in the context of climate change, climate injustice becomes evident, perpetuating disparities between industrialized countries, which have historically emitted large amounts of greenhouse gases, and the most vulnerable communities.

The discrepancy in adaptation and mitigation capacity therefore exacerbates the negative impacts of climate change on the most vulnerable populations, resulting in devastating consequences. Equally, climate injustice is compounded by the fact that the most vulnerable communities contribute less to greenhouse gas emissions yet are the hardest hit by greenhouse gases. Thus, it is the industrialized countries that have historically been responsible for the largest share of emissions. It is therefore crucial that there is a global effort to provide support and assistance to vulnerable communities, ensuring that they have access to resources and knowledge needed to address today's climate challenges.

Thus, the present study has as its main objective, at first, the analysis of some environmental principles that are of paramount relevance for the purposes of guaranteeing an ecologically balanced and healthy environment for our and future generations, and these will be analyzed under the bias of a fundamental right duly protected by the Brazilian Federal Constitution, but, above all, with regard to rights, manifestations and international declarations that have been consolidated over the years.

Therefore, as a result of the study of the principles that will be developed, which have as their fundamental objective the protection of the environment, the argumentation will be developed regarding the study of principlism in relation to the application of these to the advances of bioethics, which comes from speeches of the principles paradigm. Thus, it will be argued that there are frequent groupings of moral problems, according to which principle is considered as the most relevant to solve a given ethical problem.

Thus, as a central problem, a question of relevance to the study will be articulated, in the sense of how could conflicts between principles be resolved if there is no common framework as a basis? In response, it will be argued that the judgment of virtue ethics is not a universal judgment. On the contrary, ethical judgment is a singular judgment, which produces a decision in the examination of the circumstances of each of the actions.

Besides, the use of principlism and, in addition, the fair environment within the field of bioethics, occupies a prominent role because of the increasing of global warming and the

consequent global environmental damage. In essence, the combination of principlism and a just environment in the field of bioethics transcends theoretical discussion, growing into a practical and morally motivated strategy to address the urgent issues caused by global warming and its ecological consequences. This merger marks the beginning of a new era of ethical decision-making, where ethical concerns incorporate the larger environmental context in addition to individual actions, so symbolizing a communal commitment to protecting the planet for future generations.

Therefore, given the increasingly evident impacts of climate change on the well-being of individuals, it is essential to implement urgent and effective measures to combat this phenomenon. The present study aims precisely to present solutions and strategies throughout its evolution, aiming to address this complex challenge comprehensively and addressing different scales. Finally, it is crucial that the present study contributes to the advancement of knowledge in the scientific community.

## **1. THE ENVIRONMENTAL CRISIS IN THE CURRENT SCENARIO**

It is critical to emphasize early on in this project the fundamental value of looking at environmental legislation from the standpoint of constitutional protection. This method serves as the foundation for the study's all-encompassing development, illuminating a crucial synthesis of legal and ethical concerns that support the complex relationship between protecting the environment and the fundamental values of constitutional frameworks and the fundamental rules governing constitutional structures.

The understanding that giving environmental preservation the status of a fundamental right has significant ramifications for the development of legal discourse and cultural norms is at the heart of this investigation. This appreciation goes beyond merely making symbolic gestures; it denotes a conscious realization of the intrinsic importance and interdependence of a healthy environment and the very essence of human existence. In this sense, the recognition of environmental protection as a constitutional right is inscribed in Brazilian law, demonstrating the country's commitment to maintaining ecological integrity within its legal framework. This recognition is echoed throughout the world in international declarations that stress the importance of environmental rights as a fundamental component of a fair and sustainable world order. In essence, the study's overall framework is anchored by the consideration of environmental law in the context of constitutional protection. It clarifies the complex interactions between the legal and ethical spheres and emphasizes the crucial role that environmental protection plays in creating a just and ecologically conscious society, both locally in Brazil and globally.

The balanced environment plays a fundamental role in the existence of all beings, encompassing both living and non-living beings in their most comprehensive form. Moreover, it is essential to understand that there is no other viable possibility of existence of life without the presence of a balanced and healthy environment, not only for us, but also for future generations. The healthy environment provides the natural resources needed to sustain life in all its forms. Thus, natural ecosystems, such as forests and rivers, for example, provide food, water, clean air, habitat for species biodiversity and ecosystem services essential for the healthy quality of life, among many other processes that maintain the harmony of the planet and life. The balanced environment plays a crucial role in protecting against the negative impacts of human activities. In this way, ensuring the preservation and restoration of the balanced environment is a responsibility shared by all and should be promptly analyzed.

That said, it can be stated that human activity can be considered the cause of the increase in greenhouse gas concentrations on our planet. According to data presented by NASA (2022), the burning of fossil fuels such as coal and oil (which combines carbon with oxygen in the air) increased the concentration of carbon dioxide in the atmosphere (CO<sub>2</sub>). Thus, the result of this advance, regarding the emission of CO<sub>2</sub> into the atmosphere has increased significantly over the years, since this increase is directly intertwined with the process of production and industrialization of services and consumer goods, as well as with the uncontrolled advance of globalization.

Also, according to the World Energy Outlook 2020 report, the direct impacts of the COVID-19 pandemic crisis were also significant when talking about more vulnerable people and communities, as there was a significant advance in poverty levels in developing regions and communities, as well as making basic services such as the distribution of electricity inaccessible to more than 110 million people, resulting in the result that countless homes have returned to using traditional and inefficient fossil fuels for food lighting and cooking (INTERNATIONAL ENERGY AGENCY, 2022).

Thus, with increasing global warming and the consequent global environmental damage, this discussion has increasingly gained prominence in Brazil and in the world, and “[...] we need to face the abysmal social inequalities between nations and within nations and do so in a way that it does not compromise the future of humanity by irreversible and deleterious climate changes” (VEIGA, 2008, p. 10, own translation).

Therefore, when we talk about electricity and add the right to drinking water for human beings, we are dealing with fundamental rights and guarantees and basic conditions of a dignified life for human beings, which has been promptly restricted to the most vulnerable people and communities in Brazil and around the world, who are in risky places, affected by extreme weather events. Therefore, this study is urgent given the relevance of this topic today. In addition, environmental

degradations, day after day, have spread on the world stage, as humanity is heading for a scenario never evidenced before.

### 1.1. THE ENVIRONMENT EQUATED WITH A FUNDAMENTAL RIGHT

After making some general considerations regarding the current scenario evidenced regarding climate change, one can start to delimit and understand the fundamental guarantees present in the constitutional text and the consequent protection of the Environment to the status of a fundamental right.

According to the qualification of current environmental law and the numerous difficulties it has been facing over the years, as a result of climate change, for Sarlet and Fensterseifer (2020), the protection of the constitutional environment was preceded and fortified by ecological protection, in the sphere of International Law and in International Human Rights Law.

In addition, one of the biggest challenges that arises concerns the opening of this list of fundamental rights and guarantees in order to identify what are the weightings that will serve as a basis for the effective location of legal-fundamental positions, exactly as called by the Constituent Assembly, varying according to each case (SARLET, 2010). As an example, the environmental protection rules can be mentioned - art. 225 Brazilian Federal Constitution -, since it is a norm of fundamental content, which recognizes implicit rights and/or developed in accordance with the regime and the principles of our Fundamental Law (SARLET, 2010).

Likewise, the World Commission on Environment and Development, developed by the UN, was created with the ready objective of creating a universal declaration on environmental protection and sustainable development. Report, with strategies that were proposed to ensure sustainable development around the world (UNITED NATIONS, 2021).

Also noteworthy are the Rio Declaration on Environment and Development, the United Nations Framework Convention on Climate Change, both in 1992, and the Kyoto Protocol, in 1997 (SARLET; FENSTERSEIFER, 2020). Also, according to Milaré (2009), Agenda 21 was adopted for sustainable development purposes to be pursued and respected.

In Brazil, therefore, it can be understood that the right to a healthy environment is considered a fundamental right. Another relevant fact is that in 1988, the Brazilian Constitution began to include the right to a healthy environment as a constitutional right, making Brazil one of the first countries in the world to include this right in its national constitution, and such provision with the Federal Constitution states that every individual has the right to an ecologically balanced environment and

the government has the duty to preserve, defend and improve the environment for present and future generations.

Thus, faced with an evident fundamental right that is directly intertwined with the healthy quality of life of the human being, in its most essential form, this issue must be analyzed under the bias of some crucial principles for its effective protection.

## **2. FUNDAMENTAL ENVIRONMENTAL LAW: SOME PRINCIPLES THAT ARE BEING DEVELOPED AND STUDIED IN THE BRAZILIAN SCENARIO**

First, it should be noted that Bonavides (2014) states that the principles are, as values, the touchstone or criterion with which the most prominent constitutional contents of our form of state are obtained. After what was presented above, it is noteworthy that in the environmental field and with the evident delimitation of environmental law to the level of fundamental law, as presented above, it can be said that this has a right connection with the principle of responsibility, which is one of the primary principles for the proper promotion of the balanced environment for our and future generations.

Well then. The principle of liability is linked to the current ecological crisis, according to the inconsequent and irresponsible practices of humans, which lead to the current existential risk (SARLET; FENSTERSEIFER, 2017). Still, there is a need to impose responsibility, duties and obligations, with the ready objective of reducing the astonishing environmental destruction (SARLET; FENSTERSEIFER, 2017) that plagues us. Thus, any activity that is harmful to the environment, which may indicate the responsible agent, direct or indirect, must be subject to reparation for the ecological damage caused (TRENNEPOHL, 2019).

Furthermore, it is important to emphasize that in the present study, we will demonstrate that Lecaros clearly presents the transformation of the concept of liability regarding the current predominance of modern technique, highlighting the main currents within an ethical model (represented by authors such as Weber, Arendt, Levinas, Jonas, Apel) as well as its influence (particularly by Apel and Jonas) on bioethics. It is undoubtedly a relatively limited influence, insofar as, as confesses Lecaros (2013), one has the impression that its strategies are still quite abstract when it comes to providing bioethics with rules and principles for dealing with specific problems that world society is currently facing.

In this way, Lecaros will propose outlines for the development of a multifaceted theory for global bioethics, integrated by a principle, and this is the principle of liability as care for the vulnerable being. Likewise, it can be said that this principle gains a relevant role for the purposes



of combating current climate change and environmental justice in Brazil and worldwide. In this way, future generations are already being interpreted as being vulnerable (SARLET; FENSTERSEIFER, 2017).

Still, the principle of responsibility as care for the vulnerable being exposed above, is almost latent in communities and countries with a high level of poverty, with evident governance challenges, which present a limited access to basic health and hygiene services and resources, as is the case of about 4.2 million people who do not have drinking water and basic sanitation in their homes (UN, 2020).

In Brazil, therefore, the principle of liability is closely linked to the protection of the environment and the rights of vulnerable populations. However, despite the legal protections evidenced, Brazil still faces significant environmental challenges, such as deforestation, water pollution and climate change that are already being readily evidenced, especially in the Amazon rainforest, which significantly affects the most vulnerable populations, such as indigenous communities and low-income individuals.

Thus, it can be affirmed as vulnerable groups of human and non-human beings, who live under the constant threats of climate change, as well as who present livelihoods sensitive to climate change. Carvalho (2019) presents climate change increasing vulnerabilities in poor nations, with the financial consequences and frequency of natural disasters increasing rapidly in recent years. In turn, Junges (2001, p. 52, own translation) states that “The vulnerability of nature points to the vulnerability of the human being himself. If his vital matrix is being destroyed, it is the human being himself who has deteriorated”.

Thus, in the face of an environmental issue, which has its direct connection with the existence of the human being in society, in the words of Gwiazdon (2020), human rights violations have an impact on a person's basic needs, as well as on the growth, stability, security and governance of society. It results, therefore, in the rupture of the essential rights to the condition of life and its dignified existence, and environmental degradation contributes drastically to the advancement and future climatic consequences. Still, Gwiazdon (2020) recognizes that such situation harms the chances of current and future generations, as well as those of other species, people, and nations. Thus, the protection of those who often most need it, such as women, children, minorities, indigenous people and refugees, as well as species found in fragile habitats, is also prioritized by human rights guarantees (Gwiazdon, 2020).

Following, in addition to the principle of liability, Lecaros presents three other derivational principles that play a key role in the search for a more comprehensive approach to the environmental

issue. These principles are global justice, intergenerational justice, and the care of life in the biosphere. Each of them is going to be explored next.

According to the thoughts of Lecaros (2013), for the search for ecological justice, there is the so-called global justice, which, according to Höffe (2007) can be understood as the basic order of a society, which does not care about the personal, but about the social (more specifically politics) of justice. Thus, as it can be understood, the principle of global justice recognizes the interconnection between different countries and shared responsibility in protecting the environment. Corroborating the presented, Peters (2012) presents that global justice requires the development of a long-term social transformation that has the potential to improve the quality of life and the living conditions of current and future generations. It is therefore understood that this principle highlights the importance of considering the global consequences of local actions and promoting international cooperation to address environmental challenges.

It also urges to emphasize that when it comes to global justice, it is important to bring up Rawls' (2021) understandings, since when it comes to exclusively justice, it can be understood that in all sectors of a society one must have approximately equal perspectives on culture and achievement for everyone equally motivated and gifted.

Still, linked to the theme, a climate justice currently presents itself latently to the issue, which, according to the IPCC Sixth Assessment Report Impacts, Adaptation and Vulnerability (2022), although it presents different contexts and forms in different societies, it usually includes three principles: (a) distributive justice, which refers primarily to the use of burdens and benefits between individuals, nations and generations; (b) procedural justice, which refers to who decides and also participates in making important decisions; and, finally, (c) recognition, with basic respect, strong engagement and fair consideration of various cultures and perspectives that are envisioned today.

Following, there is the need for interspecies justice, and for Lecaros (2013), this represents the idea of the biosphere, of its reception, which makes it evident that we are just another species that depends on the ecosphere and the relationship with other living beings, and that we should not unequally appropriate the space that we share with the other beings existing here.

Therefore, to say that human beings are equal is to say that none of us is entitled to preferential treatment in the absence of reasons (Miller, 2008). Still, Miller (2008) adds that, however, we cannot really understand what justice means and, perhaps most importantly, what global justice means, if we are not sensitive to both views on the human condition - if we do not always strive to see human beings as needy and vulnerable animals and as responsible actors.

Starting from the principle of ecological justice, there is the existence of the principle of intergenerational justice, which establishes in the light of the idea of international justice or, more



precisely, justice (and equality) between different generations of people, in the sense that obligations (moral and legal) towards the current generations of human beings are presented (SARLET; FENSTERSEIFER, 2017). We can understand, therefore, that intergenerational justice recognizes the responsibility we have for future generations.

Carvalho (2017, p. 129, own translation) mentions that “Intergenerational equity places the interests of subjects not even conceived under the protection of environmental law, with the present generation having the legal obligation to meet their development needs without the commitment of future generations”. Future generations clearly cannot contribute to the preservation of the environment today, which is why all the responsibility and all other corresponding duties, such as the preservation of life and environmental quality for the future, fall on our generation (SARLET; FENSTERSEIFER, 2017).

Still, the principle of intergenerational solidarity aims to establish moral and legal responsibilities for present and future human generations, linked to the idea of intergenerational justice, that is, a justice with the bias of equity, between different human generations (SARLET; FENSTERSEIFER, 2017). The natural environment, which encompasses flora and fauna, must be understood, therefore, as the atmosphere, the soil, as well as any and all forms of life that can be considered integral to the environment, in its most varied forms of existence (TRENNEPOHL, 2019).

Following, as mentioned above, there is the principle of biosphere reserve, which, in turn, in accordance with the provisions of art. 41, of Law 9.985/2000, presents an international model of integrated management, with the ready objective of preserving biological diversity, environmental education, global sustainable development, improving the quality of life of populations (TRENNEPOHL, 2019), being the care of life in the biosphere, in its broadest forms and in the most varied existing.

Finally, further delimiting the presentation of the principles relevant to the protection of the environment, Lecaros (2013) presents four strategic and practical principles whose primary objective is to limit the aforementioned derivational principles, which will now be studied at this time. In this way, there is the principle of sustainability, precaution, shared (but differentiated) responsibility, and international solidarity.

As mentioned above, the World Commission on Environment and Development started to pay more attention to what we call today the principle of sustainability, since after the publication of the report, the principle of sustainability began to be increasingly adopted in development policies and strategies at national and international levels. In this way, by giving greater attention to the principle of sustainability, the Brundtland Commission highlighted the importance of addressing

socio-economic, environmental and equity needs to ensure a more sustainable future. Thus, it can be understood that maintaining a healthy environment is an integral factor in the sustainable development process. But this process, which has a large contingent of environmental actors and agents in society, depends on the community itself to unleash and continue. Sustainable development and sustainable society merge, in everyday practice, as effect and cause.

Development (1972), which presents, according to environmental protection, a new legal rationality, much more comprehensive and complex, linking present human action to future results, being one of the pillars of the protection of the environment also human health (SARLET, 2015). Furthermore, the precautionary principle should always be interpreted according to social relations, with the necessary responsibility and caution that it demands, as well as the existential importance of threatened legal assets, such as life, health, the environment and the principle of the dignity of the human person, of present and future generations (SARLET; FENSTERSEIFER, 2017).

In the same vein, another strategic principle presented by Lecaros is shared responsibility, whose main function is the imposition by the constituent, which must be directly and not only represented when caused by the will of the State, regarding its performance in the ecological field, leaving a responsibility between State and society. In this case, the aforementioned shared responsibility is, in the ecological field, presented as an integration between State and society, according to popular participation (SARLET; FENSTERSEIFER, 2017).

However, according to Lecaros, this responsibility should be used differently, since it was enshrined in the Rio Declaration (1992), since rich countries, which comprise only 20% of the total population, consume about 80% of the world's natural resources. Therefore, this unequal appropriation of natural resources, which are outside their territories, leaves an environmental burden on the production of raw material-producing countries, which are not primarily served (Lecaros, 2013).

Finally, Lecaros (2013) explains how the territory of a city, as it is traditionally understood, which is linked to a clearly defined political area, is fundamentally different from the territory of an ecological metropolis. This suggests that a global or cosmopolitan city is different from an ecological city (Lecaros, 2013). Thus, the absence of a governance system that establishes, executes, and defends the global responsibility of the State is the main cause of crises, which endanger human integrity, as well as environmental integrity, social integrity and ecological integrity (Gwiazdon, 2020).

Thus, as previously discussed, the existence of numerous challenges related to the environmental issue becomes evident. However, it is essential to understand that, above all, it is necessary to carefully analyze the principled concepts that underlie the theme and think strategically

about the actions to be taken by the government. This is due to the crucial importance of finding relevant and effective solutions when it comes to issues of a fundamental nature, such as environmental justice.

In addition, it is important to mention that environmental justice encompasses the guarantee of equality and equity in access to environmental benefits and in the distribution of burdens arising from human activities. It involves protecting the rights of vulnerable communities and promoting a healthy environment for all, regardless of race, social class, or geographic location.

It is crucial to consider the principles that guide environmental justice, as will be argued below. In this way, the challenges faced in the field of environmental justice require a comprehensive and integrated approach. It is necessary to consider the social, economic, and environmental dimensions, seeking solutions that take into account the different realities and needs of the affected communities. This implies working collaboratively with various actors, such as non-governmental organizations, companies, academia, and civil society, in order to promote actions that effectively contribute to the construction of a fairer and more sustainable society.

Thus, when faced with our fundamental right and that of the next generations, in order to adopt the best and most efficient measures to mitigate present and future environmental damage, we must also keep in mind an analysis with moral and ethical precepts that must be the master key for the implementation of social and economic policies around the world, for purposes of mitigating the consequences of the disastrous climate changes that are being daily evidenced.

### **3. PRINCIPLES OF ENVIRONMENTAL LAW: AN ANALYSIS IN RELATION TO BIOETHICS**

After the presentation of the environmental principles developed above, the paper will examine significant developments in the field of bioethics, mostly resulting from discourses anchored in the principles paradigm, after presenting the aforementioned environmental principles. In order to emphasize that neither virtue ethics nor principlism should claim supremacy or logical precedence over one another, this investigation will show the significant role that principlism plays in the bioethical realm.

The evaluation of virtue ethics will then be shown to be accompanied by contextual exceptions, even though it is not always guided by general rules. Unlike a principle-based approach that is universally applicable, virtue ethics bases its judgements on a careful analysis of the unique circumstances surrounding an action, leading to singular and tailored ethical judgments.

This delicate perspective emphasizes the complex nature of ethical evaluation by acknowledging that the use of ethical frameworks goes beyond strictly outlined norms to take into account the particularities of each unique circumstance. This method emphasizes the dynamic interaction between context and principles in the field of bioethics while acknowledging the complexity of ethical decision-making.

### 3.1. FROM CRITICISM TO PRINCIPLISM

The field of bioethics has advanced significantly despite being relatively young, following the exposition on environmental concepts crucial for preserving a good quality of life in harmony with our surroundings. These developments primarily resulted from discussions within the framework of ethical standards. Naturally, the principlist approach has not remained immune to criticism since the groundbreaking work of Beauchamp and Childress, and it is no longer seen as a virtually flawless strategy for solving ethical conundrums.

Conveniently, the very label of the principle's model, "principlism", was coined as a critical technical term by K. Danner Clouser and Bernard Gert in 1990 in their article entitled *A Critique to Principlism*. Both authors represent one of the most critical American conceptions of the principles' paradigm. Such an approach is not made in order to defame the principles, but rather as a warning to the abuses practiced by professionals who blindly rely on the model. For them, the principles expounded in principlism do not operate as traditional principles, which serve as a synthesis of an elaborate theory. For example, the principles of Kant, Mills and Rawls represent good syntheses of their theories, however, "the case of principlism may be somewhat illusory since there is no underlying theory that unifies the proposed principles" (CLOUSER, 1995, p. 06).

Instead, each principle operates by itself as a reminder that there is an ethical value to be considered by the decision-making agent (CLOUSER, 1995). Consequently, the agent practices the action without receiving an orientation - how to think or how to deal with a certain value - and ends up assigning its own metric of values, with its own interpretations and exceptions. What elements have entered the agent's sphere of judgment? What is the interpretation bias? The questions that seek to point out what determined the moral conclusion are hampered by the absence of a theoretical basis.

The manifestations of principlism through conditioned maxims, with the principles acting as a presupposition for ethical analysis, make them seem like ad hoc constructions (CLOUSER, 1995). In fact, without unification, each principle only represents some historically important emphasis, without the underlying theories: Kant's autonomy, Mills's consequence, Gert's non-maleficence,

and Rawls' justice. Moreover, the absence of unification results in a lack of care and observation to the specific circumstances and particularities of the specific case. Therefore, abstract universalization conceived through principles would not be sufficient to compose the entire decision-making process (JUNGES, 1999).

Another critical opinion points to the frequent groupings of clinical moral problems - in conferences, books and articles - according to the principle that is considered the most relevant to solve a given ethical problem. Because of this, "[...] it has become common to cite this or that principle as a means of solving certain problems" (GERT; CULVER; CLOUSER 2006, p. 100). It is prudent for the agent to distinguish between using the principles as decision guides and as a tool to focus on specific debates. It is evident, therefore, the concerns of critics with the widespread popularization of the principles's paradigm in biomedical ethics: "the improper use of principles serves to cover up ad hoc judgments" (Gert; Culver; Clouser, 2006, 2006, p. 101).

Good deliberation preaches the use of principles as guides to action and as aiding tools for case analysis. According to Pessini and Barchifontaine (2014, p. 64), "[...] the genesis of abuses committed by the paradigm of principles comes from a human need for moral security". Violations occur mainly in disregard of the limits of the method, as in cases where the deliberating agent models the circumstances of a given case so that it fits the understanding of a specific principle of his preference - exactly as it occurs in the cases of specific conventions, present in the critique of Gert, Culver and Clouser.

Similarly, Junges' criticisms mention that the lack of unity of principlism creates practical and theoretical problems. Still, that the principles are an eclectic proposal, the lack of an ethical theory that provides systematic unity to the principles prevents "[...] a unitary orientation in the creation of specific laws for action that are clear and coherent" (JUNGES, 1999, p. 65, own translation). How to resolve conflicts between principles if there is no common framework as a basis? From Junges' point of view, the eclectic character, which overshadows ethical reasoning, represents the failure of principled bioethics (JUNGES, 1999).

That said, finally, the critical position prevails (Gert; Clouser, 1990, p. 02):

At best, 'principles' operate primarily as checklists naming issues worth remembering when considering a biomedical moral issue. At worst 'principles' obscure and confuse moral reasoning by their failure to be guidelines and by their eclectic and unsystematic use of moral theory.

Thus, a relevant theme that will be relevant is the casuistic approach, within bioethics, since it can be limited in its ability to address broader and systemic issues, as can be understood the environmental impacts of human practices. Environmental protection often requires consideration

of long-term factors and consequences, which may not be fully addressed in a case-by-case analysis of individual cases. In short, although the casuistic approach can be useful for the ethical analysis of specific cases, it is important to combine this approach with a broader theoretical basis and consider environmental issues in a broader context, with the presentation of critiques of casuistry for purposes in relation to fundamental environmental principles being relevant.

### 3.2. BIOETHICS AS A CASUISTRY

Despite the claim of principlism to occupy a privileged place in bioethics, it is important to highlight that neither it nor the ethics of virtues should claim superiority or logical precedence over each other. Principlism is an ethical approach that is based on the identification and application of universal moral principles, and these principles are considered guides for ethical decision-making in the area of bioethics. However, it is important to recognize that principlism has its limitations and criticisms, being exactly the central problem of the present study.

Thus, at this moment, the central theme of this study will be presented, in relation to criticism of casuistry and environmental principles. Initially, as Polansky and Cimasky (2015) state, it is not an attempt to supplant principlism by virtue ethics, but rather to provide a more adequate version of the moral life, going beyond what each of the theories could offer in isolation.

In this way, the virtues of principlism are clarity, simplicity, and universality. But the vices of this approach are the inverse of its virtues: neglect of singular factors of each case, simplification arising from its universality. Virtue ethics, on the other hand, offers a complementary approach, providing a theory about the moral character of the agent, a coordination between reason and emotion, and an approach to the circumstances of deliberations and choices that is not found in principlism. In this sense, the cases to be analyzed can be better understood if we combine the two approaches.

The reason for this, as Polansky and Cimasky claim, is that the four principles of principlism - autonomy, beneficence, non-maleficence, and justice - are often celebrated for their success, but they are also often complemented by considerations from virtue ethics. To elucidate and deepen the ethical sensitivity of principlism, Polansky and Cimasky assert that the four principles of principlism must be seen as correlates of the four cardinal virtues - prudence, courage, moderation and justice - as they appear in the West, since Plato in Book IV of the Republic.

Similarly, Aristotle, who treats courage and moderation in book III of the Nicomachean Ethics. Justice occupies an entire book, Book V and prudence (phronesis) - which is the chief intellectual virtue concerning action - occupies the entire book VI of the Nicomachean Ethics. Another classic





reference of these four virtues is to be found in St. Augustine's treatise *On the Trinity* (1955) in which prudence is mentioned along with the three other cardinal virtues: justice, strength and temperance.

In this same sense, Thomas Aquinas states for the first time the study of prudence in his commentary on book III of the *Sentences* (1253-1255). He studies it again in the second part of the contemporary *Summa Theologica* (1268-1272) of his *Commentaries on the Nicomachean Ethics*. Undoubtedly, Thomas' longest and most systematic text on prudence is the questions 47-56 of the *Ila Ilae*, that is, of the second part of the second part of the *Summa Theologica*. In question 61 of the *Ia Ilae* of the *Summa Theologiae*, Thomas deals with the cardinal virtues, in which he says that temperance applies so that the human being does not deviate from reason because of sensible desires and fortitude (courage) applies so that the human being does not depart from the right judgment of reason because of fear or audacity. But it is up to the ordering of prudence to determine how and by what means the human being, in acting, observes the reasonable means.

In short, to observe the just means, as will be seen below, the end of moral virtue (which is pre-established for it by practical natural reason), but this just means is found only by the proper ordering of what concerns this end (which belongs to prudence).

This perception of the complementarity between principlism and the theory of virtues shows that the rationality required in the case of bioethics is what tradition has identified through the notion of practical reason. Recourse to practical reason in solving difficult cases results in the refutation of a merely deductive ethics of what we should do, as if ethics were only the concrete application or mere subsumption of rules in specific situations. On the contrary, to think of bioethics as a field of practical reason is to recognize that the difficulties originated by new technologies do not find solutions in the mere ability to apply principles or rules, but in the ability to rationally discern what is at stake within the scope of each singular practice.

As Ricouer (1990, p. 317-318) tells us, we can perceive the part of practical wisdom (prudence) embodied in bioethics, for example, in the search for the right medium - Aristotle's *mesotes* - which seems to be good advice, however without having universal principle's value.

It is good to remember that the just means, as Thomas informs us, following Aristotle, is the action that sins neither by excess nor by lack and that, therefore, there is always an adequate mode of judgment in our actions. It is a certain just means and insofar as it aims at the "means" and accomplishes it, it is a virtuous action. It is therefore necessary to know what the just means is, that is, by what precepts of practical reason we are led - by the virtue of prudence - into the just means of the other cardinal virtues. As a result, the ethical norm is neither unique nor the same for all cases, but it adapts itself and in an essential way to the circumstances where the action takes place.



Thomas Aquinas points out, first, that there is uncertainty and variation in the practical rules formulated universally:

[...] practical reason deals with the contingent, where human works enter. Wherefore, though in general there is also a certain necessity, the more we descend to the particular, the more exceptions we shall find. (Thomas Aquinas, 2001, Ia-IIae, Question 94, a.4).

We must point out that, notwithstanding what is set forth in the preceding passage, the lack of certainty as to how a universal rule is to be applied in the practical domain, it does not follow that the judgment in particular cases cannot be infallibly correct. This means that despite the uncertainty in the field of the application of universal practical rules and their imprecision in the application to individual cases, there is always only one adequate way of accomplishing the good and that, on the contrary, the evil comes from several particular defects.

Thus, Thomas concludes that there is always an adequate mode of judgment in our actions: this is the action that sins neither by excess nor by lack. On the contrary, it is a certain “just means” and insofar as it aims at the “means” and realizes it, it is a virtuous action. It is therefore necessary to know what the “just means” is, that is, through what precepts of practical reason we are led to the “just means” of virtue (Thomas Aquinas, 2000, lib. 6, 1, 332, p. 35-36).

Thomas points out that the norm of action is crossed by considerations about the circumstances of action, and he shows us this through the notion of “just means”. In this sense, the ethical norm is neither unique nor the same for all cases, but it adapts itself and in an essential way to the circumstances where the action takes place.

Thomas, following Aristotle, shows us the insufficiency of this knowledge, that is, the criterion of the just means as being a certain means between excess and lack, if conceived as something merely formal and abstract, it would simply mean that to act according to the “just means” is to act as one should and this does not help us at all with regard to the accomplishment of the action. In this case, it would be left to each of us to determine his “just means” for himself and in a totally subjective way. The doctrine of the “just means,” insofar as it establishes that virtuous action is something between excess and lack, it would be incapable of providing us with information useful for human action.

The recognition of the limits proper to the use of practical reason as being different from those used by principles taken in a merely abstract way, seems to make it clearer that the just means does not merely express an analytic proposition that operates by subsumption, but, on the contrary, it seems that the doctrine of the just means goes much further.

Thus, the doctrine of the just means does not express only that in one case, if X is the just means between excess and fault, it is necessary to do X. The doctrine of the "just means" establishes a restriction on every ethical norm: do X, if X is the "just means" in this particular case, all other circumstances remaining equal. In another case, if the "fair half" is no longer X, but Y, do Y, and so on. If something is the "right way", do it, but it is the "right way" always in relation to a given case, that is, that it is good precisely because it remains in the middle between excess and lack, in the precise circumstances of a particular action (Thomas Aquinas, 2000, lib. 6, 1, 332, p. 65-69).

Still, the just means introduces precisely the relative character: all things remaining equal (the clause *ceteris paribus*), it is necessary to do X. X must be done because he is the best. But what expresses the doctrine of the "just means" is that the best is a *medietas* that must always be taken from the circumstances where the action takes place. For a proper understanding of the doctrine of the just means, it is important to bear in mind that the middle ground, in any particular case, is considered the best, taking into account all the circumstances surrounding our actions. The introduction of this requirement regarding the circumstances of the action is crucial for the correct assessment of the right environment and is essential for environmental development in a healthy and effective manner.

The doctrine of the just means recognizes the importance of finding an appropriate balance between different extremes or excesses that can be evidenced. It teaches us that taking a moderate position, which carefully considers the specific circumstances of each situation, can lead to more satisfactory and beneficial results, being exactly what is being defended in the present work.

Thus, when we apply a certain argument within the environmental context, the doctrine of the just environment guides us to avoid harmful extremes, both in the exploitation of natural resources and in the implementation of safer and more effective environmental policies for the healthy and quality of life of beings. Still, it reminds us that sustainable development requires a balanced approach, which takes into account not only present needs, but also future needs and the health of the environment as a whole, and awareness of the application of the environment and criticism of principlism becomes a relevant situation for the development of knowledge today.

Equally, by considering the specific circumstances of each action, such as the socioeconomic context, the characteristics of the affected ecosystem and the possible short- and long-term consequences, we can make more informed and responsible decisions. This allows us to find solutions that minimize negative impacts while promoting human well-being and the preservation of natural resources. Therefore, the application of the doctrine of the just environment in the environmental context requires a continuous process of analysis, evaluation and adaptation. Still, circumstances are constantly changing, and it is necessary to periodically reassess the actions and

policies implemented to ensure that they remain in line with the principles of sustainable development and environmental protection.

In short, the doctrine of fair means is a valuable approach to healthy and effective environmental development. By carefully considering the specific circumstances of each action, we can find balanced solutions that promote justice, sustainability and the preservation of natural resources for present and future generations. This approach helps us navigate through the complexities of the environmental landscape and seek the path that best meets human needs and the imperatives of environmental conservation.

It can then be concluded that the judgment of virtue ethics is not a universal judgment by principles alone which would be accompanied by exceptions of circumstances in the form of a generalization of the type “most Xs are Ys.” On the contrary, ethical judgment is a singular judgment, which produces a decision making in the examination of the circumstances of the action *hic et nunc*. This means that prudence, which determines concrete action and establishes which directive we should adopt in a specific case, has a fundamental role in coordinating the other cardinal virtues in the search for the discovery of the right means.

## CONCLUSION

The realization of this study was crucial to establish that one of the greatest challenges facing the global environmental crisis today is the consequence of disasters and the results arising from it, which are not limited only to the social and economic nature, but, above all, political, since no interest of government entities is presented in developing effective public policies, with financial adjustments capable of drastically minimizing the consequences of global warming and reducing inequalities to vulnerable beings and regions.

It urges us to remember that globalization, when analyzing the economic scenario and the development of people and the circulation of wealth, is important for the circulation of capital and market negotiations, since there are trade negotiations around the world. However, on the other hand, the factor that contributes to the development of a sector of society is the same that contributes significantly to the advance of uncontrolled emissions of greenhouse gases into the atmosphere, by the uncontrolled production of products and the advance of capitalism on the verge of its collapse of production and commercialization - which can be easily demonstrated in the frantic production of the textile market, with the sale of clothing and accessories almost in a disposable way. Globalization, therefore, has become one of the crucial reasons for advances in climate change and the occurrence of extreme weather events around the world, especially when it comes to less favored

and vulnerable regions and people, which do not present the necessary conditions for the effective pursuit of global environmental justice.

Thus, during the development of the present study, the characteristics of some relevant principles that must be observed when facing an issue involving healthy and balanced environmental law for human beings were presented, but, above all, in relation to the poorest populations, as well as in relation to the main provisions regarding the Democratic Rule of Law and the fundamental concept that the environment has conquered, given its magnitude and its essentiality to the condition of human existence.

The environmental issue is imminent, and the aforementioned environmental damage is damage to humanity in general, that is, damage to the present generation - and to the entire community - which includes harming the foundations of life - gives us a vision of who we are (Gwiazdon, 2020). Likewise, this situation shows that we are capable and that through the reasons we give in defense of the damages resulting from it, it must be our priorities, our values and where our care circles end (Gwiazdon, 2020).

It is important to emphasize, as widely worked in the course of the study, that when it comes to climate change and climate justice, in addition to an in-depth analysis of the concepts and needs that society aims for, and should always be based on strategic principles and derivatives, be analyzed in line with the casuistry which we can conclude the use of the principlism presented here and, also, the use of the fair environment. Thus, it is necessary to keep in mind that whatever the middle ground in a particular case, it will be the best, taking into account all the circumstances that are part of our actions.

Moreover, it can be concluded that the judgment of the ethics of virtues is not a universal judgment based solely on principles, which would be accompanied by exceptions of circumstances in the form of a generalization of the type "most of the Xs are Ys". On the contrary, ethical judgment is a singular judgment, which produces a decision making in the examination of the circumstances of the action *hic et nunc*. That is, this means that prudence has a fundamental role in coordinating the other cardinal virtues in the search for the discovery of the right means of actions and representations that are developed in the environmental sphere.

In this line of thought, Junges (2001) mentions that the battle against environmental conflicts caused by large-scale economic and industrial processes that interact with areas where disadvantaged populations reside is the basis of popular ecology and environmental justice movements. Therefore, denying the facts that are daily reported about uncontrolled advances in greenhouse gas emissions and the resulting climate change is, at the very least, an affront to the fundamental rights and guarantees of human beings that daily suffer as a result of climate change.

It is therefore extremely important to emphasize that this work was dedicated to presenting an approach and objective that aim at the most essential good for the existence of life and a complete respect for nature in its most intrinsic form. The focus was on the pursuit of a fully balanced, sustainable, and healthy environment not only for our generation, but also for future generations, that are the most affected by the environmental problems resulting from our actions and omissions. In addition, understanding the importance of a balanced and healthy environment is fundamental to ensuring the continuity of life on our planet. All living things, from the simplest to the most complex species, depend on natural resources and the harmony of ecosystems to survive and develop effectively. In addition, non-living nature, such as the atmosphere, soils, waters and food chains, play essential roles in maintaining this balance.

However, it is worrying to note that our actions and omissions regarding the effects of climate change have caused significant damage to the environment and the continuation and existence of beings. Thus, the destruction of ecosystems, rampant pollution, as well as the uncontrolled exploitation of natural resources are examples of environmental problems that negatively affect the health of ecosystems and, consequently, the quality of life of present and future generations.

The effort of environmental preservation faces a variety of significant obstacles that need for swift and coordinated action. The necessity of creating a thorough understanding of and appreciation for environmental protection is one of these difficulties that should be given the utmost attention. Governmental entities, non-governmental groups, and the general public must work together in cooperative projects to foster environmental education and promote sustainable habits. In order to combat these complex issues, coordinated efforts must be synergized as well as the deep intricacies of environmental preservation understood. The most significant of these challenges is the imperative job of establishing in people a profound understanding and deep respect for the core of environmental stewardship. This requirement includes a broad effort to promote sustainable behaviors and foster environmental literacy. The symbiotic cooperation of political authorities, non-governmental organizations, and the general public, coming together under a common vision to secure the preservation of our planet's vitality for future generations, is essential to achieving this transformative transition.

In the end, protecting the environment must become the top priority for all segments of society, from small businesses to private individuals. Everyone's decisions and actions must be supported by a shared understanding of our shared environmental responsibilities in order to pave the way for a sustainable future for all. As a result, protecting the environment becomes a necessary and mandated goal, intended to maintain not only the standard of living we enjoy now but also the lasting legacy we leave for future generations, despite any obstacles that may arise.



## REFERENCES

- AQUINO, Tomás de. *Suma Teológica*. vol. IV. 2ª ed. São Paulo: Edições Loyola, 2001a.
- AQUINO, Tomás de. *Comentario a la Ética a Nicómaco de Aristóteles*. Trad. Ana. Mallea. Pamplona: EUNSA, 2000.
- ARISTOTE, 1959. *Étique a Nicomaque*. Introduction, traduction et commentaire de René Antoine GAUTHIER e Jean Yves JOLIF, Publications Universitaires de Louvain - Éditions Béatrice-Nauwelaerts, Paris, 1959.
- AUGUSTIN, Saint. *La Trinité*, in *Oeuvres de Saint Augustin: dialogues philosophiques*, trad. de MELLET, M. e CAMELOT, Th., v. 15-16, livre XIV, 9, 12. Desclée de Brouwer, Paris 1955.
- BONAVIDES, Paulo. *Curso de direito constitucional*. 29. ed. São Paulo: Malheiros, 2014.
- CARVALHO, Délton Winter de. *A Litigância Climática como Governança Ambiental*. *Revista de Direito Ambiental*. vol. 96. Ano 24. P. 333-349. São Paulo: Ed RT, out,-dez. 2019.
- CARVALHO, Délton Winter de. *Gestão Jurídica Ambiental*. São Paulo: Revista dos Tribunais, 2017.
- CLOUSER, K. Danner. & Gert, B. (1990). *A Critique of Principlism*. *Journal of Medicine and Philosophy* 15 (2):219-236.
- CLOUSER, K. Danner. *Common Morality as an Alternative to Principlism*. *Kennedy Institute of Ethics Journal*, Volume 5, Number 3, September 1995, pp. 219-236
- GERT, B., Culver, C. M., & Clouser, K. D. (2006). *Bioethics: A systematic approach*. New York: Oxford University Press.
- GWIAZDON, Kathryn Anne. *They also target and prioritize harm to those who often need the most protection*. In: WESTRA, Laura; BOSSELMANN, Klaus. FERMEGLIA, Fermeiglia (edi.). *Ecological Integrity in Science and Law*. E-book. Access on: 07 aug. 2021.

HÖFFE, O., Moellendorf, D., & Pogge, T. (Eds.). (2007). *Democracy in an Age of Globalisation*. Dordrecht: Springer Netherlands.

INTERNATIONAL ENERGY AGENCY. Word. Available on: <https://www.iea.org/world>. Access on: 17 jul. 2021.

JUNGES, José Roque. *Bioética: perspectivas e desafios*. São Leopoldo. Editora Unisinos. 1999.

JUNGES, José Roque. Bioética e Meio Ambiente num Contexto de América Latina. *In: Revista Redbioética/UNESCO*, Año 5, 1 (9): 13-19, enero – junio. 2014.

LECAROS URZÚA, J. A. (2013). La ética medio ambiental: principios y valores para una ciudadanía responsable en la sociedad global. *Acta bioethica*, 19(2), 177-188.

JUNGES, J. R. (2001). Ética ecológica: antropocentrismo ou biocentrismo?. *Perspectiva Teológica*, 33(89), 33-33.

MILARÉ, Édis. *Direito e Ambiente: a gestão ambiental em foco: doutrina, jurisprudência, glossário*. 6. ed. São Paulo: Revista dos Tribunais, 2009.

MILLER, David. *National Responsibility And Global Justice*. E-boo

NASA. The causes of climate change. Available on: <https://climate.nasa.gov/causes/>. Access on: 08 aug. 2021.

ONU. Mais de 4,2 bilhões de pessoas vivem sem acesso a saneamento básico. Available on: <https://news.un.org/pt/story/2020/11/1733352>. Access on: 08 aug. 2021.

PETERS, Rebecca Todd. Examining the Value of Solidarity as a Moral Foundation for Poverty Alleviation. *In: Leadership and global justice*. Edited by Douglas A. Hicks and Thad Williamso. E-book. Access on: 07 aug. 2021.

POLANSKY, Ron & Cimasky, Joe. Aristotle and Principlism in Bioethics. *Diametros* 45 59-70. 2015.

RAWLS, John. *A Theory of Justice*. Revised Edition. *E-book*. Access on: 07 aug. 2021.





SARLET, Ingo Wolfgang. Constituição e legislação ambiental comentada. São Paulo: Saraiva, 2015. *E-book*.

SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. Curso de direito ambiental. Rio de Janeiro: Forense, 2020. *E-book*. Access on: 17 jul. 2021.

SARLET, Ingo Wolfgang. Dignidade da Pessoa Humana e Direitos Fundamentais na Constituição de 1988. 8. ed. Porto Alegre: Livraria do Advogado, 2010.

SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. Princípios do direito ambiental. 2. ed. São Paulo: Saraiva, 2017. *E-book*.

TRENNEPOHL, Terence. Manual de direito ambiental. 7. ed. São Paulo: Saraiva. Educação, 2019. *E-book*.

UNITED NATIONS. Report of the World Commission on Environment and Development - Our Common Future. Available on: <https://sustainabledevelopment.un.org/milestones/wced>. Access on: 28 jul. 2021.

VEIGA, José Eli da. Desenvolvimento Sustentável: o Desafio XXI. 3. ed. Rio de Janeiro: Garamond, 2008.

#### **Sobre o autor:**

##### **Gerson Neves Pinto**

Universidade do Vale do Rio dos Sinos -UNISINOS, São Leopoldo, RS, BrasilLattes:<http://lattes.cnpq.br/8238776786204242>

Doutorado em Philosophie, Textes Et Savoir, mention très honorable na École Pratique Des Hautes Etudes - Sorbonne, Paris (2011), Mention: Très honorable; Mestrado em Filosofia pela Universidade Federal do Rio Grande do Sul (1998) e Graduação em Ciências Jurídicas pela Universidade do Vale do Rio dos Sinos (1985). Atualmente é professor adjunto da Universidade do Vale do Rio dos Sinos e do Programa de Pós-Graduação em Direito (Mestrado e Doutorado)

UNISINOS

ORCID: <https://orcid.org/0000-0002-4595-708X>

E-mail: [gerson.p@terra.com.br](mailto:gerson.p@terra.com.br)

##### **Debora Cristiane Korndorfer**

Estudante de Ph.D. em Ciências Políticas na Universidade da Flórida, Pós-graduada em Direito Tributário pela Universidade Federal do Rio Grande do Sul e Graduada em Ciências Jurídicas e Sociais - Direito pela Universidade do Vale do Rio dos Sinos.

ORCID: <https://orcid.org/0000-0001-5723-2978>

E-mail: [dckorndorfer@gmail.com](mailto:dckorndorfer@gmail.com)

