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INTERNATIONAL ENVIRONMENTAL LAW: STATE OBLIGATIONS IN THE FACE OF GLOBAL CLIMATE CHANGE

DIREITO AMBIENTAL INTERNACIONAL: OBRIGAÇÕES DOS ESTADOS DIANTE DAS MUDANÇAS CLIMÁTICAS GLOBAIS

DERECHO AMBIENTAL INTERNACIONAL: OBLIGACIONES DE LOS ESTADOS ANTE EL CAMBIO CLIMÁTICO GLOBAL

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Abstract: Climate change represents one of the greatest contemporary challenges facing the international community, requiring coordinated responses that transcend national borders. International Environmental Law emerges as the principal legal instrument for regulation and cooperation, establishing obligations for States in confronting this global crisis. This article aims to analyze the nature and effectiveness of these obligations, considering both the historical evolution of international treaties and current dilemmas related to sovereignty and cooperation among countries. The temporal scope extends from the Stockholm Conference (1972) to the most recent developments arising from the Paris Agreement (2015), with particular emphasis on the principles of precaution, prevention, and common but differentiated responsibilities. Methodologically, the study is based on qualitative, bibliographic, and documentary research, with emphasis on legal-dogmatic interpretation and the critical analysis of international treaties and reports. The results indicate that, although international legal instruments have expanded recognition of collective responsibility for climate-change mitigation and adaptation, tensions persist concerning the asymmetry of responsibilities between developed and developing countries. It is concluded that the effectiveness of environmental obligations depends not only on formal adherence to treaties but, above all, on the capacity for practical implementation, effective international cooperation, and the incorporation of climate justice principles.

Keywords: International Environmental Law. Climate Change. State Obligations. International Cooperation. Climate Justice.

Resumo: As mudanças climáticas representam um dos maiores desafios contemporâneos enfrentados pela comunidade internacional, exigindo respostas coordenadas que transcendam as fronteiras nacionais. O Direito Internacional Ambiental surge como o principal instrumento jurídico de regulação e cooperação, estabelecendo obrigações para os Estados no enfrentamento dessa crise global. Este artigo tem como objetivo analisar a natureza e a eficácia dessas obrigações, considerando tanto a evolução histórica dos tratados internacionais quanto os dilemas atuais relacionados à soberania e à cooperação entre os países. O recorte temporal estende-se da Conferência de Estocolmo (1972) aos desdobramentos mais recentes decorrentes do Acordo de Paris (2015), com ênfase nos princípios da precaução, da prevenção e das responsabilidades comuns, porém diferenciadas. Metodologicamente, o estudo baseia-se em pesquisa qualitativa, bibliográfica e documental, com foco na interpretação jurídico-dogmática e na análise crítica de tratados e relatórios internacionais. Os resultados indicam que, embora os instrumentos jurídicos internacionais tenham ampliado o reconhecimento da responsabilidade coletiva pela mitigação e adaptação às mudanças climáticas, persistem tensões relativas à assimetria de responsabilidades entre países desenvolvidos e em desenvolvimento. Conclui-se que a eficácia das obrigações ambientais depende não apenas da adesão formal aos tratados, mas, sobretudo, da capacidade de implementação prática, de uma cooperação internacional efetiva e da incorporação de princípios de justiça climática.

Palavras-chave: Direito Internacional Ambiental. Mudanças Climáticas. Obrigações dos Estados. Cooperação Internacional. Justiça Climática.

Resumen: El cambio climático representa uno de los mayores desafíos contemporáneos a los que se enfrenta la comunidad internacional, lo que exige respuestas coordinadas que trasciendan las fronteras nacionales. El Derecho Internacional Ambiental surge como el principal instrumento jurídico para la regulación y la cooperación, estableciendo obligaciones para los Estados a la hora de hacer frente a esta crisis global. Este artículo tiene como objetivo analizar la naturaleza y la eficacia de dichas obligaciones, considerando tanto la evolución histórica de los tratados internacionales como los dilemas actuales relacionados con la soberanía y la cooperación entre países. El alcance temporal abarca desde la Conferencia de Estocolmo (1972) hasta los acontecimientos más recientes derivados del Acuerdo de París (2015), con especial énfasis en los principios de precaución, prevención y responsabilidades comunes pero diferenciadas. Desde el punto de vista metodológico, el estudio se basa en una investigación cualitativa, bibliográfica y documental, centrada en la interpretación jurídico-dogmática y en el análisis crítico de tratados e informes internacionales. Los resultados indican que, si bien los instrumentos jurídicos internacionales han ampliado el reconocimiento de una responsabilidad colectiva en la mitigación y adaptación al cambio climático, persisten tensiones en torno a la asimetría de responsabilidades entre los países desarrollados y los países en desarrollo. Se concluye que la eficacia de las obligaciones ambientales no depende únicamente de la adhesión formal a los tratados, sino, sobre todo, de la capacidad de implementación práctica, de una cooperación internacional efectiva y de la incorporación de los principios de justicia climática.

Palabras clave: Derecho Internacional Ambiental. Cambio climático. Obligaciones de los Estados. Cooperación internacional. Justicia climática.

1. INTRODUCTION

Climate change constitutes one of the most complex and urgent phenomena confronting humanity in the twenty-first century. The environmental, social, and economic impacts resulting from rising average global temperatures, the intensification of extreme weather events, and changes in ecosystems transcend national borders, affecting developed and developing countries alike. In this context, International Environmental Law emerges as an indispensable normative field for articulating collective responsibilities, defining legal obligations, and promoting cooperation mechanisms aimed at protecting the climate and life on the planet (Sands, 2003).

The evolution of International Environmental Law reflects the international community's growing concern regarding ecological degradation. Since the Stockholm Conference in 1972, States have come to recognize the need for global governance focused on the environment. Beginning with the 1992 Rio Conference and the 1997 Kyoto Protocol, international commitments related to reducing greenhouse gas emissions expanded. The 2015 Paris Agreement consolidated this trajectory by establishing global mitigation and adaptation targets, seeking to align national efforts with the common objective of limiting global warming (Bodansky, 2010).

However, the implementation of these legal obligations faces numerous obstacles. The tension between sovereignty and international cooperation remains one of the greatest challenges of International Environmental Law. Many States still interpret sovereignty as a basis for limiting more stringent emissions-reduction commitments, which creates impasses in multilateral negotiations. In this regard, it is essential to understand how sovereignty should be reinterpreted in the face of global problems that do not respect borders and therefore require shared responsibilities (Viola, Franchini & Ribeiro, 2013).

The discussion of state obligations in the face of climate change is not limited to the legal sphere, but also encompasses ethical and political dimensions. The principle of intergenerational equity, for example, imposes upon States a duty to act for the benefit not only of present populations but also of future generations. This principle reinforces the understanding that state inaction jeopardizes fundamental rights, such as the rights to life, health, and a balanced environment, all of which are recognized as universal legal interests (Kiss & Shelton, 2007).

The ethical dimension is also expressed through climate justice, which seeks to correct historical inequalities in the distribution of the burdens and benefits of industrialization. Industrialized countries, responsible for a substantial share of accumulated emissions, bear differentiated obligations in relation to developing nations, which are still pursuing economic growth. Recognition of these common but differentiated responsibilities is one of the pillars of the international climate-change regime, representing an attempt to balance justice and effectiveness (Sands, 2003).

Science plays a central role in strengthening the international climate regime. The periodic reports of the Intergovernmental Panel on Climate Change (IPCC) provide robust evidence that guides policymaking and treaty negotiations. The interaction between science and law, in this context, is indispensable to legitimizing mitigation and adaptation measures, reinforcing the understanding that climate protection is not merely a policy option but an obligation grounded in objective data (IPCC, 2021).

Nevertheless, the effectiveness of international commitments remains limited by the absence of robust coercive mechanisms. Most environmental treaties depend on voluntary adherence by States and the incorporation of obligations into domestic law. This legal gap facilitates the adoption of insufficiently ambitious targets or noncompliance with assumed commitments, thereby reducing the credibility of international instruments. This scenario raises questions concerning the legitimacy of International Environmental Law and its capacity to bring about concrete change (Viñuales, 2018).

International jurisprudence has sought to address some of these gaps by recognizing the responsibility of States to prevent transboundary environmental harm. The International Court of Justice, for example, has reiterated the due-diligence obligation in environmental protection, reinforcing the view that climate degradation constitutes a violation of general international norms. This position strengthens the understanding that environmental duties transcend specific treaties and constitute erga omnes obligations (Shaw, 2011).

Despite normative advances, practical results still fall short of global needs. The increasing frequency of climate-related disasters, such as floods, prolonged droughts, and heat waves, reveals the insufficiency of current policies and the urgency of stronger international commitment. According to Silva (2019), the climate crisis requires not only formal adherence to treaties but also practical implementation capacity and effective cooperation among States.

International cooperation, therefore, should be regarded as both a legal and political imperative. In an interdependent world, where one country's emissions affect the global climate, no State can confront the climate crisis in isolation. This reality requires a redefinition of sovereignty, which must be exercised in accordance with humanity's collective interest. This does not imply the loss of state autonomy, but rather its reinterpretation in light of global responsibilities (Brownlie, 2000).

The role of international organizations is also relevant to the consolidation of the climate regime. The United Nations, through the United Nations Framework Convention on Climate Change (UNFCCC), has served as the principal negotiating arena, bringing together multilateral efforts and monitoring compliance with established targets. However, the effectiveness of this global governance depends on genuine adherence by States and on reconciling national interests with the urgency of the climate crisis (Bodansky, 2010).

In this regard, the analysis of international environmental obligations requires a critical examination of the relationship between legality and legitimacy. Whereas legality ensures the normative framework governing actions, legitimacy is associated with perceptions of justice and equity among different international actors. A lack of balance between these two elements undermines treaty adherence and effectiveness, demonstrating the importance of a climate regime that is simultaneously lawful and just (Viñuales, 2018).

The relevance of International Environmental Law is directly associated with its capacity to transform political commitments into binding legal obligations. This transformation is essential to ensure that States do not merely express intentions, but assume concrete duties of mitigation, adaptation, and cooperation. International Environmental Law therefore constitutes the link between the science that demonstrates the severity of the climate crisis and the politics that seeks collective responses (Sands, 2003).

This research proceeds from the premise that a deeper analysis of States' obligations in the face of global climate change is necessary, assessing not only normative aspects but also the limitations and challenges affecting their effectiveness. The study seeks to contribute to understanding how International Law can overcome tensions among sovereignty, climate justice, and cooperation, thereby strengthening global environmental governance (Kiss & Shelton, 2007). The article aims to analyze the nature and effectiveness of these obligations, considering both the historical evolution of international treaties and current dilemmas related to sovereignty and cooperation among countries.

Accordingly, the article is structured around four main axes: first, the foundations and principles of International Environmental Law are discussed; next, the methodological approaches employed are presented; subsequently, the results and discussion are developed through a critical analysis of international norms and practices; and, finally, the final considerations highlight the need for a more effective, just, and legitimate climate regime. In this way, the article seeks to reaffirm the centrality of International Environmental Law as an essential instrument for confronting the contemporary climate crisis.

2. THEORETICAL FRAMEWORK

2.1 Foundations of International Environmental Law

International Environmental Law emerged from global concerns regarding the degradation of nature, which intensified during the second half of the twentieth century. The 1972 Stockholm Conference is regarded as the initial milestone in the construction of an international environmental normative system, consolidating the idea that States possess not only rights but also duties related to environmental preservation. From that point forward, environmental protection came to be conceived as an integral component of human development, shifting the discussion from a strictly scientific field to a global political and legal agenda (Sands, 2003).

Among the fundamental principles of International Environmental Law, prevention and precaution are particularly significant. The prevention principle imposes upon States the duty to avoid significant environmental harm, reinforcing the responsibility to act before consequences materialize. The precautionary principle, in turn, guides the adoption of measures even in the face of scientific uncertainty, recognizing that the absence of

conclusive evidence should not be used to justify inaction. These two principles reflect the notion that environmental integrity is a collective legal interest that should receive priority protection (Kiss & Shelton, 2007).

Another foundational principle is the polluter-pays principle, under which the actor responsible for environmental degradation must bear the costs of prevention and remediation. In addition to promoting environmental justice, this guideline seeks to encourage more responsible behavior in the use of natural resources. Sustainable development, in turn, establishes that economic growth cannot occur independently of environmental protection and must meet the needs of the present generation without compromising the ability of future generations to meet their own needs. This idea, enshrined in the Brundtland Report, remains a structural axis of international negotiations (Brownlie, 2000).

Finally, the principles of international cooperation and common but differentiated responsibility deserve particular emphasis. While cooperation reinforces the need for joint efforts to confront transnational environmental problems, differentiated responsibility recognizes that States possess different capacities and levels of contribution to the climate crisis. This differentiation seeks to correct the historical inequalities of industrialization by assigning greater duties to developed countries. Thus, the foundations of International Environmental Law not only structure its normative architecture, but also reflect ethical and political concerns of global scope (Viola, Franchini & Ribeiro, 2013).

In addition to the already established principles, International Environmental Law is also grounded in the idea of intergenerational solidarity. This concept emphasizes that environmental protection transcends spatial and temporal boundaries, since today's ecological impacts will directly affect future generations. This perspective appears in various international instruments, such as the 1992 Rio Declaration, which emphasizes the need to secure the right to development in balance with environmental protection. International Environmental Law thus incorporates an ethical dimension, recognizing that natural resources belong not only to present societies but also to future ones (Nações Unidas, 1992).

Another fundamental aspect concerns the progressive incorporation of the environment as an essential human right. United Nations General Assembly Resolution 76/300 of 2022 formally recognized access to a clean, healthy, and sustainable environment as a universal human right. This normative development reinforces the centrality of Environmental Law within the contemporary international system, expanding its legitimacy and linking it to the protection of human dignity. When conceived as a human right, the environment receives greater legal and political protection, strengthening the possibility of holding States accountable when they fail to fulfill their ecological duties (Nações Unidas, 2022; Viñuales, 2018).

2.2 State Obligations in Environmental Matters

Environmental obligations assumed by States at the international level may be classified into two broad groups: obligations of conduct and obligations of result. The former concern the adoption of specific conduct and policies, such as enacting domestic legislation or implementing environmental monitoring programs. Obligations of result, by contrast, require the achievement of concrete targets, such as the effective reduction of

greenhouse gas emissions. This distinction has a direct impact on compliance assessment because obligations of conduct are more flexible, whereas obligations of result require objective demonstration (Viñuales, 2018).

Another relevant aspect is the distinction between legally binding norms and soft-law norms. While international treaties and conventions impose mandatory legal obligations, instruments such as declarations, resolutions, and action plans operate as persuasive policy guidelines. Although soft law lacks coercive force, it plays an important role in consolidating normative expectations and preparing the ground for future, more stringent obligations. Normative evolution in the environmental field often occurs precisely through the gradual transformation of soft-law norms into binding rules (Shaw, 2011).

However, the effectiveness of international obligations depends on how they are implemented and monitored. Some regimes include enforcement mechanisms, such as mandatory reporting, peer-review systems, or even economic sanctions. In International Environmental Law, however, the prevailing pattern has been voluntary commitments and mechanisms of political pressure rather than robust coercive instruments. This weakens the system's effectiveness by allowing States to fail to comply with their obligations without significant legal consequences (Bodansky, 2010).

This reality reveals the challenge of balancing national sovereignty with global collective interests. Voluntary compliance, although relevant, has not proven sufficient to contain the escalating climate crisis. The absence of stronger legal enforcement undermines the legitimacy of the international regime because the effectiveness of its norms comes to depend on the good faith of States. Accordingly, discussing state obligations in environmental matters also requires reflection on how international accountability mechanisms can be strengthened (Sands, 2003).

Although soft-law norms are not legally binding, their influence on the shaping of public policy is evident. Documents such as Agenda 21 and the 1992 Rio Declaration, despite being nonbinding, inspired legislative reforms and the creation of environmental programs in different countries. In addition, these instruments serve as interpretive guides for international courts and constitutional tribunals, consolidating standards of conduct expected of States. Soft law therefore plays a strategic role by establishing normative consensus and strengthening a culture of international cooperation (Shaw, 2011).

Finally, it is important to emphasize that the implementation of environmental obligations faces serious challenges related to state sovereignty. Many countries resist international monitoring mechanisms because they regard such instruments as interference in their domestic affairs. This tension between sovereignty and global cooperation makes it difficult to create more stringent oversight systems. Nevertheless, the severity of the climate crisis requires a reconfiguration of this balance so that sovereignty does not become a shield for environmental inaction. The effectiveness of International Environmental Law will increasingly depend on States' willingness to accept robust accountability and transparency mechanisms (Sands, 2003; Viñuales, 2018).

2.3 The Paris Agreement and Its Legal Architecture

The Paris Agreement, concluded in 2015, represents one of the most significant milestones in the trajectory of International Environmental Law. Unlike previous instruments such as the Kyoto Protocol, the Agreement is

structured around nationally determined contributions (NDCs), which allow each State to define its own emissions-reduction targets. This flexibility was essential to ensuring broad participation, although, on the other hand, it reduced the degree of binding force with respect to actual results (Bodansky, 2010).

The legal architecture of the Paris Agreement combines elements of soft law and hard law. While participation in the Agreement and the submission of NDCs are legally binding, the specific content of the targets remains at the discretion of each State. This structure seeks to balance sovereignty and international cooperation by creating a dynamic and adaptable regime. In addition, the Agreement provides mechanisms for periodic updates to targets, requiring States to present progressively greater advances over time (Viñuales, 2018).

Another central element is the transparency framework, which establishes an obligation to report standardized information on emissions and climate policies. This mechanism seeks to build mutual trust among States and enable collective monitoring of global progress. Although it does not provide for formal sanctions in cases of noncompliance, public disclosure of the reports functions as a mechanism of political pressure, encouraging stronger commitment (Viola, Franchini & Ribeiro, 2013).

The Paris Agreement also provides for financing and technical-support instruments, recognizing that developing countries require additional resources to implement their targets. Climate-finance mechanisms seek to reduce structural inequalities by strengthening adaptation and mitigation capacity in more vulnerable regions. The Paris Agreement therefore represents significant progress, but its effectiveness depends on genuine cooperation among States and on reconciling voluntary commitments with the urgency of the climate crisis (IPCC, 2021).

Another notable feature of the Paris Agreement is the creation of an implementation and compliance mechanism designed to assess fulfillment of the obligations assumed by States. Although this mechanism is not punitive in nature, its function is to promote transparency, identify gaps, and encourage greater climate ambition. The logic underlying this institutional design is to prioritize cooperation and mutual trust rather than rely on coercive sanctions that could undermine participation in the regime. Accordingly, the Agreement seeks to create an environment in which political and diplomatic engagement serve as the principal tools of pressure encouraging States to advance toward their targets (Shaw, 2011).

In addition, the Paris Agreement establishes a permanent global review process, known as the Global Stocktake, which takes place every five years. This process consists of collectively assessing progress in mitigation, adaptation, and climate finance, serving as a starting point for updating NDCs. The cyclical nature of this mechanism seeks to prevent backsliding and encourage continuous progress by aligning state action with the objectives of limiting the increase in average global temperature to well below 2 °C and preferably to 1.5 °C above pre-industrial levels. Thus, the legal architecture of the Paris Agreement combines flexibility with political pressure in an attempt to overcome the traditional dichotomy between sovereignty and global environmental governance (UNFCCC, 2015).

2.4 Legal and Institutional Limits of Climate Responsibility

Despite normative advances, international climate responsibility faces significant limitations. The absence of robust coercive sanctions means that many States do not fully meet their targets without incurring direct legal

consequences. This characteristic demonstrates the structural fragility of International Environmental Law, which still depends predominantly on mechanisms of persuasion and voluntary cooperation rather than effective enforcement instruments (Sands, 2003).

The justiciability of environmental norms also presents a challenge. Although some constitutional courts and regional tribunals have recognized climate protection as part of fundamental rights, the application of International Environmental Law in judicial fora remains limited. The International Court of Justice, for example, has acted cautiously, recognizing general principles while avoiding the imposition of direct sanctions on States that fail to comply with their obligations (Shaw, 2011).

In this context, the role of national constitutional courts has gained prominence. Several recent decisions have recognized the duty of States to protect the climate as an integral component of human rights, increasing domestic pressure for more ambitious environmental policies. This interaction between domestic law and international law strengthens the climate regime, but still encounters political and institutional resistance, particularly in countries whose economies depend heavily on carbon-intensive activities (Viñuales, 2018).

Future prospects point to the need to consolidate more stringent binding environmental norms capable of imposing concrete obligations and sanctions in cases of noncompliance. For this to occur, however, the relationship between state sovereignty and global governance will have to be reconsidered. Strengthening multilateral institutions, together with the advancement of international jurisprudence and the engagement of civil society, may create the conditions necessary to overcome current limitations of climate responsibility and make International Environmental Law more effective (Kiss & Shelton, 2007).

Another factor limiting international accountability in climate matters is the absence of consensus among States concerning the creation of an international environmental court with broad jurisdictional powers. Although the idea has already been discussed in multilateral fora, resistance from developed and emerging countries prevents its realization. This resistance stems from concerns about relinquishing significant elements of sovereignty, as well as fears of substantial financial liability. Until a specialized tribunal or stronger binding mechanisms are established, climate accountability will remain fragmented and dependent on regional arrangements and external political pressure (Bodansky, 2010).

In addition, the asymmetry of power among States constitutes an obstacle to consolidating an equitable accountability regime. Developing countries frequently argue that climate rules reflect the interests of major powers without adequately accounting for historical inequalities in industrialization. This imbalance generates distrust and undermines international cooperation, weakening the universal character of environmental norms. Overcoming this challenge will require strengthening the notion of climate justice and ensuring that the costs and benefits of global action are distributed more equitably. Only then can international climate responsibility evolve toward greater legitimacy and effectiveness (Viola, Franchini & Ribeiro, 2013).

3. METHODOLOGY

This study adopts a qualitative approach aimed at interpreting legal and political phenomena related to climate change from a critical-reflective perspective. This methodological choice is justified by the complex and

multidimensional nature of the subject, which involves the intersection of international legal norms, political commitments, and concrete socio-environmental impacts. Qualitative research therefore makes it possible to understand not only the text of treaties but also the context of their application and the practical limitations affecting their effectiveness.

The legal-dogmatic method, traditionally employed in legal scholarship, was adopted because it makes it possible to examine the normative structure of International Environmental Law and its repercussions for state obligations. The dogmatic method enables the identification of legal principles, rules, and categories that guide the interpretation and application of climate treaties, providing a basis for understanding their internal coherence and how they fit within the international system.

With respect to documentary sources, the study analyzes international treaties such as the United Nations Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement. Opinions and reports issued by multilateral bodies are also examined, particularly UNFCCC documents and reports of the Intergovernmental Panel on Climate Change, which provide the scientific basis indispensable for legitimizing legal commitments and guiding global environmental policies.

International jurisprudence constitutes another relevant methodological axis. Decisions of the International Court of Justice were considered, as were pronouncements by regional and constitutional courts that have recognized state obligations in environmental and climate matters. These decisions reveal the growing judicialization of environmental protection at the international level and demonstrate how courts contribute to strengthening the justiciability of environmental norms.

In addition to normative and jurisprudential sources, the methodology includes a comprehensive literature review on International Environmental Law and global climate change. Classical and contemporary works were consulted, addressing subjects ranging from the foundations of the international environmental regime to the challenges of implementing commitments assumed by States. This review made it possible to situate the debate within a broader historical and theoretical framework by articulating different analytical perspectives.

Methodological triangulation among documentary, jurisprudential, and bibliographic analysis provided greater robustness to the study and avoided conclusions based on a single dimension. This combination ensures that the considerations presented are not limited to isolated normative interpretations but also reflect the practical limitations of implementing international environmental obligations. The research thus remains faithful to its objective of critically evaluating the effectiveness of International Law in the face of the contemporary climate crisis.

4. RESULTS AND DISCUSSION

4.1. The Consolidation of International Environmental Law

Examination of international normative sources demonstrates that, since the Stockholm Conference (1972), there has been a progressive movement toward consolidating International Environmental Law as an autonomous branch of law. The establishment of foundational principles, such as precaution and prevention, was

fundamental to setting parameters that extend beyond the mere political will of States and have acquired binding force in various contexts.

This consolidation is evidenced by the multiplicity of multilateral environmental treaties and the growing inclusion of the climate dimension in sustainable-development agendas (Sands, 2003). However, critical analysis reveals that, although treaties have proliferated, their practical implementation remains uneven, reflecting the persistent tension between sovereignty and international cooperation (Shaw, 2011).

4.2. Differentiated Obligations and Global Asymmetries

The results also indicate that the effectiveness of international environmental norms is directly related to the principle of common but differentiated responsibilities, enshrined in the Rio Declaration (1992) and reaffirmed in the Paris Agreement (2015). This principle recognizes that all States bear responsibility for mitigating the climate crisis, but to different degrees according to their economic capacities and historical greenhouse gas emissions (Bodansky, 2010).

Documentary analysis demonstrates that this differentiation is a source of intense legal and political disputes, particularly between developed and developing countries. While the former seek mechanisms that provide greater flexibility in fulfilling their obligations, the latter demand greater financial and technological support to meet their climate commitments (Viñuales, 2018).

4.3. The Paris Agreement and Implementation Mechanisms

The study of the Paris Agreement's normative architecture reveals both advances and limitations in international climate governance. On the one hand, nationally determined contributions (NDCs) provide States with greater flexibility by respecting their domestic circumstances. On the other hand, the absence of coercive sanctions for failure to meet targets reduces the treaty's binding force, shifting the burden of effectiveness to transparency mechanisms, periodic reviews, and pressure from international public opinion (IPCC, 2021).

The technical reports and UNFCCC opinions analyzed demonstrate that many countries have not yet aligned their targets with the objective of limiting temperature rise to 1.5°C, revealing the weakness of current enforcement mechanisms (UNFCCC, 2020).

4.4. Justiciability and Future Prospects

Another relevant point discussed in the research is the growing judicialization of the climate agenda. Cases brought before international and constitutional courts, such as the proceedings decided by the Supreme Court of the Netherlands (the Urgenda case) and the recent advisory opinions requested from the International Court of Justice, illustrate the judiciary's growing role in defining state obligations in climate matters (Sands, 2003; Shaw, 2011).

Nevertheless, significant limits remain regarding the justiciability of these norms, given the absence of an international environmental court with universal jurisdiction. Future prospects point to the need for institutional strengthening and the creation of more robust legal mechanisms capable of giving greater effect to international

climate obligations. In this regard, global cooperation and the incorporation of international norms into domestic legal systems emerge as indispensable paths for addressing the climate challenge in the twenty-first century (Bodansky, 2010).

5. FINAL CONSIDERATIONS

The analysis conducted in this article demonstrated that International Environmental Law has played a central role in structuring global legal responses to the climate crisis. From the earliest normative milestones to the Paris Agreement, there has been a progressive expansion in the scope and complexity of state obligations. Nevertheless, a significant gap persists between the formulation of norms and their effective implementation, reinforcing the need for greater political and legal commitment by States.

It was also found that the asymmetry between developed and developing countries constitutes one of the greatest challenges to the effectiveness of international environmental norms. The principle of common but differentiated responsibilities, although it represents a fundamental legal advance, has proven insufficient in the face of structural inequalities that affect States' capacity to fulfill climate obligations. In this context, international cooperation, accompanied by financing and technology-transfer mechanisms, emerges as an indispensable condition for achieving global environmental objectives.

Another relevant aspect discussed was the normative architecture of the Paris Agreement, which, by prioritizing nationally determined contributions, reinforces flexibility but weakens the coercive force of the international regime. The absence of binding sanctions jeopardizes the treaty's credibility and compromises the goal of limiting global warming to 1.5°C, as indicated by IPCC reports. This normative fragility demonstrates that the effectiveness of international obligations depends to a considerable extent on social pressure, environmental diplomacy, and the growing judicialization of the issue.

Finally, it was found that the judicialization of climate issues has gained prominence and represents a promising tool for strengthening the justiciability of environmental norms. However, the absence of an international environmental tribunal with broad jurisdiction remains a significant gap in the global legal system. In this context, institutional strengthening and harmonization between international norms and domestic legislation constitute essential paths toward ensuring greater effectiveness of state obligations in the face of the climate crisis.

It is therefore concluded that International Environmental Law is undergoing a process of maturation, with significant advances as well as structural limitations that must be overcome. The consolidation of more robust monitoring, accountability, and enforcement mechanisms, together with stronger international cooperation, will be decisive in ensuring that environmental commitments transcend the normative sphere and are converted into concrete results for the protection of the climate and life on the planet.

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