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The Effectiveness of Global Enforcement Mechanisms in International Environmental Law in Protecting the Environment

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Abstract:

International law is a potential mechanism for addressing the adverse impacts associated with natural resources consumption and pollution resulting from human activities .

Currently, there are lots of international environmental agreements and rules which govern different aspect of our environment. However such international environmental rules are ineffective due to different challenges and factors that affect its effectiveness. One of the main challenges is the lack of effective enforcement mechanisms which make it unable to implement these rules .

This research aims to analytically study the main factors and challenges that affect the effectiveness of the current enforcement mechanisms of international environmental law.

This paper showed how inadequate implementation mechanisms can impede the enforcement and effectiveness of international environmental law, resulting in environmental degradation, and difficulties in achieving the goals of the environmental agreements. The analytical study gives an in-depth idea on the reasons affecting the effectiveness of these rules and causing a lack of implementation across different environmental areas.

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فعالية آليات الإنفاذ العالمية في القانون البيئي الدولي في حماية البيئة

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المستخلص

ويعد القانون الدولي آلية محتملة لمعالجة الآثار السلبية المرتبطة باستهلاك الموارد الطبيعية والتلوث الناتج عن الأنشطة البشرية

يوجد حاليًا الكثير من الاتفاقيات والقواعد البيئية الدولية التي تحكم جوانب مختلفة من بيئتنا. ومع ذلك، فإن هذه القواعد البيئية الدولية غير فعالة بسبب التحديات والعوامل المختلفة التي تؤثر على فعاليتها. أحد التحديات الرئيسية هو الافتقار إلى آليات التنفيذ الفعالة مما يجعلها غير قادرة على تنفيذ هذه القواعد. يهدف هذا البحث إلى دراسة العوامل والتحديات الرئيسية التي تؤثر على فعالية آليات التنفيذ الحالية للقانون البيئي الدولي

أظهرت هذه الورقة كيف يمكن لآليات التنفيذ غير الكافية أن تعيق إنفاذ وفعالية القانون البيئي الدولي، مما يؤدي إلى تدهور البيئة وصعوبة تحقيق أهداف الاتفاقيات البيئية. تقدم الدراسة التحليلية فكرة متعمقة عن الأسباب التي تؤثر على فعالية هذه القواعد وتتسبب في نقص التنفيذ في مختلف المجالات البيئية

الكلمات المفتاحية: البيئة، التنفيذ، الفعالية، التحديات، الكفاءة.

Introduction

The exploration of global environmental challenges is a recent study, yet it has gained significant interest owing to the seriousness of environmental crises (Yu, 2022). Environmental issues such as international resource consumption and different types of pollution have emerged as prominent focal points in the realm of international relations.

International law is a potential mechanism for addressing the adverse impacts associated with natural resources consumption and pollution resulting from human activities. However, the implementation and enforcement of international environmental rules have faced lots of challenges affecting their adequacy and

effectiveness. This article aims to articulate the effectiveness of international environmental law in addressing global environmental issues from a comprehensive perspective that mainly focuses on analyzing the main factors and reasons that affect the adequacy, and enforcement of these rules. This article contends that the existing international law is necessary, but not sufficient for solving global environmental problems. This research is considered a novelty in the area of environmental studies. It includes analytical discussion using international courts' rulings, and opinions of the pioneer professionals and academics in the field.

An analytical and critical method has been to scrutinize the main gaps that make international environmental law ineffective in terms of its enforcement and implementation. For this purpose, the author will use primary data and secondary data. For the primary data, the researcher has used legal text and case law to provide an analytical discussion of the law provisions and courts' decisions. Moreover, to provide deep critical points of view from different perspectives, this research has used academic books, journals, and reliable websites. to articulate the effectiveness of international environmental law.

This paper will answer the following research questions: how effective is the international environmental law in addressing global environmental problems, and what are the main challenges and reasons that affect the adequacy, and enforcement of international environmental rules?

To provide a comprehensive answer, the first section will cover the conceptual framework that is related to the international environment. To pave the way for studying the main challenges facing the effectiveness of international environmental law, the researcher will examine the main sources of international environmental law. Then, scrutinizing and analyzing the effectiveness of international

environmental law, and the main factors affecting this effectiveness will be discussed from an analytical and critical perspective. Finally, this piece of research will include a general conclusion encompassing the main research findings, and a list of recommendations.

I. The Conceptual Frameworks

I.A. The Concept of Environmental Law

Generally, the term "environment" stems from the French word "Environia," meaning "to surround." Basically, the environment encompasses physical components such as land, water, and air. Therefore, laws and regulations are put in place to protect the environment for the well-being of current and future generations and to prevent potential catastrophes(1).

Environmental laws are formed to conserve and protect the environment(2). It encompasses a range of legal collections, including laws, rules, regulations, conventions, agreements, and common law principles that govern human interactions with the environment(3). Environmental law is commonly viewed as the body of laws that focuses on safeguarding and protecting living organisms, including humans, from harms resulting from human activities, whether directly or indirectly. The environmental law includes some principles that aim at providing the planet protection such as Transboundary responsibility, Sustainable development, equity, public participation and transparency, precautionary principles, Prevention and Polluter pays principle.

(1) For further details on the meaning of the environment, see the website of Law & Bhoomoi: https://lawbhoomi.com/introduction-to-environment-and-environmental-law/ accessible on 20-01-2024.

(2) Sands, Philippe. Principles of International Environmental Law. Cambridge University Press. 2nd Edition. 2003. PP. 13-14.

(3) Morales, Michael. What is Environmental Law? The website of the Legal Research Bath. Available on: https://legalcareerpath.com/what-is-environmental-law/ . Retrieved on 28-06- 2023.

In recent days, some discussions regarding the issues of necessity, fairness, and cost of environmental regulations as well as the suitability of regulations versus market-based solutions have been raised and are a source of ongoing debate.

The former Senator and Earth Day founder Gaylord Nelson's asserted that "the economy is a wholly-owned subsidiary of the environment, not the other way around[1]." Moreover, many views environmental issues as having an ethical or moral dimension that transcends financial considerations. So, the value of environmental elements such as clean air, sea, a healthy ecosystem, and species diversity is not quantified.

While affected industries and large companies often stir controversy by opposing environmental rules and regulations, many environmentalists, civil actors, and public interest groups, see that existing laws are insufficient and advocate for adopting stronger and stricter protections[2]. By contrast, the fairness of environmental laws to all regulated stakeholders has been a source of debate as well. Researchers Preston Teeter and Jorgen Sandberg argued that smaller companies often incur disproportionately higher costs due to environmental regulations. This can create additional barriers to entry

(1) In other words, all business relies on nature and owes its existence to the natural environment. See the website of Major Sustainability. https://majorsustainability.smeal.psu.edu/concepts/enterprise-risk-management-concepts/climateandnaturerisk/#:~:text=Wisconsin%20Senator%20Gaylord%20Nelson%20who,existence%20to%20the%20natural%20environment. Accessed on 12-01-2024.

(2) Hiss, Tony. Can the World Really Set Aside Half of the Planet for Wildlife? Smithsonian Magazine. Available on: https://www.smithsonianmag.com/science-nature/can-world-really-set-aside-half-planet-wildlife-180952379/ accessed on 12-01-2024.

for new firms, and startup companies, thereby restricting competition and stifling innovation[1].

After studying the conceptual frameworks regarding the environment and its international dimensions from legal perspectives. The sources of international environmental law will be discussed as well in the next section. The study of such sources is very important and required to highlight the main gaps including in the international laws structure that affects the effectiveness of international environmental rules.

I. B. Concept of International Environmental Law:

The concept of international environmental law has been widely used by different agreements and bodies. Article XII of the 1839 Treaty of Separation and Article IV of the Iron Rhine Treaty mentioned international environmental law as the rules relevant to the relations between the Parties. In the same sense, Article 31, paragraph 3, subparagraph (c) of the Vienna Convention on the Law of Treaties makes a reference to "any relevant rules of international law applicable in the relations between the parties". In the Lac Lanoux arbitral award, delivered on 16 November 1957 which resolved the case between France and Spain regarding the use of the waters of Lac Lanoux. The tribunal used a broad concept of the environment which includes air, water, land, flora and fauna, natural ecosystems and sites, human health and safety, and climate. When defining international environmental law the tribunal argued that the international environmental law may include principles, rules whatever their current status which is related

(1) Preston, Teeter & Sandberg, Jorgen. Constraining or Enabling Green Capability Development? How Policy Uncertainty Affects Organizational Responses to Flexible Environmental Regulations. British Journal of Management. Volume28, Issue4. 2016. P. 471. 649-665.

to conservation, preservation, management, notions of prevention and of sustainable development, and protection for future generations(1).

Some scholars argue that international law is not a unique law which is solely derived from environmental principles. Instead, environmental issues should be governed by principles, and sources of general international law(2).

International environmental law is an important integral part of international law as a whole, rather than an isolated rule. The issue with strictly emphasizing on general international law that prioritizes the unrestricted freedom of states, and has been formulated from perspectives not specifically focused on environmental concerns(3).

As environmental concerns have gained significance, it has become an essential need to establish and develop a specific body of law aimed at conserving and protecting the environment. Additionally, international environmental law includes some relevant aspects of private international law and, in some instances, has local roots which are extensively driven from domestic law. Therefore, the current contemporary international environmental law necessitates encompasses this evolving body of specifically environmental law and the application of general international law to environmental

(1) For further information see the report oF INTERNATIONAL ARBITRAL AWARDS (2005). Para 58. P. 66. It is available https://legal.un.org/riaa/cases/vol_XXVII/35-125.pdf . Retrieved on 12-11-2024. For further details see the Gabčíkovo VS Nagymaros Case, ICJ Reports (1997) 7, paras 92, 104, 141 Iron Rhine Arbitration, PCA (2005) paras 58, 222–3. It is available on: https://www.icj-cij.org/node/103193 . Retrieved on 12-11-2024.

(2) Crawford, James (2019). Brownlie's Principles of Public International Law (2019). (9th Edition). Oxford Public International Law. 9th edition. P. 35.

(3) SCHNEIDER, JAN. World Public Order of the Environment: Towards an International Ecological Law and Organization. University of Toronto Press, 1979. P. 30. Also available on: http://www.jstor.org/stable/10.3138/j.ctvfrxc62. Accessed 6 June 2024.

challenges. In this way, the concept of 'international environmental law' is used to refer to the entire body of international law, both public and private branches which pertains to environmental issues. This will be analogous to some other laws which are globally accepted like 'Law of the Sea,' 'Human Right Law,' 'Sustainable Development Law,' 'Natural Resources Law,' 'International Criminal Law,' and so on.

In somehow, all of the above-mentioned laws are interlinked with international environmental law in one way or another. For instance, much of contemporary international environmental law focuses on climate change, sustainable and equal use of fresh water, fisheries, forests, Sea, endangered species, Fauna and Flora, and biological diversity. This can be viewed as natural resources law, climate change Law from another perspective, or perhaps elements of the law of sustainable development.

The way of interconnection with other international law branches is so clear when using dispute settlements. When an international environmental problem is involved, the resolution of such a problem, regardless of its type, requires the application of international law as a whole[(1)]. Much of international law fields have an environmental dimension. In practice, when addressing and resolving a dispute related to international environmental problems, various fields of law could be involved.

The most obvious overlap is between international environmental law and sustainable development. There was a clear lack of distinction between them, especially with regard to the issue of which one is more comprehensive and includes the other until the Rio Conference came and stipulated the necessity of continuing to develop

(1) Dupuy, Pierre Marie. L'affaire des essais nucleaires francais et le contentieux de la responsabilite internationale publique. German Yearbook of International Law, (1977). PP. 375-404.

international law in the field of sustainable development(1). The UN Environment Programme endorsed a clearer approach in its 1997 Nairobi Declaration(2), which refers to 'international environmental law aiming at sustainable development. Despite the similarities and great overlap between these two laws, there is a noticeable difference in goals.

Certainly, sustainable development emphasizes more on economic development than environmental protection However, in certain instances, international law might reflect environmental priorities that take precedence over or supersede development, even if it is sustainable. The concept of sustainable development is defined as a strategy that aims to t meets the needs of the present without compromising the ability of future generations to meet their own needs[3]. According to the report of Report of the World Commission

(1) Principle 27 of the Rio Declaration stated that: States and people shall co-operate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development. Also, Chapter 39 of Agenda 21 deals with International Legal Instruments and Mechanisms and is concerned with assisting States in promoting sustainable development at national and international levels through enhancing the effectiveness of such instruments and mechanisms. See the website of the UN Department of Economic and Social Affairs. Division for Sustainable Development. : https://www.un.org/esa/sustdev/sdissues/intl_law/law.htm#:~:text=Chapter%2039%20of%20Agenda%2021,of%20such%20instruments%20and%20mechanisms. Accessed on 21-11-2023.

(2) This declaration stated that: To further the development of its international environmental law aiming at sustainable development, including the development of coherent interlinkages among existing international environmental conventions. See the United Nations Environment Programme: https://www.unife.it/giurisprudenza/giurisprudenza/studiare/international_law_sustainable_development/materiale-didattico/class-11-the-international-governance-of-sustainable-development/11_Nairobi_Declaration.pdf . accessed on 23.12.2023.

(3) The report of Report of the World Commission on Environment and Development: Our Common Future. Available on: https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf retrieved on 13-06-2023.

on Environment and Development, the sustainable development contains two key concepts within it[1]:

- The concept of 'needs', in particular, the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

In some way and another, Some researchers found that international environmental law is more comprehensive than sustainable development. They emphasize on the idea that the environmental law has a comprehensive goal 'aiming at sustainable development'[2].

II. The Sources of International Environmental Law:

International environmental law which forms the backbone of the legal framework for addressing global ecological challenges derives its power from several primary and subsidiary sources.

While treaties and customary law are the main sources of international environmental law, the legal framework for environmental protection also combines a range of legally non-binding sources known as 'soft law,' which includes declarations and guidelines recognized as subsidiary sources.

II. A. The International Agreement and Treaties:

Treaties have become one of the most important sources of international law, especially after the adoption of the Stockholm

(1) Ibid.

(2) Birnie, Patricia & Boyle, Alan & Redgwell, Catherine. International law and environment. Oxford University Press. 3st edition. 2020. P. 4. Also it is available on: http://oceanlaw.ru/wp-content/uploads/2017/10/International-Law-and-the-Environment-Third-Edition-Patricia-Birnie.pdf . Accessed on 22-01-2024.

Declaration. Since this declaration to present, lots of multilateral environmental agreements (MEAs) have been notably adopted. These agreements cover a wide range of environmental issues such as climate change, biodiversity, and the regulation of hazardous wastes.

The increase and abundance of the number of international treaties in the field of environment is due to several reasons, including the novelty of the environmental challenges and the failure of international customary norms to find appropriate solutions. This required adopting new rules to address the new environmental challenges. Also, the ecological problems are characterized by cross-border dimensions. This requires cooperation and coordination among interstates constitutions. So, theoretically, adopting international agreements will be more effective in addressing environmental issues.

Moreover, during the international negotiations regarding addressing environmental challenges, we can find that developing countries are reluctant to adopt commitments and measures that may hinder their economic development. So, entering into negotiations with different Parties will make agreements the best way to raise the states' wishes and views.

The distinctive feature of the international environmental agreement is the treaty-making process which encompasses a unique model; the Convention-Protocol model. In this model, the broad principles are outlined in the framework convention, whereas a subsequent agreement called protocol will provide specific obligations and actions. This is the case of the United Nations Framework Convention on Climate Change (1992), and the Kyoto Protocol, (1997) which provides concrete rights and obligations. In theory, this approach aims to encourage states to participate and join the agreement. Such a framework convention will help parties to foster cooperation and build trust among them. In a later stage, this

cooperation will lead to establish and develop a concrete legal framework.

II. B. Customary International Law:

Customary international law is a significant source of international environmental law. Although its role in addressing environmental issues is limited due to the novelty of such emerging issues, it still has a significant role that should not be underestimated(1). Such norms and rules are so globally accepted that they bind states globally. An example of such rules is the duty to promptly warn other states about environmental hazards and damages that might affect them, as well as cooperation and prevention, and the principle of shared natural resources(2)

Given that customary international law is dynamic and constantly evolving, it could be a good way to address specific environmental problems, applied to enforce international

(1) Dupuy, Pierre-Marie. Formation of Customary International Law and General Principles. In Bodansky, Daniel & Brunnée, Jutta & Hay, Ellen. The Oxford Handbook of International Environmental Law (Oxford University Press, 2007. P. 450.

(2) Dupuy, Pierre-Marie. Overview of the Existing Customary Legal Regime Regarding International Pollution. In Magraw, Daniel-Barslow. International Law and Pollution (Philadelphia: University of Pennsylvania Press, 1991. PP. 61–89. Also, see. Pierre-Marie Dupuy, Ginevra Le Moli and Jorge E. Viñuales. Customary International Law and the Environment. University of Cambridge Press. 2018. PP.10-12. Also available on: https://www.landecon.cam.ac.uk/sites/default/files/2023-05/ceenrg_wp_19_customaryinternationallawandtheenvironment.pdf . Accessed on 08-11-2023.

Viñuales, Jorge. *The Contribution of the International Court of Justice to the Development of International Environmental Law: A Contemporary Assessment*, 32 Fordham Int'l L.J. (2008). P.232. Available at: https://ir.lawnet.fordham.edu/ilj/vol32/iss1/14 accessed on 15-01-2024.

environmental law[1]. At later stages, the customs that are globally accepted could be codified into an agreement. This is the case of the law of the sea. This will make international environmental law more dynamic and able to keep up with new challenges.

As an important source of law, international customs are well recognized by international courts and tribunals. For instance, in the Pulp Mills case (Argentina v. Uruguay 2010), the International Court of Justice acknowledged the principle of reasonable and equitable utilization as a customary norm that is internationally accepted in the context of using and conserving international watercourses[2].

Despite the significant importance of international customary law, some challenges may face their application. The evolving nature of environmental issues makes so difficult to identify the international customary norms that require two elements. The first one is state practice which refers to actual state conduct. The second one is opinio juris which refers to the belief that such states consider it as part of their legal obligations. It is very difficult to verify state practices in more than 190 countries.

(1) Viñuales, Jorge. La Protección Ambiental en el Derecho Internacional Consuetudinario . 69/2 Revista Española de Derecho Internacional. (2017). P 71. (P.71-92). Also available on: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2938473 . Accessed on 17-02-2024

(2) McIntyre, Owen. The World Court's Ongoing Contribution to International Water Law: The Pulp Mills Case between Argentina and Uruguay. Water Alternatives 4(2). (2011). P.124. PP.124-144. Also available on: https://www.water-alternatives.org/index.php/allabs/135-a4-2-2/file . accessed on 19-01-2023

II. C. General Principles of Law

General principles of law recognized by states play a crucial role in the development of international environmental law. Such principles are frequently recognized by international courts and tribunals which frequently relied on such principles when deciding international cases. However, the application of these principles by international courts in environmental law has been limited. An example of this is the Trail Smelter Arbitration (US v. Canada, 1941). In this case, the tribunal derived its decision from general principles of national law, adopted by the United States Supreme Court ruling regarding air and water pollution disputes between states. The tribunal concluded that " State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein[(1)]."

II. D. Judicial Decisions:

According to the ICJ statute, judicial decisions are regarded as 'subsidiary means for the determination of rules of law'. Generally, international law does not recognize the precedential value of decisions made by international courts and tribunals. Consequently, these decisions are not regarded as a formal source of law. Article 59 of the ICJ Statute explicitly states that the decisions of the Court have no precedential value and bind only the parties involved in the dispute[(2)].

(1) See the Reports of International Arbitral Awards. Trail smelter case (United States, Canada) 16 April 1938 and 11 March 1941 VOLUME III pp. 1905-1982. P.1965. Also available on: https://legal.un.org/riaa/cases/vol_III/1905-1982.pdf . Accessed on 19-01-2024.

(2) The decision of the Court has no binding force except between the parties and in respect of that particular case. See the official website of ICJ: https://www.icj-cij.org/statute#:~:text=Article%2059,respect%20of%20that%20particular%20case. Accessed on 20-12-2023.

However, in practice, decisions of international courts and tribunals strongly influence subsequent rulings. For instance, in the Gabcikovo-Nagymaros case (Hungary v. Slovakia, ICJ, 1997), the ICJ explicitly relied on its earlier advisory opinion in the Legality of Nuclear Weapons case (1995). The court stated that:

It is all the more important to do this because as the Court recalled in its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn" (I.C.J. Reports 1996, para. 29; see also paragraph 53 above)[(1)].

II. E. Teachings of the Most Highly Qualified Publicists

According to the ICJ statute, the teachings of the most highly qualified publicists are another 'subsidiary' source of international law. Art 31 (1) (d) Statute of the International Court of Justice provided that:

The International Court of Justice (ICJ), whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply, among other things, the teachings of the most highly qualified publicists of the various nations, as a subsidiary means for the determination of rules of law.

Although the ICJ has recognized such a role, it is rarely used by international courts and tribunals. In a survey conducted by Michael Peil, he found that only 22 out of 139 judgments and advisory opinions

(1) The judgment of ICJ in the case of CASE CONCERNING THE GABCÍKOVO-NAGYMAROS PROJECT (HUNGARY/SLOVAKIA). 1997. Para 112. See also, the official website of ICJ: https://iilj.org/wp-content/uploads/2016/08/Case-Concerning-the-Gabc%C3%ADkovo-Nagymaros-Project-Hungary-v.-Slovakia.pdf . accessed on 13-01-2024.

ICJ referred to Publicists[1]. One of these 22 cases was the case of Gabčíkovo-Nagymaros (Hungary v Slovakia, 1997) where the court relied on Draft Articles on State Responsibility adopted by the International Law Commission on first reading. Peil (2012) stated that:

where the Court quoted not less than seven times from the Articles on State Responsibility adopted after first reading by the Commission".

Although, article 38 (3) (d) we can find that the ICJ has recognized the teachings of the most highly qualified publicists as a subsidiary source of international law, however, the reference in Article 38(1)(d) of ICJ Statute to the term 'most highly qualified' has been criticized for the reason that it is problematic to establish the criteria by which we can identify who are the 'most highly qualified publicists' in the field of international law.

II.F. Soft Law:

In recent decades, more than 500 multilateral environmental agreements have been adopted. Alongside this, soft law has emerged and continued to evolve. According to Dupuy soft law is a trouble maker because it is either not yet or not only law(2). The essence of "soft" law is that it lacks legal binding force[3].

According to Chinkin Soft law instruments range from treaties, but which include only soft obligations to non-binding or voluntary resolutions and codes of conduct to statements prepared by individuals

(1) Peil, Michael. Scholarly Writings as a Source of Law: A Survey of the Use of Doctrine by the International Court of Justice. Cambridge Journal of International and Comparative Law (1)3. (2012). P.141.

(2) Pierre-Marie Dupuy. Soft Law and the International Law of the Environment. 12 MICH. J. INT'L L. (1991). P. 420. Pp. 420-435.

(3) Ibid.

in a non-governmental capacity, but which purport to lay down international principles(1).

The environment cannot be deemed entirely lawless, as traditional legal frameworks still apply, but international law may be outdated and inadequate for addressing cyber activities for various reasons. The traditional international law-making process, which is often slow, is insufficient to keep pace with the rapid growth and evolving needs of the environment. Therefore, the soft law emphasizes self-regulation, incorporating the contributions of both civil society and individuals in shaping the regulatory framework(2).

The international law making process shouldn't be restricted to just the state's legislative and regulatory measures. Instead, it should also include engaging civil organizations and institutions across all countries. Those actors could establish new rules which are characterized by their easy and quick procedures and flexibility in contrast with the national or international traditional means.

The hard law is characterized by three dimensions; obligation, precision, and delegation. Soft law as a non-binding legal framework, arises when legally binding frameworks are weakened in one or more dimensions of obligation, precision, and delegation. For instance, a treaty that lacks legally binding force is considered soft in terms of obligation. Similarly, an agreement that is formally binding but vague in content, allowing parties substantial discretion in its implementation, is soft in terms of precision. Finally, if an agreement does not delegate

(1) Chinkin, C. M. “The Challenge of Soft Law: Development and Change in International Law”, 38 International and Comparative Law Quarterly. 1989. pp. 850-866.

(2)MOHAMAD, ALBAKAJAI & JACKSON, ADAMs. Cyberspace: A Vouch for Alternative Legal Mechanisms. International Journal of Business & Cyber Security (IJBCS) Vol. 1 Issue 2016. P. 1. PP. 1-10.

authority to a third party for monitoring its implementation, it is soft in terms of delegation. Without a third-party focal point for reassessing compliance, parties can more easily justify their actions in legalistic terms with fewer consequences, whether reputational or otherwise[1].

In international law, soft law covers areas such as codes of conduct, codes of practice, Action plans (agenda 21) declarations (declaration of Stockholm), resolutions (the UDHR 1948), principles, and statements.

In terms of environmental law, lots of soft rules have been adopted and have played an important role in paving the way for creating binding rules. For instance, the 1992 Rio Declaration on Environment and Development has created a solid ground for global sustainable development. Also, the Montreal guidelines in 1985 has established new rules for protecting the marine environment from land-based activities.

III. The Main Challenges Affecting the Effectiveness of International Environmental Law and its Adequacy.

As mentioned earlier, this study will mainly focus on the main challenges facing the enforcement of international environmental law. The main reasons behind studying the issue of effectiveness aim to discuss why international environmental law fails or is inadequate to address the major global environmental issues such as climate change and pollution. Studying the effectiveness of international environmental law will require investigating the main reasons and factors affecting its adequacy, and making it invalid to address the global environmental challenges.

(1) Arif Ahmed & Md. Jahid Mustofa. Role of soft law in environmental protection: an overview. Global Journal of Politics and Law Research Vol.4, No.2, pp.1-18, March 2016. P. 2-3 Pp.1-18.

In this research, the author will mainly focus on the lack of binding instruments, implementation, and enforcement mechanisms. The reason behind studying such factors is that international environmental law is not a lawless zone. Instead, there are lots of global rules that govern the environmental issues. However, the lack of clear and binding rules, and the lack of enforcement mechanisms make such rules ineffective in most cases.

III. A. Lack of Binding International Treaties and Agreements

The fragmented characteristics of international environmental rules are often conceived as a significant element of treaty formation and the collaboration between various international protection frameworks(1) (Stranadko, 2022). However, this does not imply that greater centralization of international environmental enforcement is impossible. The effective global efforts require consistent and concerted actions in conjunction with regional and multi-level enforcement at the national level.

The proliferation of conventions and agreements under international regulation has raised concerns about the ability to comply with the obligations to meet global goals and aspirations which are often included in multilateral environmental agreements and treaties.

The existing international legal instruments are highly fragmented, that why greater efforts should be directed towards

(1) Stranadko, Nataliya. "Global climate governance: rising trend of translational cooperation. *International environmental agreements. politics, law and economics* vol. 22,4 (2022). P. 640. PP. 639-657. Also available on: https://link.springer.com/article/10.1007/s10784-022-09575-6 . Accessed on 01-10-2023.

adopting a unified global environmental treaty or even establishing a comprehensive International Environmental Code.

However, due to the impracticalities and improbabilities of adopting a unified global agreement—stemming from differences in perspectives and national interests—the disparate fields of international environmental law necessitate a different approach to enforcement. Instead of focusing on broad-based global agreements, practitioners and scholars increasingly turn to soft-law rules. These less formal enforcement tools can foster more robust cooperation among nation-states (Albakjaji et al, 2021)[(1)].

The lack of binding agreements poses a crucial challenge in enforcing international environmental law. Moreover, the structure by which international environmental agreements are formed may hinder their application effectively. Most international environmental agreements usually outline the framework agreements which are in most cases of non-binding, and non-punitive nature to attract countries to join. This will be a serious limiting factor to achieving their goals. From the practice of international relations, we can find lots of examples of the lack of binding agreements.

The Paris Agreement, while it is a crucial step in global climate efforts, is not legally binding in its entirety. It includes both binding and non-binding provisions[(2)]. The Parties to this Agreement have

(1)Mohamad Albakjaji, Jackson Adams, Hala Almahmoud, Amer Sharafaldean Al Shishan. The legal dilemma in governing the privacy right of e-commerce users: Evidence from the USA context. International Journal of Service Science, Management, Engineering, and Technology (IJSSMET) 11(4). P. 12.

(2) Bialek, D (2015). Is the Paris Agreement legally binding? Climate & Development Knowledge Network (CDKN). Available on: https://cdkn.org/story/feature-is-the-paris-agreement-legally-binding . accessed on 12-11-2023. See also, Bodansky, Danial. The Legal Character of the Paris Agreement. RECIEL 25 (2) 2016. P. 143.

limited liability for failing to fulfill their commitments. Consequently, developed countries may not provide sufficient funding for implementing mitigation and adaptation activities necessary for climate-resilient development. This poses a significant challenge for developing countries which will be in a difficult situation, and makes them unable to pursue domestic mitigation and adaptation efforts to address the adverse impacts of climate change(1).

CITES and National Legislation for Enforcement: The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) includes regulations on trade in endangered species through mandated trade restrictions outlined in its appendices. However, enforcement relies on national legislation, as highlighted in Article XIV, which states, "the provisions of this Convention shall in no way affect the right of Parties to adopt stricter domestic measures regarding the conditions for trade." This reliance on national laws limits the uniformity and efficacy of enforcement efforts against illegal wildlife trade(2).

When negotiations begin to adopt an international environmental agreement, such negotiations often face challenges and are not always successful. In most cases, the resulting agreements are not universal or binding. Such negotiations aim to encourage Parties to join such agreements and attract the maximum number of participants to sign the agreement. That is why negotiators frequently resulting in establishing minimalistic rules. In most cases, international environmental law is

(1) Khan, Munjurul-Hannan (2015). Paris Agreement – Opportunities and challenges for developing countries. Climate & Development Knowledge Network (CDKN). Available on: https://cdkn.org/story/opinion-paris-agreement-opportunities-and-challenges . accessed on 17-01-2024.

(2) For further information. See the website of CITES : https://cites.org/eng/disc/text.php

characterized by its ineffectual nature. It is often unable to produce the goals it intends to achieve[1].

In the case of biodiversity conservation, the Convention on Biological Diversity (CBD), adopted in Rio in 1992, provides only minimalistic, general, and nominal rules. Notably, it has not been ratified by the United States. The Parties have failed to adopt sufficiently specific and binding agreements to assist in curbing the ongoing loss and disappearance of species. The goals of this agreement set by states have not been met. Moreover, terrestrial and marine species and populations have been declining since 1970, a trend that continues unabated[2].

The protocol of Kyoto also illustrates this obstacle. The negotiations were so lengthy and of slow progress which took stages since 1992. Also, the process of states ratification was slow and took a very long time. In addition to the challenges of monitoring and implementation process, and the lack of commitments which are modest and unclear[3]. Despite this, the member states were unable during the negotiations to persuade USA to join the agreement, which is considered the largest source of greenhouse gases.

(1) Maljean-Dubois Sandrine. La mise en œuvre du droit international de l'environnement. The Report of Institut du Développement Durable et des Relations Internationales (IDDRI). Paris. 2003. P. 23.
(2) See: Increasing The Effectiveness. Supra n. 22.
(3) Maljean-Dubois, Sandrine & Richard, Vanessa (2004). Mechanisms for monitoring and implementation of international environmental protection agreements The Report of Institut du Développement Durable et des Relations Internationales (IDDRI). Paris. 2004. P. 15. Available on: https://shs.hal.science/halshs-00426417/document . accessed on 14-11-2023.

III. B. Inadequate Implementation Mechanisms

The loss of species and biodiversity has long been one of the main challenging issues in international environmental law. By the mid-1980s, it was conceived as one of the three main key areas of focus, alongside atmospheric issues (such as responsibility for transboundary air pollution and atmosphere protection) and oceanic concerns (including responsibility for marine pollution and protection of the marine and coastal environment). New challenging issues have emerged such as air pollution, ozone depletion, and climate change which need to be addressed globally(1).

International environmental law acts as the backbone of global ecological efforts(2), interlinking with many other international concerns such as public health, trade, and human rights. However, sustainable environmental management remains a pressing challenge for modern society. Over the past few decades, the impacts of pollution, global warming, acid rain, climate change, and the loss of species and biodiversity on a global scale have become increasingly undeniable.

Although the Industrial Revolution had a major impact on the development of humanity, this revolution along with human activities was a major source of pollution, leading to what is now considered as the most serious global environmental problem, especially for low-lying areas. Air pollution from growing traffic and industries has caused local air quality issues in several megacities. Pollutants and particulates such as NOx and SO2, emitted in these and other regions, have become significant sources of regional and global environmental challenges and directly impact public health.

(1) Yamineva. Supra n. 22.

(2) Yu, Z. Analysis of the Effectiveness of International Law in Global Environmental Relations from the Perspective of International Institutional Theory. J Environ Public Health. 2022. P. 1. (P.1-10). Also it is available on: https://www.researchgate.net/publication/363049115_Analysis_of_the_Effectiveness_of_International_Law_in_Global_Environmental_Relations_from_the_Perspective_of_International_Institutional_Theory/link/632b3b3c071ea12e364ea4da/download . accessed on 12-01-2024.

International environmental law recognizes that human activities are interconnected across borders, requiring shared understanding and collective efforts to address problems. This necessitates global cooperation, and coordination to achieve global environmental harmony. A global regulatory framework with a strong controlling authority is essential for effectively implementing and developing international environmental law. Such a regulatory framework should empower authorities to regulate, decide, direct, and enforce rules, therefore, managing, and controlling critical human affairs. However, effective execution mechanisms are required as well. These mechanisms act as policing activities, ensuring that the obligations, and duties imposed by the regulatory regime are properly managed and applied. Based on this, it is worth mentioning that while global environmental law has evolved significantly over the last few decades, the development of effective regulatory enforcement methods has lagged behind, and is ineffective, particularly regarding air pollution[(1)].

Another example is Plastic Waste Management in Southeast Asia, it is worth mentioning that despite adopting regional agreements and frameworks like the ASEAN Framework of Action on Marine Debris which aimed at tackling marine plastic pollution in Southeast Asia[(2)], effective implementation remains inadequate and poses a challenge. This inadequate enforcement is attributed to various factors such as weak waste management infrastructure, and insufficient funding. The inadequate enforcement mechanisms undermine efforts to meet targets and commitments for reducing plastic pollution.

(1) Yamineva. Supra. 22.

(2) The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN: Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam joined ASEAN on 7 January 1984, followed by Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN. See the Report of the Association of Southeast Asian Nations: https://asean.org/about-us/ accessed on 01/02/2024.

Therefore, the region continues to struggle with plastic waste leakage into the oceans, adversely affecting the marine ecosystems and biodiversity. Inadequate implementation mechanisms undermine efforts to meet targets and commitments for reducing plastic pollution(1).

The issue of inadequate implementation in international environmental agreements is attributed to many factors. Firstly, the lack of enforcement mechanism in international environmental agreements is considered one of the factors affecting the effectiveness of the implementation of the international agreements where many environmental agreements are mainly based on voluntary compliance and lack the authority to impose penalties on non-compliant parties. For example, the Protocol of Kyoto which aimed to protect the atmosphere and reduce greenhouse gas emissions, does not include strong enforcement provisions. Instead, it contains weak enforcement provisions. This undermines the overall effectiveness of the agreement(2).

(1) Lebreton et al stated that: We estimate that between 1.15 and 2.41 million tonnes of plastic waste currently enters the ocean every year from rivers, with over 74% of emissions occurring between May and October. The top 20 polluting rivers, mostly located in Asia, account for 67% of the global total. Laurent, Lebreton & Joost van, der Zwet & Jan-Willem & Damsteeg, Boyan Slat &, Anthony, Andrady & Julia, Reisser. River plastic emissions to the world's oceans. Nature Communications. (8). 2017. P. 1. (1-11). Available on: https://www.researchgate.net/publication/363049115_Analysis_of_the_Effectiveness_of_International_Law_in_Global_Environmental_Relations_from_the_Perspective_of_International_Institutional_Theory/link/632b3b3c071ea12e364ea4da/download . Accessed on 12-11-2023.

(2) Victor stated that Moreover, the Kyoto Protocol prohibits the parties from adopting a compliance mechanism that imposes “binding consequences” unless governments formally amend the Protocol. Victor, David. The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming. Princeton University Press. (2002). P.18. Available on:

Also, the weak institutional frameworks are conceived as another factor affecting the effectiveness of implementing international environmental agreements which often requires strong institutional frameworks, which are frequently lacking. The softness of norms which are characterized by vague obligations, and weak enforcement mechanisms. Also, means that most obligations are not of a self-enforcing nature which needs strong institutional frameworks to implement. Unfortunately, such institutional frameworks are unavailable in most cases.

The issue of non-compliance in international environmental agreements often stems from the interpretation of unclear rules or the vagueness of the provisions included in treaties, or from the inability of treaties to keep up with changes, such as new scientific, and technological discoveries. Young (2002) argued that the lack of coordination and issues of interplay, between the various institutions is considered one of the challenges facing the enforcement of international environmental law(1).

Additionally, the profusion of norms creates difficulties. Dubois & Richard stated that:

International environmental law, developed under urgent pressure on a case-by-case basis, lacks internal consistency and suffers from external interaction problems due to normative and institutional

https://catdir.loc.gov/catdir/samples/prin031/00051633.pdf . Retrieved on 13-10-2023.

(1)Young , Oran. Matching Institutions and Ecosystems: The Problem of Fit.” Les séminaires de l’ institut du développement durable et des relations internationals (IDDRI). 2002. PP.6-7. Available on: https://www.iddri.org/sites/default/files/import/publications/id_0202_young.pdf . accessed on 17-11-2023. Young also argued that Issues of scale arise due to variations in the evolution of systems across different spatial and temporal levels. Ibid. PP.22-23-24.

compartmentalization with other bodies of law—such as trade, investment, and human rights(1).

Insufficient Funding is the third factor that affects the effectiveness of the implementation of the environmental rules. The financial issues are considered a significant challenge to the implementation of environmental rules. In order to support the efforts of developing countries in implementing their commitments, the United Nations Framework Convention on Climate Change (UNFCCC) has created financial mechanisms, such as the Green Climate Fund (GCF). However, the lack of financial contributions from developed countries has limited the program's impact. This makes it so hard for developing countries to implement their commitments, and the important measures required to meet their obligations.

The GCF and other funds such as the World Bank's Climate Investment Funds have been criticized for many reasons. The lack of accountability to affected communities, their reliance on debt-inducing loans instead of debt-free grants, and their failure to reach the poorest populations are the main challenges facing such funds. The GCF has a great goal from a theoretical side. However, translating these principles into concrete practical action plans is a lengthy process fraught with potential pitfalls and political battles(2).

Moreover, developing countries have failed to manage the financial support provided by donors (developed countries) in particular when there is a conflict between the national priorities and the CGF priorities. Although the GCF provides all the technical and financial support needed for implementing the GCF requirements, most

(1) Maljean-Dubois, Sandrine & Richard. Supra. 28. P. 15
(2) Wu, Brandon. Where's the Money? The Elephant in the Boardroom. HuffPost. Also available on: https://www.huffpost.com/entry/wheres-the-money_b_3499523 . accessed on 15-10-2023.

developing countries find these processes too burdensome or delay access to funding.

The lack of coordination among the national stakeholders is considered one of the main hurdles facing the effectiveness of good governance in developing countries. Annaka Peterson Carvalho, Senior Program Officer, Adaptation Finance Accountability Initiative stated that(1):

The reality in some countries is that the climate change department is staffed by two people, making it really difficult for them to coordinate with 20 other ministries, civil society, and private companies.

The ineffective international organizations in running and supervising the fund is considered as a hurdle as well. Peterson Carvalho describes this situation as(2):

While there are valid concerns about the national-level systems and capacities needed to make country ownership a reality, there are equally valid concerns about the efficiency and efficacy of international organizations. But many of the GFC board members seemed to take at face value the superiority of international organizations without acknowledging their relatively high costs. I observed that they seemed to have blinders to the shortcomings and failures of these institutions.

Moreover, the lack of adequate monitoring and reporting systems is a challenge that faces the implementation of the environmental agreements. Usually, the international community adopts

(1) Peterson, Annaka-Carvalho. 3 ways country ownership is being put to the test with climate change funding. Oxfam America. 2013. Also available on: https://politicsofpoverty.oxfamamerica.org/3-ways-country-ownership-is-being-put-to-test-with-climate-change-funding/ accessed on 21-10 2023.
(2) Ibid.

environmental agreements that suffer from inadequate monitoring systems. For instance, the Paris Agreement, which builds on the UNFCCC, relies on nationally determined contributions (NDCs) to reduce emissions. The Paris Agreement, which builds on the support the efforts of developing countries in implementing their commitments, the United Nations Framework Convention on Climate Change (UNFCCC), relies on nationally determined contributions (NDCs) to meet the commitments and reduce emissions. Although the agreement includes provisions for transparency and reporting, the absence of a standardized, and unified system for measuring emissions and progress makes it challenging to ensure compliance and compare efforts across countries.

IV. **Final Conclusion**

This paper showed how inadequate implementation mechanisms can impede the enforcement and effectiveness of international environmental law, resulting in environmental degradation, and difficulties in achieving the goals of the environmental agreements. The analytical study gives an in-depth idea on the reasons affecting the effectiveness of these rules and causing a lack of implementation across different environmental areas.

Issues such as lack of enforcement, non-binding and non-punitive agreements, weak institutional frameworks and capacities, insufficient funding, and inadequate monitoring and reporting all contribute to the gap between commitments and actual outcomes. Also, the effectiveness of international environmental agreements is frequently undermined by inadequate implementation mechanisms.

Finally, in order to address these issues effectively, the following recommendations are proposed:

Addressing these challenges necessitates strengthening institutional capacities, securing sufficient financial resources, and developing robust monitoring and enforcement mechanisms. Without these improvements, international efforts to tackle environmental issues will persistently fall short of their goals.

Moreover, it is highly recommended to adopt binding and punitive agreements that help reach the target for which these agreements have been adopted.

In most cases, international environmental agreements adopt a lenient and permissive approach to attract the largest number of countries to join the agreement, which deviates them from the goal for which it was developed. Therefore, it is necessary to adopt binding agreements and texts and adopt a policy of financial incentives, especially for developing countries, to encourage countries to join the agreement.

The development of education in terms of environmental issues, awareness campaigns, school curricula, and public outreach initiatives plays a crucial role in fostering the importance of compliance with environmental laws as well as the potential consequences of non-compliance. Moreover, Due to the important role of non-state actors in developing environmental law, it could be better to involve non-state actors in the agreement-making process.

The new path for the contemporary environmental law requires enhancing integration, networking, and cooperation between governments, and community institutions beyond government, particularly with businesses and environmental NGOs. This strategy also provides more extensive coverage of environmental issues, as closer collaboration across diverse networks will create more opportunities for successful implementation and compliance.

Moreover, Such cooperation will facilitate environmental management by encouraging participation and building consensus. This includes promoting and utilizing effective ways for avoiding or swiftly resolving disputes through alternative dispute resolution mechanisms.

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