

Global Environmental Governance for Secure the Future

الحوكمة البيئية العالمية من أجل تأمين المستقبل

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Abstract :

This study delves into the challenges and opportunities in global environmental protection policy governance, a method widely recognized as the most effective for tackling 21st-century environmental issues. Central to this approach is the imperative of international cooperation, as these issues transcend national boundaries. However, this strategy is not without its share of problems that hinder its effectiveness and jeopardize its ability to meet its objectives.

key words: governance, global policy, environmental preservation, sustainable development.

الملخص:

تتناول هذه الدراسة تحديات ورهانات حوكمة السياسات العالمية لحماية البيئة ، خاصة في ظل ما تمثله الحوكمة باعتبارها الآلية الأكثر فعالية في مواجهة مختلف الاشكاليات البيئية في القرن الحادي والعشرين. يتمثل الجوهر في هذا النهج في ضرورة التعاون الدولي، حيث تتجاوز هذه القضايا الحدود الوطنية. ومع ذلك، فإن هذه الاستراتيجية ليست خالية من المشاكل التي تعوق فعاليتها وتعرض قدرتها على تحقيق أهدافها للخطر.

الكلمات المفتاحية: الكلمات المفتاحية: الحوكمة، السياسة العالمية، حماية البيئة، التنمية المستدامة

Introduction:

Over the past few years, environmental degradation has escalated into a pressing global concern, compelling activists, international institutions, and researchers to urgently address these threats. The literature unanimously calls for immediate action to achieve sustainability and mitigate the environmental repercussions that pose a real threat to human existence and the biological system on planet Earth.

It is a universally acknowledged fact that environmental degradation, primarily caused by carbon dioxide emissions, poses a severe threat to human life and the planet's ecosystem. This existential threat has elevated environmental treatments from mere policies to high-priority global concerns.

Carbon dioxide emissions have surpassed safe levels and steeply risen, especially with the ongoing technological revolution. The resulting environmental degradation has led to many issues, including poverty, overcrowding, extreme weather conditions, deforestation, loss of species, poor water quality, and growing famine. The World Bank's Environment Report 2020 estimates that this degradation cost approximately US\$8.1 trillion in 2019, equivalent to 6.1 percent of global GDP. (Azimi, 2023)

In light of this dangerous fact, this research paper attempts to address a central problem that begins with posing a leading question: How can the governance of global environmental protection policies contribute to confronting the increasing environmental threats during the twenty-first century?

This study assumes that the governance approach is the most practical mechanism to confront environmental protection problems worldwide. However, it is also the most difficult approach to achieve in the field, given the various challenges and difficulties it faces in light of the multiplicity of actors and the conflict of their narrow interests in contrast to the public interest for which the approach was called.

Methodology:

This research paper is theoretically based on the comparative approach, which is the approach widely used in political science to study political systems, institutions,

and processes across various local, regional, and international levels. The comparative approach in this context is based on data and empirical evidence related to the political phenomenon, which is collected and classified through a restricted scientific methodology that aims to develop the political understanding of the phenomena under study. (Stafford, 2013)

By relying on the comparative approach in this study, we seek to monitor and analyze various global policies for environmental protection, subjecting them to a comparison process that enables us to perceive and explain the great disparity between them.

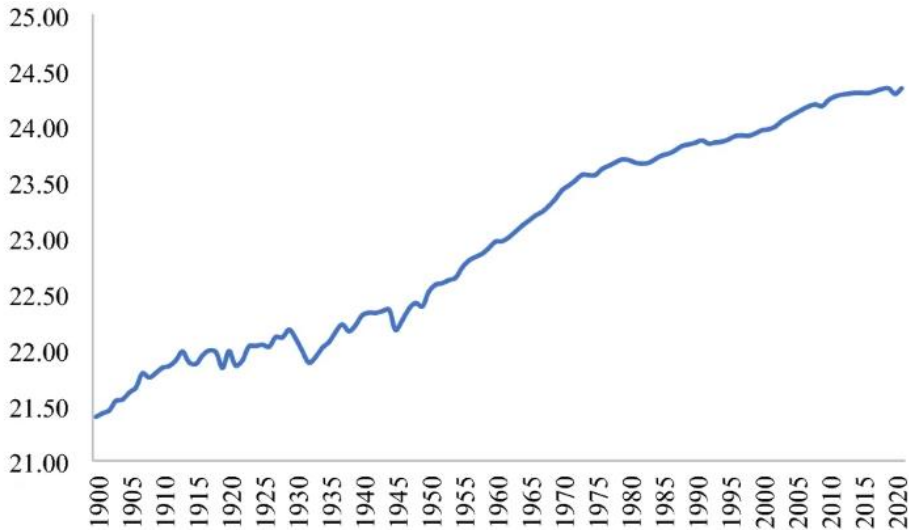
First: The state of the environment during the twenty-first century: a general introduction

The threat of environmental problems in the twenty-first century lies in their ability to change the course of life on Earth. Global warming, increasing accumulations of toxic waste, water and air pollution, acid rain, and shrinking energy supplies have become daunting challenges that may threaten the future of sustainability if the world's decision-makers do not take decisive action. (Lorey, 2002)

The increasing annual global carbon dioxide emissions have been a significant concern over the past few years, with studies and reports indicating that from 22.76 billion metric tons in 1900, carbon dioxide emissions have risen to exceed 37.12 billion metric tons in 2020. (Azimi, 2023) It also continued to increase in 2021 by 6.0% compared to 2020. (Li X, 2022) Most of these reports attribute the real causes directly to the combustion of fossil fuels and industry.

CO₂ Emissions are the amount of carbon dioxide released into the atmosphere due to various processes such as burning fossil fuels, manufacturing, energy use, and other activities. They are a major contributor to climate change and global warming and are usually measured in kilograms or tons. They are determined using data on the amount of fuel burned or processes that produce CO₂. Reducing CO₂ emissions is essential to environmental conservation and climate change efforts.

Fig.1.: Carbon Dioxide Emissions



Source: Azimi, M.N., Rahman, M.M. & Nghiem, S. Op, cit.

The global average temperature has become a standard measure of the state of the world's climate, having risen by about 0.7 degrees Celsius (1.3 degrees Fahrenheit) since the Industrial Revolution, and the trend is accelerating dramatically, with the world's average temperature rising by 2 degrees Celsius per decade. With this increasing rise, the planet is experiencing changes in local rainfall patterns, shifts in ecological zones, rising sea temperatures, and dangerous melting of the ice caps. (Human Development Report 2007/2008, 2008)

The rise in average temperatures is causing major climate changes, including melting glaciers, rising sea levels, and changes in ecosystems and even biology. Given its deadly repercussions, limiting the rise in the planet's temperature and addressing climate change are among the most important environmental challenges facing the world today.

Today's need is increasing more than ever to take adequate measures to protect and preserve the environment for future generations. This is a step that governments, societies, and companies must work together to achieve to reduce the negative impacts on the environment, which can only be achieved by adopting strict environmental policies, increasing environmental awareness among individuals,

and encouraging the use of clean and sustainable technologies in production and consumption. We must adopt a governance approach when formulating various ecological policies.

Second: Environmental governance as an effective mechanism for environmental protection

Governance is one of the most critical factors in ensuring effective environmental management and conservation measures. However, there is still a relative paucity of comprehensive and practical guidance that can be used to frame ecological management systems' assessment, design, and analysis. (Bennett, 2018)

Environmental governance helps consider the world as an interconnected whole, and its preservation is the responsibility of all. It thus has a general view of all parts of the world, its components, and structures. Moreover, it is possible to manage this interconnected whole, that is, the world, and direct it in the right direction in the hope of providing a safe and sustainable life for all the planet's inhabitants. Most importantly, environmental governance sees a close link between the environment and politics, as it determines the arrangements for the full range of processes, mechanisms, and regulatory organizations through which political actors influence environmental actions and outcomes.

It is worth noting in this context the urgent need to distinguish conceptually between governance and management, as the latter refers to the resources, plans, and actions that result from governance performance. The primary goal of environmental management, in particular, is to manage individual behaviors or collective actions to achieve public environmental benefits and related societal outcomes. (Bennett, 2018)

In the same context, the environmental governance system reflects the successes and failures of this rapid development in the global policy structure, as the tremendous collective awareness of environmental threats has contributed to the emergence of many efforts to address these threats at the worldwide level. (Adil Najam, 2006)

Therefore, it may seem useful to emphasize the role of culture and global awareness in encouraging the governance of global policies to protect the

environment. Enhancing awareness of the importance of preserving the environment motivates individuals and communities to take serious and practical measures to reduce pollution, global warming, and environmental degradation. Thanks to culture and global collective awareness, sustainable environmental practices can be promoted, and international cooperation can be enhanced to protect the environment and preserve biodiversity.

Third: Mechanisms for governing global policies for environmental protection:

Global environmental policy governance mechanisms refer to frameworks and principles that aim to guide and manage environmental affairs effectively and transparently based on principles and practices that enhance transparency, accountability, and participation in decision-making at the global level. These mechanisms include a wide range of national and international actors such as governments, international bodies, and organizations such as the United Nations, the International Monetary Fund, and the World Bank, in addition to private companies, economic institutions, and non-governmental organizations active in the field of environmental protection. All of these official and unofficial actors work to enhance international cooperation to protect the environment and achieve sustainable development.

In the "governance" literature, an increasingly important perspective focuses on the "quality of government." According to this perspective, high-quality governments are characterized by neutral, just, effective, and honest institutions that exercise governmental power, and these institutions thus constitute the "outputs" of the political system, ranging from the legal system and the police to the bureaucracy with all its public servants. (Kulin, 2019)

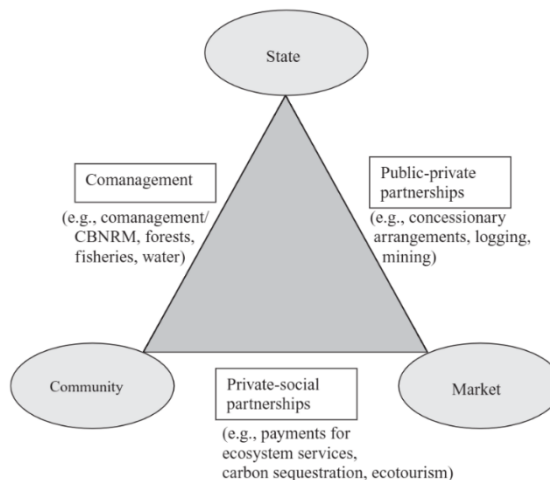
In this context, some cognitive debate appears in the literature of democratic theory about the importance of distinguishing between institutions that exercise governmental authority and other democratic institutions, such as legislative institutions. However, empirical evidence shows a weak link between the legislative authority, on the one hand, and other institutions, especially the executive ones, on the other hand, which indicates that the "quality system" constitutes a unique feature of the political system. Many recent studies have linked

the "quality system" to a wide range of desirable social and economic outcomes, such as public health, economic growth, and environmental sustainability, which has become a fundamental pillar in judging the quality of governments. (Kulin, 2019)

Unlike local governance mechanisms, global environmental policy governance operates in a complex manner through a variety of relationships and interconnections between different formal (states, governments, intergovernmental organizations) and informal (communities, the private sector, and non-governmental organizations) actors within a set of various partnerships and agreements through which the system seeks to ensure practical cooperation to manage resources and services safely and sustainably.

In this context, multi-level cooperation is an effective mechanism to ensure the broad participation of all formal and informal actors in managing environmental policies at the global level, which today constitutes an organizational challenge in managing the differences resulting from the intellectual and ideological diversity of various actors, especially those who hold many preconceived ideas.

Fig.2.: Global Policy Governance Mechanisms for Environmental Protection



Source: Maria Carmen Lemos, Arun Agrawal, "Environmental Governance," Annual Review of Environment and Resources, vol. 31, 2006, <https://doi.org/10.1146/annurev.energy.31.042605.135621>

1. Public-Private Partnerships:

Many public-private partnerships have made significant progress in activating sustainability concepts by integrating these concepts into operations, strategy, and communications. Although the private sector primarily seeks to create wealth, many leading companies have spent significant time and resources over the past two decades trying to integrate sustainability considerations into their businesses. A large group of successful companies in various business sectors has taken on more transformative sustainability initiatives, which has prompted large-scale literature to investigate the objective reasons that drive these companies to pursue sustainability initiatives, even though achieving wealth and profit is the basis of their existence and primary goal. The results were somewhat consistent, as this literature concluded that the search for improving the environmental and social performance of companies is due to a range of reasons, starting from improving efficiency and legal compliance to broader strategic concepts of competitive positioning and employment through enhancing public relations, corporate image, and community relations, and reaching the search for improving regulatory compliance and seeking to obtain a better competitive advantage that enables them to achieve their profit goals. (National Academies of Sciences, 2014)

International financial institutions such as the World Bank and the International Monetary Fund are also working to provide appropriate financial incentives for companies to engage in these partnerships by providing concessional financing and/or loan guarantees for projects focusing on sustainable growth. For example, the European Investment Bank pledged €4.7 billion in December 2020 to support clean energy and sustainable transport. Financial institutions are already leading the development of environmental, social, and governance standards and frameworks required to identify, select, and monitor sustainable projects. (PwC, 2024)

2. Co-Management:

The concept of co-management refers to cooperation and coordination between governments and non-governmental organizations to achieve environmental protection and conservation goals. This includes exchanging information, setting priorities, and implementing environmental policies and programs jointly, in addition to participating in the management of natural resources such as forests, national parks, dams, rivers, and water bodies that work to protect the environmental balance, especially in areas far from residential areas.

In this context, French law allows environmental protection associations to participate in advisory bodies to study environmental and sustainable development policies and the possibility of taking legal action, provided that these associations submit annually to the authority that granted them the license a set of documents that include a report on their activity. (Service Public)

3. Social partnerships:

The gap between civil society and the private sector often arises due to differences in priorities, goals, and operating models. While civil society organizations typically focus on social and environmental issues, advocating for the public good and holding both governments and companies accountable, the private sector, on the other hand, has traditionally aimed primarily at making a profit. However, governments are increasingly working to develop policies and regulations that align with international standards and guidelines that call for environmental protection and register it as a priority on the public policy agenda. This would encourage civil society and the private sector to come closer to each other. (Sara Ezra Teri, 2023)

Fourth: Challenges of global environmental policy governance:

Environmental protection is one of the most prominent challenges facing the world today, as the importance and necessity of developing effective environmental policies that preserve the environment and promote sustainable development increases. However, many challenges appear that hinder the process of ecological policy governance, which calls for comprehensive thinking and urgent action to address them. Perhaps the most important of these challenges are:

1. Absence of organized global authority:

The unwillingness of global actors to take collective action is the first challenge to global policy governance for environmental protection. In practice, no global authority can impose enforceable rules to change the incentives of all actors and their corresponding actions. The interests of local actors differ from those of international organizations, and there is no organized cooperative collective action except in small to medium-sized groups. The problem of free-riding remains a significant concern. Over the past decades, scholars have sought to apply

polycentric governance theory to find alternative solutions to the failure of global commons. (Puppim de Oliveira, 2023)

In this context, polycentric governance is a central tenet of the Bloomington School of Political Economy or institutional analysis, the basic idea being that many tasks must be completed if societies are to determine acceptable patterns of behavior for individuals and collective entities operating within that society. In practice, governance processes are highly complex because accomplishing all the necessary tasks requires the participation of public officials acting in their official capacity, private corporations, professional associations, nonprofit organizations, community leaders, and individual citizens. (Ostrom Workshop)

2. Knowledge gap and disparity among actors:

The limited understanding of the complex ecosystem and societal dynamics by actors is one of the most critical challenges facing global environmental policy governance. In addition to the problem of free-riding, knowledge gaps between actors with different backgrounds, expertise, and interests affect the effectiveness of collaborative environmental governance. For example, addressing long-term ecological problems, such as climate change, requires the creation of sustainable collaborative networks that include a wide range of actors with different backgrounds to maintain and develop standard norms and routine deliberations. While addressing transient environmental problems, more centralized collaborative and participatory networks with specific actors can provide rapid responses. The dynamics of collaborative governance systems need to be better understood. Therefore, there is an urgent need to unite people with different cognitive backgrounds around a single idea to find future solutions for global environmental governance. (Puppim de Oliveira, 2023)

On this basis, these knowledge gaps between actors, whether formal or informal, negatively affect the effectiveness of collaborative environmental management, or in other words, the environmental protection system, for several reasons, including:

- Working on not fully understanding environmental challenges, thus affecting the effectiveness of possible solutions after failing to arrange options and compare them, contributes to a low success rate in making sound decisions.

- This contributes to ineffective communication between actors, which hinders cooperation and coordination in implementing the required environmental measures.
- Working on creating a disparity in goals and guidelines between different actors makes it difficult to achieve the necessary consensus and cooperation to govern ecological policies in the required manner.

3. The struggle over Technology:

Technology is undergoing rapid changes that many scientists describe as an "unknown race." Innovation is essential for the environment, but we must first focus on appropriately organizing and managing environmental and health risks. For example, this change is evident in the rapid increase in patents in emerging economies. In addition, the spread of new technology has become faster than a few years ago. The mobile phone, which was invented 35 years ago, has become shorter than it was a few years ago. The CD achieved the same widespread spread in just 12 years after that, while the Internet took only seven years to accomplish the same spread or more. (European environment agency, 2016) The same observation can be generalized if we talk about artificial intelligence technology, the fifth generation, and other technologies experiencing a boom in the speed of spread.

These rapid developments open the way for major companies to compete fiercely over intellectual property and dominate global markets, leading to the consolidation of more global conflict between major companies that, in turn, work to ensure their commercial interests away from environmental calculations and their repercussions. This reality was clearly evident during the crisis between the Chinese company Huawei and the United States of America During President Trump's first term.

Conclusion:

The environmental problems facing the planet in the twenty-first century constitute a global challenge that requires international cooperation and joint efforts to address them. We must take adequate measures to enhance the sustainability of using natural resources and encourage clean and sustainable technologies that enable us to reduce the effects of all these problems and preserve the environment for current and future generations. Preserving the planet and the environment is a

shared responsibility that requires everyone to work together to ensure the sustainability of life on Earth.

To achieve this supreme goal, the issue requires adopting many effective strategies that are based on the governance approach, as it provides precise mechanisms for practical fieldwork and provides real opportunities for international cooperation in this field, as the mechanisms of governance of global environmental protection policies include a wide range of national and international actors, both official and unofficial. The work carried out by governments cannot be truly popular except through what is provided by international governmental and non-governmental organizations, in addition to civil society organizations, and this also cannot be guaranteed to succeed except after the involvement of companies and industrial economic institutions in these organized efforts.

However, despite all these international efforts provided by the governance work platform, many challenges appear that hinder the process, such as the absence of a global authority capable of imposing governance rules, especially in light of the difference in the interests of local actors from the interests of international organizations, in addition to the knowledge gap and the disparity between actors who are trying to work according to their different ideologies, rules, and systems that they find very difficult to abandon. In addition, the global conflict between major companies to own technology and dominate the market is considered a real challenge, especially in light of what the conflict constitutes regarding arranging priorities that force these companies to prioritize their interests (profitability) over public interests (environmental).

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