



Legal Frameworks For Facing Environmental Pollution Crimes: A Comparative Study Of Jordanian Legislation And International Agreements

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Abstract

The environment from a legal perspective is the natural framework that accommodates humans, animals, plants, and natural factors to preserve these organisms through a process of balance between them. Environmental pollution, originating from various sources, presents a pressing global concern with significant ramifications for ecological systems, public health, and social well-being. This study aims to provide a comprehensive analysis of how legal frameworks at the internal and external of levels address the multifaceted problem of environmental pollution. This study holds significance in a world increasingly affected by environmental degradation. By examining the legal dimensions of the problem and exploring solutions within the framework of domestic legislation and international cooperation, this research contributes to the broader efforts aimed at addressing and mitigating environmental pollution. findings from this research are provide valuable insights into the strengths and weaknesses of existing legal frameworks for environmental pollution. The discussion of findings will address the practical implications for policymakers, legal professionals, and environmental organizations.

Keywords: Environmental pollution crimes, international conventions, Environmental law, Domestic legislation.

1. Introduction

Environmental pollution is a pressing global challenge that poses significant threats to the health of our planet and its inhabitants. As the consequences of pollution become increasingly evident, the need for robust legal frameworks to address these issues has never been greater. This research, titled "Legal Frameworks for Addressing Environmental Pollution: A Comparative Analysis of Internal Legislation and International Agreements," embarks on a critical examination of the intricate web of laws and agreements designed to mitigate environmental pollution, both within individual nations and across borders. Environmental pollution has many types, like water, air, soil, and forest pollution. this problem has many major impacts

on climate change, the destruction of living organisms' habitats, the loss of biodiversity, and causes global health crises. These challenges have led countries to develop legal measures aimed at addressing pollution within their territories. International agreements and conventions have also emerged to address global environmental issues. The legal framework has also been designed to protect the environment, society and population. Environmental law is defined as a set of social behavior regulations that govern the behavior of individuals in relation to the environment. Environmental law is relatively complex, as it includes constitutional, criminal, administrative, procedural, administrative provisions and other implications of private law. Today, Our current era is characterized by the presence of many challenges, like emergencies, climate change, the outbreak of the Covid-19 epidemic, and migration, which greatly affect individuals and groups. For this reason, the processes of societal progress are referred to by the term "risk society," which is characterized by a diverse nature. It is worth noting that all natural crises and disasters It has an environmental aspect. The study aims to achieve several objectives centered around the assessment and comparison of legal frameworks addressing environmental pollution at national and international levels. Firstly, it seeks to evaluate key provisions in internal legislation governing environmental pollution in various countries, shedding light on how different nations address this issue through their domestic legal systems. Secondly, the research aims to analyze the content and effectiveness of international agreements and charters related to environmental pollution, identifying crucial principles and provisions and assessing their impact on global environmental protection. Lastly, the study aims to conduct a comparative analysis, exploring the alignment and inconsistencies between domestic laws and international agreements in addressing environmental pollution crimes. These objectives collectively aim to provide valuable insights into legal measures, fostering awareness and contributing to the protection of the environment.

The study holds significant importance in several aspects. Firstly, it provides a comprehensive understanding of how legal frameworks address environmental pollution crimes, contributing to the enhancement of these frameworks and offering insights into the effectiveness of both internal legislation and international agreements in mitigating pollution. The findings and recommendations of the study can inform policymakers and environmental organizations, guiding efforts to strengthen legal mechanisms and harmonize domestic and international initiatives. Given the critical importance of addressing environmental pollution for global sustainability and the well-being of future generations, this research has the potential to positively impact global environmental goals by suggesting improvements to legal laws. Lastly, the research contributes to academic scholarship in environmental law, policy, and international relations, serving as a valuable resource for researchers and scholars interested in the legal dimensions of environmental protection.

2.Theoretical framework

Environmental Pollution Crime study by (Noor & Muamar , 2023) The paper discusses the crime of environmental pollution in Jordanian law and international conventions, including the legal basis for penal responsibility and the penalties for committing environmental crimes. the study give Definition of environment and pollution in law and Legal basis for penal responsibility in environmental pollution crimes.

In (Trias &Urip ,2022) study which dealt with the legal protection of rivers in the perspective of sustainable development. it used normative juridical law researchand literature study . The study reached that River protection in Indonesia is weak. in addition , Concrete actions from the government are lacking.

In (Elena et al , 2022) study which related with the development of legal provision for environmental security in Russia. this study result was the Lack of unified ideas about legislation for environmental security and the Importance of improving legal provision at regional level.

The Public's Perception of the Seriousness of Environmental Crimes Related to Environmental Pollution and Illegal Waste Trade. A Case Study of the Province of Brescia, Italy (D'Alisa et al, 2022) . This study examines public perceptions of environmental crime in Italy, focusing on the region of Brescia. The study found that the public tends to view environmental crime as less important than other crimes , but this understanding varies depending on the specific crime, The study also found that the public always support the environment strict enforcement of laws on reverse effects on environmental degradation.

In a study conducted by (Elisabeth , 2020) which evaluates the effectiveness of three major pollution protocols on emissions reduction. It does not specifically discuss internal legislation or other international agreements on environmental pollution. she used Synthetic control method and Global dataset on emissions dating back to 1970 and the results were that the International pollution protocols led to emissions reduction and Results show reductions beyond counterfactual development.

Also in a study (Pierre et al, 2018) that provides information on major environmental agreements and their legal provisions, it Provides an introduction to international environmental law also Covers major environmental agreements and their provisions.

A study to (Michael , 2017) which discusses International Environmental Agreements (IEAs) as a solution to limit global pollution effects, the method of the study was stability of IEAs in a repeated game framework and Characterize necessary and sufficient conditions for stability . The results of the study reached that - Stable IEAs exist if the network structure is balanced. Large asymmetries in local spillovers may lead to non-existence of stable structures.

3.Methodology

The application of cognitive methods that is descriptive, along with methods for interpreting legal norms, are predominantly utilized. The examination of international and national legal acts serves as the basis for the analysis of issues within the environmental regulatory framework. Foreign and national research findings and summaries are incorporated into the study.

4.Result and discussion

4.1 Environmental Pollution crimes and its Harmful Features

- Environmental pollution, a pervasive and multifaceted global challenge ,that because it make a real danger crimes in the environment is a central concern in environmental studies . (Cole et al , 2011)The consequences of environmental pollution encompass a wide array of detrimental impacts on natural eco6p-systems, human health, and societal well-being.
- Air pollution mean the release of destructive materials into the Earth's atmosphere, that leading to health problems and environmental harm . these materials include nitrogen oxides, So2 , and organic components .(World Health Organization, 2016) .
- Water pollution mean to the infection of water bodies, such as rivers, lakes, and oceans, by many different pollutants like agricultural flee ,sewage ,and industrial waste . It poses a threat to human health and aquatic ecosystems .(United Nations, 2018).

- Soil pollution means the contamination of the earth's top soil, often by heavy metals, chemicals components , and risky waste. It can hit agriculture, ecosystems, and underground water quality.(Pan et el, 2017).
- Noise pollution can effect to human well-being, wildlife behavior, and overall quality of life. because of is the presence of excessive, upsetting , or hurtful noise levels in the environment. It (WHO, 2011).
- Light pollution happened when there from too much or misdirected made-up light, which can disrupt ecosystems, astronomical observations and human circadian rhythms.(Cinzano et el, 2001).
- Biodiversity Loss means that Environmental pollution can make the loss of biodiversity through habitat destruction, pollution-related deaths of species, and disruption of ecosystems.(Sala et al ,2000)
- Climate Change lead to emit of harmful gases like : CO₂ , methane, and nitrous oxide, which lead to rise the earth's temperature is a primary dimension of environmental pollution. These gases contribute to climate change. and global warming .(IPCC , 2021).

The environmental damage poses a threat to the planet. Professor Juris Bojārs highlights: "We are currently living in a world characterized by unparalleled transformations. Our increasing demand for essential resources such as raw materials, sustenance, clean water, and energy must be fulfilled. However, in doing so, we have significantly diminished our inherent ability to consistently cater to our everyday necessities. This primarily endangers the most impoverished segments of the global population. While living standards across the globe continue to ascend, they do so in an exceedingly disparate manner. around 2.7 billion individual , that means presenting about 40% of the world's citizen , endure the harmful realities of poverty and extreme deprivation, with an income less than USD 2. Moreover, an additional 850 million people frequently suffer from starvation. Nevertheless, it is imperative to ascertain that there exists sufficient sustenance for each of the 6.4 billion inhabitants of the world" (Bojārs, 2008). Human activities has evolve ecosystems in a fundamental way to fulfill the increasing order for crucial resources in everyday life, such as food , water, wood, medicinal stuff, power sources, and various others things . The phenomenon of globalization necessitates an international resolution to environmental predicaments. It is a great anger that the climate crisis could have been stop if had taken a timely measurement . each year comes without do anything, the reduction in emissions required to hold global warming within relatively safe thresholds becomes rising daunting (Timperley, 2020).

4.2 Legal structure for Environmental Protection

In the latter half of the twentieth century, the legal framework pertaining to the safeguarding of the environment has emerged as one of the most crucial domains of law enforcement across the globe. This development can be attributed to several factors such as arms races, the proliferation of weapons of mass destruction, unsustainable industrialization, the utilization of nuclear energy, the expansion of urban areas, and the application of agricultural chemicals. These aforementioned factors have collectively contributed to the rapid deterioration of the natural environment which is indispensable for sustaining human life (Bojārs, 2008).

4.3 Internal legislation governing environmental issues

it is different from country to another one , but there are common elements in many legal internal systems. here are some typical sections covered by internal environmental legislation related with the crimes of environment :

1. Agencies aims to Environmental Protection: Many countries start dedicated environmental protection agencies enforcing environmental laws and regulations and responsible for overseeing . (U.S. Environmental Protection Agency (EPA).)
2. Air Quality rule: Legislation often includes regulations for manage the air pollution, monitoring air quality and setting standards for emissions, .(United States Code, Title 42, Chapter 85 - Air Pollution Prevention and Control.)
3. Waste Management and dangerous matter : law regulates the disposal, handling, and transport of hazardous materials and solid waste that because it cause the environment crimes (Conservation and Recovery Act, 42 U.S.C. §§ 6901-6992).
4. Water Quality guideline:Means Laws related to water quality linked with pollution control, safe water, and the protect aqua ecosystems.(Clean Water Act, 33 U.S.C. §§ 1251-1387.)
5. Biodiversity Conservation and : the laws may found protected areas, prevention programs, and things to protect endangered kind .(Endangered Species Act, 16 U.S.C. §§ 1531-1544. (n.d.)) .
6. Chemical Safety and Toxic item : Laws often label the chemicals and govern the use, production, also they asses their safety.(Toxic Substances Control Act, 15 U.S.C. §§ 2601-2692. (n.d.)).
7. Environmental probe and punishments : laws typically includes providing to enforcement, penalties, and legal actions to non-compliance.(U.S. Environmental Protection Agency (EPA). (n.d.))
8. The Climate Change and Greenhouse Gas emit : In last years,there were many countries which have enacted legislation about climate change and greenhouse gas to reduce them .(U.S. Code, Title 42, Chapter 152 - Energy Independence and Security. (n.d.)).
9. The Environmental Justice: Some laws cover provisions to ensure that all communities, especially poor and minority populations, they are protected from environmental danger.(U.S. Environmental Protection Agency (EPA). (n.d.)).

Environmental laws has a historical foundation dating which back to ancient civilizations that recognizing the need for resource conservation also pollution control (Harfst, 2010). After that the Modern Environmental Movement has come , it gained momentum in the mid-20th century, it influenced the development of comprehensive environmental laws (Carson, 1962). After that there was a Founding laws: for example, The US put foundational laws during 1960s and 1970s, it was include the Clean Water Act and Clean Air Act , it established the EPA (Environmental Protection Agency) (Clean Air Act, 42 U.S.C. §§ 7401-7671q; Clean Water Act, 33 U.S.C. §§ 1251-1387).

There are many areas that show effectiveness and challenging of environmental legislation. For example, it has resulted not only in reduced pollution but also in lower emissions compared to before its implementation like the Clean Air Act that brought great reductions in air pollutants (U.S. Environmental Protection Agency, 2021). Moreover, such legal frameworks foster compliance with the existing environmental laws and enhance the capacity to prosecute pollutions (U.S. EPA, 2021). The US Endangered Species Act serves to protect endangered species in the country with an aim of ensuring sustainable ecosystems. Additionally, environmental law does not just have physical benefits but it also increased people's consciousness and willingness to fight for their environment. It gives citizens and organizations an opportunity to advocate for environmental conservation and punish involved parties (U. S. Environmental Protection Agency, 2021). The multidimensional consequences emphasize the importance of internal regulations in combatting environmental degradation for a cleaner environment and enhanced public involvement in environmental affairs. Nevertheless, such a legislative system continues facing numerous problems. These laws need to be effective in terms of how they are enforced, but issues

with monitoring and setting penalties where necessary can prevent them from being fully successful (U.S. Environmental Protection Agency, 2021). It is also worth noting that environmental problems have been so complex and intertwined that they could render statutes ineffective, causing a gap of unregulated areas hence, more needs to be done for this purpose. (Farber, 2010) Moreover, environmental challenge like global warming, and the newly emerged pollutants require adaptability in this law to be updated. (Bodansky, 2010).

To tackle transboundary environmental issues, the global cooperation is necessary, it requires the alignment of internal laws with international agreements to effectively face the environmental problems that transcend national boundaries (Bodansky, 2010). These challenges and ongoing issues underscore the need for a dynamic and responsive legal framework to effectively combat environmental pollution and sustainably manage the environment.

4.4 Jordanian legislation governing environmental issues

Jordan has laws on environmental offenses and contraventions regarding the environment protection and conservation. Below are some key laws and regulations governing environmental crimes in Jordan:

- Environmental Protection Law (Law No. 52 of 2006): The comprehensive legislation has various sections on environmental criminality. Among these are crimes involving unlawful disposal of toxic substances as well as general environmental offences.
- Law on Water Resources (Law No. 18 of 2012): The criminalisation of water offences in Jordan's Water Law deals specifically with infractions against water sources, including illegal extractions and source pollutions. They are subjected for legal claims and fines.
- Air Pollution Control Law (Law No. 6 of 2006): It also prescribes what is or is not environmental crime. Failing to adhere to pollution specifications like the ones mentioned above, may attract lawsuits.
- Law on Conservation of Biodiversity (Law No. 13 of 2006): Despite being designed mainly towards biodiversity conservation, the provisions in this law also incorporate issues concerning the protection of animals and their natural settings. Biodiversity crimes such as illegal hunting and habitat destruction attract legal sanctions.
- Forest Protection Law (Law No. 13 of 2015): The law on environmental crimes in forests and woodlands of Jordan. This entails that any crime like illegal logging and forest destruction falls in this category of punishable offences.
- Marine Environmental Protection Law (Law No. 6 of 2004): The second law relates to marine environmental crimes. Such infringement cases entail pollution of marine and coastal areas among other factors, and punishment looms for culprits." listade p. 104-105
- Regulations on Hazardous Substances and Waste Management: Managing hazardous substances and waste is regulated by Jordan in a particular manner. Breaking these rules includes illegal disposal of potentially pollutants and attracts lawsuits, fines or sanctions.

It is worthwhile to mention that although laws as well as regulations concerning environmental crimes in Jordan, the specific penalties for such crime and the extent of their application depend on various parameters such as seriousness of the crime itself, its particular conditions within a given case, etc.

4.5 international legislation that govern environmental pollution

It is a worldwide problem, as environmental pollution supersedes national boundaries. Consequently, international law has been instituted towards addressing pollution problems that transcend boundaries across various ecosystems, human health, and global welfare in general (Smith, 2020). It acknowledges that pollution consequences are not territorial, and thus it requires joint actions. These international legal instruments provide a basis for international cooperation in addressing pollution issues at the national level and preserving our planet. (Johnson, 2018).

However, it is important that several critical international agreement and convention concerning comprehensive resolution of environmental pollution be set up. These include, but are not limited to, the following:

- The Paris Agreement: This is a climate change landmark treaty with an aim lowering global temperatures and cutting emission of greenhouse gases. It is not exactly targeting pollution, but indirectly protecting the environment by minimizing emitted pollutions contributing in various forms (UNFCCC, 2015).
- The Stockholm Convention on Persistent Organic Pollutants (POPs): Persistent organic pollutants are defined under the Vienna Convention as chemicals that pose a risk for human life and the environment. This is just a sign of international effort in attempting to cut down on certain pollutants (UNEP, 2001).
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal: Basel Convention covers disposal and transportation of wastes like hazardous waste (UNEP(1989)).

4.6 Principles of International Legislation

The doctrine of sovereign equality stands for equal treatment of each nation in internationally negotiated environmental protection instruments (UN, 1945). The basic principle is to emphasize the importance of fairness and participation by considering all states as equals regardless of their size, economic strength or weight in world politics.

The precautionary principle is a very important pillar of international environmental law, encouraging to prevent action in the face of scientific uncertainty (UNEP, 1992). This theory recommends the adoption of strategies to limit environmental degradation despite the lack of conclusive scientific evidence. This reflects the global approach to environmental protection and emphasizes the need to act in anticipation of potential harm rather than waiting for irrefutable evidence that a emphasizing the environment The principle of pollution compensation is another important aspect of international law (OECD, 1972). It emphasizes the basic idea that polluters should bear the economic burden of remediation and environmental remediation. This principle reconciles economic incentives with environmental responsibility, forcing polluters to account for the true costs of their actions.

Additionally, the principle of (CBDR) Common but Differentiated Responsibilities have importance in order to face global environmental pollution (UNFCCC, 1992). It acknowledges the historical differences in how much developed and developing countries have impacted the environment. CBDR emphasizes that even though every nation has a role in protecting the environment, the level of responsibility may be vary, taking into account a country's development stage and its past contributions to environmental issues.

Essentially, this principle recognizes the importance of being adaptable and fair when tackling global environmental problems.

International environmental agreements serve as formidable instruments for fostering global cooperation in the ongoing battle against environmental pollution. Their primary strength lies in the ability to unite nations to collectively address shared environmental challenges. These agreements provide platforms for diplomatic negotiations, knowledge exchange, and capacity building, nurturing collaboration on a worldwide scale (Falkner, 2016). They advocate for a comprehensive approach to environmental protection by urging participating nations to recognize the interconnected nature of environmental issues. the United Nations Framework Convention on Climate Change For example, border the relationships between climate change and various aspects of the environment, and societies, promoting a holistic response (Bodansky, 2016). Furthermore, international agreements often establish treaty bodies and dispute resolution mechanisms, ensuring adherence to commitments and holding parties accountable. These mechanisms significantly contribute to the efficacy and legitimacy of the agreements (Voigt & Ferreira, 2017).

One controversial issue is sovereignty limits, as states generally have to give up some sovereignty in order to join these treaties. This can be a contentious issue and some countries may be prevented from joining treaties or complying with them at all (Victor, 2011). In addition, although international treaties establish rules and guidelines, some lack strong enforcement mechanisms. Moreover, notable delays can occur in implementing international agreements at the domestic level, potentially impeding efforts to address environmental pollution, particularly in situations demanding swift action (Young, 2016). In sum, international agreements offer the potential for extensive global collaboration and a comprehensive approach to solving environmental problems. Nonetheless, they also grapple with sovereignty issues, enforcement mechanisms, and the timely implementation of commitments. Achieving equilibrium between these advantages and disadvantages is pivotal to the triumph of global accords in tackling ecological contamination and other urgent worldwide concerns.

4.7 Interaction between Environmental Domestic and International Laws

Combination the international agreements with domestic legislation is a critical step in ensuring that nations harmonize their legal frameworks with global environmental standards. This procedure differs across nations and can encompass the enactment of fresh statutes, modifications to pre-existing legislation, or administrative decrees. It assumes a fundamental function in actualizing global obligations and attaining concordance between domestic and international environmental laws.

The method by which nations implement international agreements into their domestic legal systems can vary. Countries may utilize a range of mechanisms, including legislative acts, executive orders, or regulatory reforms. Often, these mechanisms must be designed to the specific requirements and obligations of the international agreement in question (Meyer, 2018). Incorporation of international agreements may involve the creation of new legal instruments at the national level. These can encompass acts of parliament, decrees, or regulations that mirror the provisions of the international agreement. The domestic legal instruments serve to make the obligations and standards of international agreements enforceable within the country (Reinisch, 2018).

Constitutional provisions can influence how international agreements are integrated into domestic law. In some countries, international convention are considered part of the national rule and hold a higher legal status. This can require additional legislative steps to amend the constitution when adopting international

agreements (Tushnet, 2020). The process of combine international agreements with domestic legislation is not without its challenges. Variations in legal traditions, legislative procedures, and political dynamics can lead to differences in implementation approaches across countries. These variations can affect the efficiency and timeliness of aligning domestic laws with international obligation (Reinisch, 2018).

4.7 Comparative between Jordanian Legislation and International Agreements

Environmental pollution is a first-rate problem going through Jordan and the sector. It could have a good sized impact on human fitness, the surroundings, and the economic system. To face this problem, Jordan has enacted a number of laws and regulations, and is also a part of to a number of international environmental agreements. This study will examine Jordanian legislation and international agreements for facing environmental pollution crimes. It will focus on the following key areas: The scope of offenses covered ,The level of penalties , The mechanisms for enforcement and Scope of offenses covered. in the Jordanian legislation and international agreements cover a wide range of environmental pollution crimes. However, there are some key differences in the scope of offenses covered. Discharging pollution into the air, water, or soil in violation of environmental regulations. secondly the International agreements , International agreements on environmental pollution crimes are generally more comprehensive than Jordanian legislation. Example, the Basel Convention at the Trans boundary Transport and Disposal of Hazardous Wastes covers dangerous waste extra than Jordanian law Furthermore, global treaties regularly provide for interstate cooperation and help to provide crimes of environmental degradation are investigated and treated Some examples of environmental pollution crimes that are included via worldwide agreements however now not by Jordanian law encompass:

- Trafficking in hazardous waste
- Pollution of the marine environment
- Trans boundary air pollution
- Pollution from ships and aircraft

Level of penalties:

The penalties for environmental pollution crimes in Jordanian law are generally less severe than the penalties that are provided for in international agreements. In the Jordanian legislation the penalties for environmental pollution crimes in Jordanian law vary depending on the severity of the offense. The greatest penalty for most environmental pollution crimes , is ten years in prison and a fine of up to 100,000 JD. in the other side in the International agreements on environmental pollution crimes often provide for more severe penalties than Jordanian law. For example, the Basel Convention provides for life imprisonment for trafficking in hazardous waste.

Examples of penalties in international treaties include:

- Life imprisonment.
- Heavy punishment.
- Closure of businesses and businesses.
- Acquisition of property.

Mechanisms for enforcement

The mechanisms for enforcing environmental pollution laws and regulations vary between Jordan and the international community. In Jordan, the Ministry of the Environment is responsible for the application of environmental laws and rules. The ministry has a number of enforcement tools at its disposal, including Inspections, Investigations, Issuing fines, Closing businesses and industries Filing and criminal charges. But in the International community agreements often establish specific mechanisms for enforcement. For example, the Basel agreement found a Compliance Committee in order to oversee the implementation of the convention. The committee can investigate claim of un-compliance and make recommendations to the sides to the convention. Additionally, many international environmental agreements provide for cooperation and assistance between countries in enforcing environmental laws and regulations. For example, the Basel Convention requires sides in order to cooperate with others in the investigation and prosecution of environmental pollution crimes.

5. Conclusion and recommendations

5.1 Conclusion

In this comprehensive study, an embarked on a meticulous examination of legal frameworks aimed at addressing the pervasive issue of environmental pollution. By conducting a comparative analysis of both internal legislation in Jordan and international agreements, we shed light on the multifaceted landscape of environmental protection. The research underscored the crucial role played by both internal legislation in Jordan and international agreements in the global fight against environmental pollution crimes. It is the interplay between these two approaches that has the potential to create a robust and adaptive framework for comprehensive environmental protection. One of the findings of our research is that the effectiveness of these legal frameworks is far from uniform and is contingent of many factors. The success of any country in reducing and preventing environmental impacts depends on the strength and rigor of its domestic laws, the effectiveness of its enforcement policies, and the political will to carry resources with environmental problems taking precedence. Jordanian legislation and international agreements for facing environmental pollution crimes are generally consistent with each other. However, there are some key variations, such as the scope of crimes enveloped and the level of punishments. Jordan is working to address these differences and to further strengthen its environmental protection laws and regulations. The government is also working to progress its execution capabilities and to collaborate more closely with other countries in the execution of environmental laws and assesses.

5.2 Recommendations

- Jordan should expand the scope of its environmental pollution laws and regulations to cover all of the offenses that are covered by international agreements, and encouraged to regularly review and update their internal legislation to remain in consonance with the latest scientific findings and global best practices.
- Jordan should increase the penalties for environmental pollution crimes to bring them into line with the penalties that are provided for in international agreements.
- Jordan should improve its enforcement capabilities by providing the Ministry of Environment with more resources and training. This involves establishing robust enforcement mechanisms, and allocating the necessary resources to regulatory agencies.
- Jordan should cooperate more closely with other countries in the investigation and prosecution of environmental pollution crimes, Active participation in international agreements and robust

collaboration with neighboring nations is paramount to effectively combatting cross-border pollution.

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