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Criminal Protection against Environmental Pollution in Omani and UAE Legislation

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Abstract

The article analyses the role of the criminal legislator in the field of environmental protection guaranteed by both Omani and UAE legislators. The problem of the study was the extent to which the Omani and UAE legislators contributed to the criminal protection of the environment. The study aimed to indicate and determine the content, elements, and penalties imposed by the Omani and UAE legislators for environmental offences. The study found several conclusions and recommendations, the most important of which being that the Omani and UAE legislature has ensured the criminal protection of the environment by criminalizing acts that pose a serious threat to one or more elements of the environment either by an explicit provision in the Penal Code or by special laws relating to the protection of the environment or within the special law on environmental protection and pollution control. The penalties prescribed for the offence of environmental pollution must be reviewed by establishing penalties for deprivation of liberty and not only a fine.

Keywords: Environment, Environmental Law, Criminal Law, Environmental Crime, Criminal Protection.

Introduction

Today's environment receives exceptional attention. In the past years, scientific advances in science and technology in most sectors, such as agriculture, transport, and the exploitation of wealth and resources, have increased the amount of waste and leftovers they pose to various species and sources. This resulting adverse and serious impacts that threaten human life and society as a result of polluting environmental resources and components (Shandab, 2019).

Whereas the philosophy of criminalization and punishment in contemporary criminal thought is no longer limited, namely, the abstract physical protection that is confined to the prevention of the material dangers of crime in its narrow sense. It is aimed at protecting the material and moral values necessary for the preservation of society and supporting its foundations to preserve its development and progress (Abdel-Aal, 2015).

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Thus, the Penal Code has become one of the most sensitive systems for responding to the requirements of social conditions. It has been aimed at contributing to the development of different conditions towards the goals of cultural and humanitarian progress in general. It has dealt with many provisions on social and economic issues and even with topics related to scientific matters, such as environmental pollution (Abdel-Hadithi, 2022).

Therefore, the Criminal Code plays an inherent role in the face of attacks against elements of the environment within the framework of its function. This includes achieving the objectives of defending the security and integrity of society and safeguarding its fundamental interests and values. The Criminal Code increases its impact on environmental protection through the authority to punish perpetrators of environmental crimes. Since combating environmental crimes requires the intervention of the Penal Code on Environmental Protection. This study was based on a major problem: what criminal protection was guaranteed by the Omani and Emirati Environmental Legislature?

The objectives of this study are to illustrate the general provisions of environmental crime and to study and analyze the role of Omani and UAE criminal legislators in the field of environmental protection.

Indeed, the importance of this study is demonstrated both in theory and in law. This article seeks to demonstrate environmental crimes, which extend to all components of life and vary to varying degrees between severity and cruelty. Their damage has become evident to the human person himself and the surrounding environment, and socio-economic terms. Such studies have become an urgent need to identify the criminal protection of the environment for human safety and environmental integrity, economic or social, not country-specific, but for the global community as a whole.

Methodology

Therefore, the best way to achieve the results and objectives of this study is to follow the descriptive approach in the acquisition of concepts and information. As well as the analytical approach in the analysis of the texts of the Omani and UAE environmental protection laws, which is discussed by comparing the texts of the Omani and Emirati Environmental Protection Laws, to draw criminal protection guaranteed by both the Omani and Emirati Environmental Legislature (Attiya, 2014).

Literature Review

The first appearance of the term environment was at the first United Nations Conference on the Environment, held in Stockholm in 1972, and it was

possible to give the term environment a holistic and modern meaning, defining the environment as "the group of natural, social and cultural systems in which man and other beings live, from which they derive their provisions, perform their activities" (Ghanaimi, 2022; Al-Billeh & Abu Issa, 2022).

The widespread use of the term "environment" in modern times has led to a divergence of global concepts of this new term, addressed by scientists and researchers in their various studies, as it relates to the life of living organisms. So, before addressing the criminal protection of the environment, it is first necessary to clarify what the environment is (Al-Zubaidi, 2014; AL-Hammouri et al., 2023a; Al-Billeh, 2023a).

In terms of its general content, the term "environment" indicates the environment in which man lives, exercises his activity, and sustains his survival. However, the development of human life in its various aspects and manifestations and the dramatic transformation of the foundations of human interaction with the environment have, in turn, given this term broad content and connotations beyond its linguistic meaning (Bamun, 2011; Al-Hammouri & Al-Billeh, 2023; Al-Billeh, 2024a).

According to the general concept, the word "environment" is defined as everything outside the human being and all other living organisms surrounding it (Al-Damiri, 2010; Al-Billeh & Al-Hammouri, 2023).

Terminologically, due to the novelty of the word "environment" and its frequent use, jurisprudence has tended to develop a concept consistent with the fact that it is a phenomenon that needs careful study that accommodates all the technological possibilities and natural phenomena surrounding it. And that the jurisprudence of the statement of the nature and elements of the environment must accommodate scientific facts relating to the field of the environment to enable it to come up with a precise and comprehensive concept of this meaning. This in turn reflects the criminal protection decided upon by the legislator (Abdel Mon'im, 2009; Al-Billeh & Abu Issa, 2023a; AL-KHALAILEH et al., 2023; Al-Khawajah et al., 2023).

The multiplicity and diversity of definitions of the environment that have been termed "environment" are noted. Because jurists disagree on the meaning of the word "environment". They are narrowly perceived as the space in which human beings engage in their various life activities and include all living organisms of flora and fauna, defined as, "the framework within which a person lives and obtains his life and has a relationship with his fellow human beings", which some also define as: "the set of physical, organic and inorganic conditions and factors that help humans and other organisms to survive and sustain life" (Amin & Budali, 2016; Al-Billeh, 2022a; AL-Hammouri et al., 2023b).

There are those who look at its broad meaning, "the medium that relates to human life and health in society, whether nature-made or man-made". It should be noted that this trend has gone to the meaning of the word "environment", not in a sense synonymous with nature. It is in an environment that adds new elements to nature from the manufacture of civilized establishments, so most jurists describe the environment not only as nature but as encompassing both natural and industrial elements (Abdul Hafiz, 2019; Al-Billeh, 2022b; AL-Hammouri et al., 2023c; Al-Billeh, 2023b).

From the previous definitions, it can be said that the definition considered the environment in its broad meaning is the most precise of the definitions and concludes that the concept of the environment includes two elements: the first is all that surrounds man by natural elements such as water, air, and soil. etc., while the second is the industrial elements that man contributed to its creation by introducing other elements such as the different forms of industries and others (Al-Assali, 2014; Al-Billeh, 2022c; Khashashneh et al., 2023; Al-Billeh & Abu Issa, 2023b).

Here the Environment can also be defined legally as well. Omani and United Arab Emirates legislators have defined the concept of the environment and have clarified elements of the environment that enjoy appropriate criminal protection (Amin & Budali, 2016; Al-Billeh, 2022d).

This definition of the environment encompasses all elements of the natural and industrial environment, the natural resources are those created by Almighty Allah, including man, an animal, plant, water, air and soil. And industrial installations established by man, through which he contributed to the formation of the environment in which he lives, whether fixed or not (Ghanaimi, 2022; Al-Billeh, 2022e).

It can also be said that the review of these definitions is aimed at demonstrating the study's purpose of establishing effective environmental protection for the conservation of humans and other living organisms, especially in the light of industrial and economic developments that often have an impact on the environment (Attiya, 2014; Alkhseilat et al., 2022).

Environment Elements

After reviewing previous definitions of jurisprudence and legislation, it is clear that the environment, in general, consists of two key elements that interact together, namely, a natural and an industrial component (Abdel-Hadithi, 2022; AL-KHAWAJAH et al., 2022).

The natural element is made up of all the resources and wealth that Allah has created in nature, as a whole constituting the necessary ingredients for the

survival and sustainability of life and varying between water, air, seas, oceans, forests, and others. These elements did not interfere with man's will to make them but rather preceded the existence of man (Abdel-Aal, 2015; Al-Billeh, 2022b; ALMANASRA et al., 2022).

The industrial component consists of man's collection of objects, systems, tools, equipment, and otherwise, in which man exploits the elements of the natural environment to take advantage of those elements in devising what is new to satisfy his needs and requirements (Shandab, 2019; Al-Billeh & Al-Qheiwi, 2023).

It is worth mentioning that the industrial environment is not only the natural environment, but the changes that man has made to it to make use of it to meet his needs and meet his requirements. However, man's misuse of these elements has resulted in many disadvantages, often in diverse forms of environmental pollution, where the changes he has introduced have affected the different elements of the environment (Ghanaimi, 2022; Alshible et al., 2023; Al-Billeh et al., 2023a).

Environmental Crime Provisions

The Criminal Code plays an inherent role in the face of attacks against environmental elements within the framework of its function, which includes achieving the objectives of defending the security and integrity of society and safeguarding its fundamental interests and values. Any approach taken by the legislature to criminalize acts that pose a risk to the environment is either explicitly advised in the Penal Code or special laws relating to the protection of the environment, or within a law dealing with environmental protection and pollution control in particular or any approach it deems appropriate (Shandab, 2019; Isa et al., 2022; Al-Billeh et al., 2023b).

All this does not preclude the arbitration of general principles established in the Criminal Code about environmental crime, taking into account certain special provisions that are compatible with their nature in terms of liability and sanction. The intent of the act or omission to pose a serious threat to an element of the environment will inevitably impose on the legislature to provide for its criminalization and appropriate punishment (Abdul Hafiz, 2019; Al-Billeh, 2024b).

Concept of Environmental Crime

Environmental crimes do not concern a single victim, but their harm goes beyond all. It has led Countries to intervene to confront them with their legislative authority and enact legal texts to criminalize them. In general, the crime means any act or omission criminalized by law and imposed a criminal penalty on the perpetrator (Al-Damiri, 2010). Accordingly, environmental crime is defined in jurisprudence by various definitions, including:

"Any unlawful positive or negative behavior, whether intentional or unintentional, by a natural or legal person who harms or attempts to harm an element of the environment, whether directly or indirectly, shall be punished by environmental law or precautionary measures" (Amin & Budali, 2016).

It can also be defined as "conduct which is contrary to the obligation of the perpetrator to be protected by the legislator by a criminal sanction, and which alters the characteristics of the environment in an administrative, direct non-administrative or indirect manner and results in damage to the elements of the environment affecting the exercise of human life" (Attiya, 2014).

Although there is a diversity of views in the definition of the environment in general, they almost agree that it is "any act that is unlawfully positive or passive by a criminal will and which is imposed by law as a criminal sanction, whether a penalty or a precautionary measure" (Al-Damiri, 2010).

Elements of Environmental Crime

Criminal conduct affecting the environment is subject to general rules of criminal liability, which require two elements: physical and mental (Abdul Hafiz, 2019).

a. The Physical Element

Article 27 of the Omani Penal Code of Royal Decree No. 7/2018 defines the material element of the offence as: "The material element of the offence consists of an activity legally criminalized by the commission of an act or omission", as defined by the UAE legislator in the Code of Offences and Penalties promulgated by Federal Law No. 36/2022 in article 32, which stipulates that: "The material element of the offence consists of a criminal activity by committing an act or omission where such commission or omission is legally criminalized."

Through the texts of the preceding articles, the material element of the offender's activity is aimed at achieving the criminal result punishable by law (Attiya, 2014).

b. Criminal Behavior

Is criminal behavior against the environment and may be positive if it arises from one or more physical movements with intent to lead to it (Ghanaimi, 2022). In the field of environmental crime, positive behavior is the intentional act of polluting and damaging the environment, such as the offshore discharge of petroleum or oil referred to by the Omani legislature in article 23 of the Environmental Protection Act: "All vessels are prohibited from discharging oil, oil

mix or any environmental contaminants in inland waters, territorial waters or the special economic zone."

Marine means carrying harmful substances transported in packaging, shipping containers, portable tanks or land or iron tank vehicles shall also be prohibited from disposal by dumping them into the country's marine environment" (Ghanaimi, 2022).

By reading the aforementioned texts on the environment, the offence of marine pollution can be characterized by negative behavior through the legislator's obligations to persons and establishments to be undertaken, specific precautions, and special technical specifications to be undertaken to prevent risks to them in the event of harm, which in turn creates protection against the effects of pollution (Shandab, 2019).

Criminal conduct may be negative and can be achieved simply by refraining from action imposed by law. In negative environmental crimes, the law does not require a criminal result but merely by refraining from a legal duty (Bamun, 2011).

c. Criminal Result

The criminal consequence is an element of the material element of the offences in general, as they result from the conduct of the perpetrator constituting this element so that an attack on the legally protected interest is the cause of criminalization and without such an assault the offence is not the object of the offence (Attiya, 2014).

For the physical element of environmental crime to be established and criminal liability to be established against the perpetrators, the legislator requires that positive or negative criminal conduct cause pollution in the surrounding environment or disturb the components of an environmental element. Not having such a consequence means that there's no crime as required by law (Al-Damiri, 2010).

It is worth noting that environmental abuse is difficult to prove, depending on the nature of these crimes and their consequences, and is different from other crimes that produce tangible results. The criminal outcome in the field of the environment may not be achieved immediately but may require a prolonged or shortened time (Abdul Hafiz, 2019).

It can be argued that most environmental legislation does not require a certain material result in environmental pollution offences, but rather criminalizes criminal conduct that is an act or omission, regardless of the outcome, and thus criminal liability is simply based on conduct that would endanger the protected interest (Ghanaimi, 2022).

Accordingly, it can be argued that the legal entity of an environmental crime is complete only by achieving the result, namely the contamination identified by the legislature in the legal texts of the crime, or that there is other environmental damage that poses a threat to living organisms or natural resources, and that by lagging that consequence the material element is incomplete (Abdul Hafiz, 2019).

d. Causality

A causal relationship is the third element of the physical element of the crime, where the link between conduct and result through attribution of the result to the act is therefore limited to material offences, i.e. the result without formal offences (Attiya, 2014).

It is the causation relationship between the act and the result that confirms that it is the act that causes the result. And sometimes there is no difficulty in the availability of causation if the offender's behavior has led to the result. However, other reasons often overlap in the creation of a criminal outcome, such as environmental crimes, where establishing a causal relationship is a delicate issue because of the specificity of such crimes and the characteristic nature of environmental damage, which is often difficult to prove for delayed appearance, preventing the result from being attributed to its source (Shandab, 2019).

Since there is no criterion or restriction defining causation in most legislation, this is left to jurisprudence and the judiciary. Therefore, as to the causal relationship in environmental crimes, the objective attribution of environmental pollution offences is suited to the appropriate cause, whether related to offences of harm, crimes of reparation at risk, or crimes of conduct and consequence, which would suffice to commit criminal conduct without depending on the actual achievement of the result (Ghanaimi, 2022).

e. The Mental Element

Of course, it is not sufficient to hold the perpetrator accountable for criminal activity and the existence of a causal link between the perpetrator's activity and the result. It must have the moral status on which he can be tried and the criminal sanction prescribed (Abdel-Hadithi, 2022).

Intentional acts or omissions are available in the direction of the offender's will to commit an act or omission whenever such commission or omission is legally criminalized, to produce a direct or other legally criminalized result that the offender has foreseen and accepted to risk. The offence is also intentional if it occurs against the person concerned. The error is available if the criminal result is caused by the fault of the perpetrator, or by the failure to observe laws or regulations" (Shandab, 2019).

It is clear from the texts of the above-mentioned articles that the mental element is criminal intent and error, the criminal intent is the perpetrator's intention and will to commit the act with knowledge of the elements of the crime, but the error may be intentional or unintentional (Al-Assali, 2014).

The mental element requires that the perpetrator be competent to assume criminal responsibility so that he or she must enjoy a well-accepted by the law and act on the physical part of the crime, that is, the will to produce the punishable outcome and the crime is then intentional and may be motivated by criminal conduct without the result being achieved and the crime is then unintentional (Shandab, 2019).

Through these texts, it is clear that the criminal intent has two elements: Knowledge and will. The perpetrator must be aware of the elements and aggravating circumstances of the crime. Other facts do not affect wrongdoing or ignorance of criminal liability. If a crime is committed against the environment in a circumstance where there is error or ignorance of an element or aggravating circumstance of the crime, he is not criminalized accordingly (Attiya, 2014).

Punishments for Environmental Crimes

The importance of the criminal legislator's role is to protect the environment from the damage it threatens by criminalizing, eliminating, and compensating, as appropriate, acts that may cause environmental disasters (Ghanaimi, 2022).

By reference to the environmental protection penalty in the laws under consideration, the Omani Environmental Law and the UAE Environment Law, it is clear that they contain the original penalties of death, imprisonment, and fine, as well as other penalties, namely dependency and supplementary (Al-Damiri, 2010).

a. Original Penalties

The original penalties are those prescribed by law for the offender and must be explicitly stipulated in the judgement, as they represent the original punishment for the offence (Shandab, 2019).

The policy of criminalization and punishment in environmental protection legislation varies from one Country to another. It is not consistent but rather differentiates according to the intellectual philosophy behind the criminalization of acts, although the elements of the environment are unchanged by time and place. This depends on each Country's approach to environmental protection (Attiya, 2014).

By reference to the laws under consideration, the original penalties for which there are either corporal punishments such as execution or deprivation of liberty, such as absolute and temporary imprisonment, or financial penalties such as a fine (Attiya, 2014).

b. Death Penalty

The death penalty means the loss of life of the convicted person. It should be noted that some legislation punishes the death penalty for anyone who deliberately causes serious damage to the environment because of the gravity of the consequences of crimes against the integrity of the environment, the effects of which not only limit people's health or lives but sometimes cause deadly environmental disasters (Abdel-Hadithi, 2022).

However, the Omani legislator has not provided for this penalty in the Environmental Protection and Pollution Control Act, contrary to the UAE legislator's Environmental Protection Act, which has recognized the death penalty for any natural or legal person who imports, fetches, buries, dumps, stores or disposes of nuclear or hazardous materials or wastes in any way in the territory of the Country (Abdel Mon'im, 2009).

c. Imprisonment Penalty

The penalty of imprisonment shall be deemed to be the absolute and temporary type of imprisonment for deprivation of liberty. The Omani legislature prescribes a single penalty of deprivation of liberty for all offences, regardless of the term of imprisonment (Bamun, 2011).

In Article 42 of the Omani Environmental Protection Act, the Omani legislature prescribes the penalty of absolute (life) imprisonment for anyone who disposes of nuclear remnants in the Omani environment by stipulating that: "Without prejudice to any heavier penalty prescribed by another law, anyone who disposes of nuclear remnants in the Omani environment shall be punished by absolute imprisonment (life) and a fine of not less than (100000) a hundred thousand Omani Riyals and not more than (1000000) million Omani Riyals or one of these penalties...".

d. Fine Penalty

It follows from the foregoing that the criminal legislator placed the penalty between minimum and upper sentences and left the judge free to judge between these two limits in the light of the gravity of the offence, and therefore the assessment of the penalty is within the court's jurisdiction under the circumstances of the offence (Ghanaimi, 2022).

e. Subsidiary and Supplementary Penalties

The recent policy of punishment requires the addition of penalties along with the original penalties that uphold the general aims of the imposition of punishment, so-called subsidiary and supplementary penalties provided for by law (Abdel-Hadithi, 2022).

f. Confiscation

Is when the ownership of a particular money is transferred to the Country and free of charge, which falls into two types: the first is general and the second is specific (Al-Zubaidi, 2014).

It is general confiscation that requires the removal of all the perpetrator's property, which is prohibited by modern laws, while specific confiscation is the place of a particular object until it is used in, prepared for use in, or related to, the offence (Shandab, 2019).

g. Close the Shop and Suspend the Activity

The closure is intended to prevent the convicted person from engaging in the same activity as he used to engage in the shop before he was sentenced to such punishment. The shops where the offence is ordered to be closed are those where the offence was committed or is intended to be committed, and after the closure of the shop, enterprise, or company and the suspension of its activity is one of the supplementary penalties (Attiya, 2014).

Publication of the Judgment

Is intended to publicize or disseminate environmental crime, to defame the perpetrator, and to warn every one of his or her actions and behavior, such punishment is of paramount importance in combating and reducing environmental crime by familiarizing the public with the offence and the offending person to prevent the commission of the crime (Al-Zubaidi, 2014).

The publication of the judgement may be ordered by the court on its initiative or at the public prosecutor's request, it is clear that the Omani and Emirati legislature did not take this penalty into the Environmental Protection Act as many other legislations did (Karim, 2023).

Conclusion

The Omani and Emirati Criminal Legislators have ensured the criminal protection of the environment by criminalizing acts that pose a serious threat to one or some elements of the environment either by an explicit provision in the Penal Code or in special laws relating to the protection of the environment, or by special law dealing with environmental protection and pollution control. In

addition, there is no definition of environmental crime in Omani and UAE legislation, as most have.

Criminal conduct affecting the environment is subject to the general rules of criminal responsibility, which require two elements: physical and mental, and the penalty in the field of environmental protection in the laws under consideration is the Omani Environmental Law and the UAE Environmental Law. The original penalties include death, imprisonment, and fine, as well as other penalties, namely subsidiary and supplementary penalties. The legislation in question predominates the penalty of a fine for other penalties to suit the nature of environmental offences. Sanctions in the UAE Environmental Protection Act are also severe compared with Oman's Environmental Protection Act.

Finally, the penalties established for the offence of environmental pollution must be reviewed by establishing penalties for deprivation of liberty and not only a fine. Because the penalty of deprivation of liberty achieves the required deterrence and protection of the environment for anyone who thinks of performing this criminal act, while the fine is not commensurate with the offence that some may tolerate depending on the amount of the fine.

References

- Abdel Mon'im, B. (2009). Administrative Legal Means of Environmental Protection in Algeria. Master's Thesis. University of Algeria bin Yusuf bin Kheda.
- Abdel-Aal, S. (2015). *Environment from the perspective of international criminal law*. Alexandria: New University House.
- Abdel-Hadithi, S. (2022). *International Legal System for Environmental Protection*. Lebanon: Halabi Rights publications.
- Abdul Hafiz, B. (2019). Criminal Protection of the Environment in National Law and International Instruments. Master's Thesis. Al-Arabi University bin Mohidi Umm al-Bawaqi.
- Al-Assali, M. (2014). Legal Protection of the Environment in Domestic Legislation. Iraq: Mosul University.
- Al-Billeh, T. (2022a). Judicial oversight on the administrative contracts in the Jordanian legislation and the comparison: the modern qualitative jurisdiction of the administrative judiciary. *Indian Journal of Law and Justice*, 13 (2), 1-28. https://ir.nbu.ac.in/handle/123456789/4763
- Al-Billeh, T. (2022b). The Correction of the Invalidity of the Civil Trials Procedures in Jordanian and Egyptian Legislation: The Modern Judicial Trends. *Kutafin Law Review*, 9 (3), 486-510. https://doi.org/10.17803/2713-0525.2022.3.21.486-510

- Al-Billeh, T. (2022c). Legal Controls of the Crime of Publishing a Program on the Internet in Jordanian Legislation. *Pakistan Journal of Criminology*, 14 (1), 1-14. http://www.pjcriminology.com/wp-content/uploads/2022/08/1.-Legal-Controls-of-the-Crime-of-Publishing-a-Program-on-the-Internet-in-Jordanian-Legislation.pdf
- Al-Billeh, T. (2022d). Freedom of Religious Belief and the Practice of Religious Rites According to the Jordanian Legislation: Difficult Balance Between International and Regional Requirements as well as the National Legislative Controls. *Balkan Social Science Review*, 20. 117-137. https://js.ugd.edu.mk/index.php/BSSR/article/view/5503/4660
- Al-Billeh, T. (2022e). The Impact of the Comprehensive Ban Due to the COVID-19 Pandemic on the Quality of Ambient Air in Jordan. Study for 15th March to 15th April of 2020 Period. Journal of Environmental Management and Tourism, 3(59), 802-811. https://doi.org/10.14505/jemt.v13.3(59).19
- Al-Billeh, T. (2023a). Disciplinary Measures Consequent on the Judges' Misuse of Social Media in Jordanian and French Legislation: A Difficult Balance between Freedom of Expression and Restrictions on Judicial Ethics.

 **Kutafin Law Review*, 10(3), 681–719. https://kulawr.msal.ru/jour/article/view/224*
- Al-Billeh, T. (2023b). The Situations Related to the Functioning of the Administrative Judiciary in Jordan for the Year 2020: A Step Forward. *International Journal for Court Administration*, 14(3). https://doi.org/10.36745/ijca.453
- Al-Billeh, T. (2024a). Jurisdiction Regarding Administrative Proceedings in Jordanian and French Legislation: Views on the Administrative Judiciary in 2021. *Int J Semiot Law*, 37, 189–215. https://doi.org/10.1007/s11196-023-10064-5
- Al-Billeh, T. (2024b). Teaching Law Subjects by Using Educational Robots: Does the Use of Robots Lead to the Development of Legal Skills Among Law Staudents?. *Asian Journal of Legal Education*, https://doi.org/10.1177/23220058241227610
- Al-Billeh, T., & Abu Issa, H. (2022). The Community Penalties in the Jordanian Criminal Law: What are the Alternatives to Liberty-Depriving Penalties? Pakistan Journal of Criminology, 14 (3), 1-18. http://www.pjcriminology.com/wp-content/uploads/2023/03/1.pdf
- Al-Billeh, T., & Abu Issa, H. (2023a). The Role of the Environment Committees in the Nineteenth Parliament for the Year 2020 in Studying Matters Related to Environmental Affairs in Jordan. *Journal of Environmental*

- *Management and Tourism*, 1(65), 168-175. https://doi.org/10.14505/jemt.14.1(65).16
- Al-Billeh, T., & Abu Issa, H. (2023b). Jordanian Women's Political Participation in The Nineteenth Parliament Elections (2020): The Beginning of the Political Rise of Jordanian Women?. *Dirasat: Human and Social Sciences*, 50(5), 244 -255. https://doi.org/10.35516/hum.v50i5.961
- Al-Billeh, T., & Al-Hammouri, A. (2023). Guarantees of Juvenile Trial Procedures in Jordanian Legislation: The International Standards towards Reformative Justice for Juveniles. *Pakistan Journal of Criminology*, 15 (1), 1-16. https://www.pjcriminology.com/wp-content/uploads/2023/07/1.Tareq Billa Paper Final Draft.pdf
- Al-Billeh, T., & Al-Qheiwi, M. (2023). OBJECTION OF THIRD PARTIES OUTSIDE THE LITIGATION IN ADMINISTRATIVE JUDICIAL JUDGMENTS IN THE JORDANIAN AND FRENCH LEGISLATION. Revista Relações Internacionais do Mundo Atual, 4(42), 76-101. http://revista.unicuritiba.edu.br/index.php/RIMA/article/view/e-5951
- Al-Billeh, T., Al-Hammouri, A., Al-Khalaileh, L., & Derbal, I. (2023a). The Impact of Administrative Control Authorities on Sustainable Development in Jordanian Legislation: What are the Challenges Facing Administrative Control Authorities in Achieving Sustainable Development?. *Journal of Law and Sustainable Development*, 11(5), e1129. https://doi.org/10.55908/sdgs.v11i5.1129
- Al-Billeh, T., AL-Khalaileh, L., Al-Hammouri, A., Khashashneh, T., & Almamari, A. (2024). Exploring the Psychological Dimensions in Teaching Criminal Administrative Law in Legal Education. *Pakistan Journal of Criminology*, 16 (1), 285-301. https://doi.org/10.62271/pjc.16.1.285.301
- Al-Billeh, T., Alkhseilat, A., & AL-Khalaileh, L. (2023b) Scope of Penalties of Offences in Jordanian Public Office. *Pakistan Journal of Criminology*, 15 (2), pp. 341-356, https://www.pjcriminology.com/publications/scope-of-penalties-of-offences-in-jordanian-public-office/
- Al-Damiri, A. (2010). *Penal Protection of the Environment in Jordanian Legislation*. Master's Thesis. University of the Middle East.
- Al-Hammouri, A. & Al-Billeh, T. (2023) Specificity of Criminalisation in the Jordanian Environmental Protection Law. *Pakistan Journal of Criminology*, 15 (2), pp. 357-371, https://www.pjcriminology.com/publications/specificity-of-criminalisation-in-the-jordanian-environmental-protection-law/

- AL-Hammouri, A., Al-Billeh, T., & Alkhseilat, A. (2023a). The Extent of Constitutionalizing the Environmental Rights as One of the Anchors to Keep a Healthy, Clean Environment: A Difficult Balance between the International Agreements and the Jordanian Constitution's Restrictions.

 Journal of Environmental Management and Tourism, 1(65), 89 -97.

 https://doi.org/10.14505/jemt.v14.1(65).09
- Al-Hammouri, A., Al-Billeh, T., & Derbal, I. (2023b) Mechanisms for Protecting Children's Rights from the Effects of Climate Change. *Pakistan Journal of Criminology*, 15 (4), pp. 639-653, https://www.pjcriminology.com/publications/mechanisms-for-protecting-childrens-rights-from-the-effects-of-climate-change/
- Al-Hammouri, A., Al-Billeh, T., Al-Billeh, H., Alhammouri, N., & Roua Belghit, R. (2024). International and Constitutional Efforts to Protect the Environment Through the Use of Artificial Intelligence Techniques. *Pakistan Journal of Criminology*, 16 (1), 387-398. https://doi.org/10.62271/pjc.16.1.387.398
- Al-Hammouri, A., Al-Billeh, T., Khashashneh, T., AL-Khalaileh, L., & Belghit, R. (2023c) Penal Protection Contained in the Framework Law on Waste Management and Instructions for the Management of Electrical and Electronic Waste. *Pakistan Journal of Criminology*, 15 (4), pp. 103-118, https://www.pjcriminology.com/publications/penal-protection-contained-in-the-framework-law-on-waste-management-and-instructions-for-the-management-of-electrical-and-electronic-waste/
- AL-KHALAILEH, L., MANASRA, M., Al-Billeh, T., ALKHSEILAT, A., ALZYOUD, N., & AL-KHAWAJAH, N. (2023). Legal Regulation of Civil Liability for Environmental Damage: How Appropriate are Civil Liability Provisions with the Privacy of Environmental Damage?. *Journal of Environmental Management and Tourism*, 14(5), 2174 2186, https://doi.org/10.14505/jemt.v14.5(69).02.
- Al-Khawajah, N., Al-Billeh, T., & Manasra, M. (2023). Digital Forensic Challenges in Jordanian Cybercrime Law. *Pakistan Journal of Criminology*, 15 (3), 29-44. https://www.pjcriminology.com/publications/digital-forensic-challenges-in-jordanian-cybercrime-law/
- AL-KHAWAJAH, N., ALKHSEILAT, A., AL-BILLEH, T., MANASRA, M., & ALWERIKAT, N. (2022). Criminalization of the Transmission of the Coronavirus COVID-19 and Its Impact on the Right to a Healthy Environment. *Journal of Environmental Management and Tourism*, 13(7), 1881-1887. https://doi.org/10.14505/jemt.v13.7(63).08

- Alkhseilat, A., Al-Billeh, T., Almanasra, M., & Alwerikat, N. (2022). Criminal Behavior as a Basis for Criminal Responsibility for the Crime of Introducing Substances Hazardous to the Environment in Jordanian Legislation. *Journal of Environmental Management and Tourism*, 7(63), 1851 1858. https://doi.org/10.14505/jemt.v13.7(63).05
- ALMANASRA, M., Alkhseilat, A., Al-Billeh, T., ALWERIKAT, N., & ALSHARQAWI, A. (2022). Criminal Responsibility for the Crime of Discharging Polluting Substances for Water Sources in Jordanian Legislation. *Journal of Environmental Management and Tourism*, *13*(7), 1948–1948. https://doi.org/10.14505/jemt.v13.7(63).15
- Alshible, M., & Abu Issa, H., & Al-Billeh, T. (2023). The Extent of Considering Environmental Crimes as A Manifestation of Economic Crimes. *Journal of Environmental Management and Tourism*, 1(65), 23-31. DOI:10.14505/jemt.v14.1(65).03
- Al-Zubaidi, N. (2014). *Legal Protection of the Environment (Comparative Study)*. Lebanon: Halabi Rights Publications.
- Amin, B., & Budali M. (2016). *Criminal Protection of the Environment*. Master's Thesis. Djillali Liabes University.
- Attiya, T. (2014). Legal System for Environmental Protection in Light of Comparative Arab Legislation. Alexandria: New University House.
- Bamun, L. (2011). Criminal Liability of the Legal Person for the Crime of Polluting the Environment. Master's Thesis. University of Kasdi Merbah.
- Ghanaimi, T. (2022). Legal Protection of the Environment from Waste Hazards in Light of International Law. Lebanon: Halabi Rights Publications.
- Isa, H. A., Alwerikat, N., & Al-Billeh, T. (2022). The Concept of the Public Employee in Jordanian Law: Different Constitutional, Administrative, and Criminal Law Definitions. *BiLD Law Journal*, 7(2s), 331–337. https://bildbd.com/index.php/blj/article/view/318
- Karim, M. (2023). Role of International Criminal Policy in Environmental Protection. Iran: Wasit University
- Khashashneh, T., Al-Billeh, T., Al-Hammouri, A., & Belghit, R. (2023) The Importance of Digital Technology in Extracting Electronic Evidence: How Can Digital Technology be used at Crime Scenes? *Pakistan Journal of Criminology*, 15 (4), 69-85, https://www.pjcriminology.com/publications/the-importance-of-digital-technology-be-used-at-crime-scenes/
- Shandab, R. (2019). *The Brief in Environmental Law*. Libya: Modern Book Foundation.