
The Criminal Protection of Hydrocarbon Resources from Wasting and Squandering

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Abstract

This paper, in addressing the problem of preserving hydrocarbon wealth arises from the ground that such wealth continues to face challenges with respect to poor and piecemeal provisions to existing laws; they are dispersed throughout reference laws. Since Iraq, at the date of writing these lines, has no all-encompassing and integrated laws regulating the hydrocarbon industry, we would propose that the concerned authorities start working on enacting laws that would regulate and preserve the extracted hydrocarbon wealth and put an end to abuses against it by penalizing whoever violates it through waste, damage or loss, guaranteeing the rights of future generations to invest in oil and gas wealth.

Keywords: Hydrocarbon wealth; waste; loss; squandering.

Introduction

The drafters of the Hydrocarbon Wealth Protection Law have sought to become as much as possible conversant with the details of this wealth, and avoid the deficiencies in legal texts. There can be no denying that such laws have been in place at a time when foreign companies had already been excluded from working and investing in the extraction and production of oil and gas in Iraq, after the decision on the nationalization of the national wealth was issued. The penalties prescribed in the Penal Code then were sufficient to deter the employees and their commitment to preserve the hydrocarbon wealth and not to waste and squander it.

However, after foreign companies entered and executed service contracts for the development and production of oil and gas fields (i.e. licensing rounds contracts), it became crucial to set special legal texts to ensure the preservation of such wealth, especially since all service contracts are defined by a period of time, which calls for companies to extract oil and gas faster at the expense of maintaining the reserves in the reservoirs, or even resulting in the loss and damage of large quantities of oil reserves in the ground, without the absence of any deterrent whatsoever. That is what prompted us to research and study the subject matter.

1.1 Research Significance

The significance of the research lies with the aim to study and highlight knowledge regarding the protection for hydrocarbon wealth before and during its extraction from the ground, and figure out whether the texts of Iraqi laws are sufficient to cover all aspects of protection required for such wealth, or need further texts that are more encompassing of their protection.

1.2 The scope of the research

The scope of our research is limited to the statement of the criminal protection established for Underground hydrocarbon wealth, avoiding methods that would lead to waste, loss or damage of that wealth, keep it underground, thus the impossibility of investing and benefiting from it in the present or future. Therefore, it is outside the scope of this study to list all matters related to waste, damage and squandering away oil derivatives, or sabotaging facilities for hydrocarbon wealth on the ground.

1.3 Research Problem

The problem of the study lies in the form of several questions, including:

1. The law stipulates the prevention of wasting hydrocarbon wealth throughout the production process and prohibits acts that lead to the loss and damage of a well, reservoir, or field without establishing an appropriate penalty for those who commit such acts.
2. The Penal Code also contains no immediate protection regarding the hydrocarbon wealth, but rather makes it dependent protection. For the main objective and desired interest of the protection established in the Penal Code is to protect the internal or external security of the state, or the country's economy.

1.4 Research methodology

We will address the subject matter by relying on the scientific method to analyze the relevant legal texts and make comparisons, whenever necessary, with relevant laws.

1.5 Research Plan

We will address the issue of the crime of wasting and squandering hydrocarbon wealth in two sections as follows:

Section 1: The Conceptual Framework

Section 2: The Elements of the Crime and Punishment

II. The Conceptual Framework

Natural resources can be divided into three categories: First, renewable resources such as air, sunlight and water; second, renewable sources includes plant, animal and soil; and third, non-renewable resources are temporary resources whose present is finite and does not regenerate indefinitely, but will disappear because they are stock-limited and subject to the law of depletion, including, hydrocarbon, coal and minerals. The non-renewable resources of wealth are exposed to natural exhaustion due to the continuous use by humanity as well as cases of waste and damage.

The problem of wasting and squandering hydrocarbon wealth and not extracting it according to the most successful methods to prevent its loss is one of the most important problems facing countries. This wealth is being extracted at rates that result in damage in reservoirs and wells, and again in a manner that is not subject to considerations to guarantee the rights of future generations. In this section, we will discuss in the first theme the concept of waste and damage related to hydrocarbon wealth and the rights of generations to such, and then the geological nature of oil and gas reservoirs in the second theme.

2.1 The Concept of Wasted and Squandered Hydrocarbon Wealth

The hydrocarbon wealth sector constitutes a vital sector on which some oil and gas producing-countries depend entirely, which makes it a public utility. Moreover, history has not known a discovery or phenomenon that affected the fate of peoples and countries, economically, politically and socially to this day as much as oil and gas. However, this wealth is naturally permeable through continuous use; it is also subject to waste and damage and that the fate of the rights of future generations is closely related to its preservation. Thus, it falls within the constitutional protection of natural resources stipulated in the constitutional documents as stated in the Constitution of Egypt, "State Resources belongs to the people, and the state is committed to preserving it, exploiting it well and not depleting it, taking into account the rights of future generations to it."¹

Besides, the Iraqi constitutional legislator stipulated, "designing strategic policies for development of oil and gas wealth to achieve the highest benefit for the Iraqi people, adopting the latest technologies of market principles and investment promotion."² However, the 2005 constitution of the Republic of Iraq was devoid of an explicit text that guarantees to future generations what is guaranteed by the Egyptian constitution, so the jurisdiction of the federal court could guarantee the rights of future generations by investigating them in terms of the constitutional texts and their references, as the Iraqi constitutional legislator did not hesitate to repeat the text on the term 'future' in the preamble, declaring the rights of 'youngsters', denoting in its linguistic and idiomatic meaning the new generation. In order to make sure other guarantees for future generations, there remains a need to derive the rights of future generations with economic resources and capabilities and substituting them from the state's duty to reform the economy, and its duty to invest resources and distribute its resources.³

It is also the duty of the state to preserve wealth, including hydrocarbon wealth, and not to expose it to waste, destruction or damage. What then is waste? What then is destruction? We will demonstrate these two terms after we define the concept of hydrocarbon wealth:

1. Hydrocarbon wealth: The Iraqi legislator defines it under Law No. (84) of 1985, “hydrocarbon wealth means crude oil, associated and free gas and their derivatives.”⁴
As for the Qatari legislator, referring to the definition of the term hydrocarbon wealth in the Petroleum Wealth Preservation Law, he writes, “all-natural hydrocarbons in the solid, liquid or gaseous state whether produced or can be produced from the ground or underground.”⁵
It seems that the Iraqi legislator has rightly defined the concept, hydrocarbon wealth, since the petroleum wealth represented by crude oil and gas is part of the hydrocarbon wealth and not the other way around.
2. Destruction: It is the destruction of the subjectivity of the thing, i.e. the loss of its original entity in whole or in part, by any means.⁶ Destruction means the introduction of modification to the physical entity of the thing in a way that leads to its distortion and change of its features such that its value decreases, or at least its benefit and utility for the owner are reduced. It is a form of physical disposal of an object.⁷
3. Waste: The phrase ‘wasted oil’ refers, in its direct sense, to loss and this loss has several aspects. The first aspect can be caused by loss or theft, while the second through the loss of the desired benefit from it due to the failure to choose the best technologies; and the third aspect can involve the low price or loss of interest even after it is paid for.⁸
4. squandering: It means every act by the trustee, which would completely remove the thing entrusted from his possession, with which it is impossible to return it to its owner.⁹
As for damage, it means an actual, real or true abuse on fund or a legally protected interest. If there was damage to the fund, then this means the destruction of that fund, its loss, or the reduction of it. However, if the abuse affects an interest, then this means wasting it or detracting from it.¹⁰
5. Making the thing unusable: This can be caused by complete or partial disruption of the benefit of the thing, or in other words, making the thing absolutely or relatively unfit to achieve the purpose for which it was created or formed, without distinction between the shape of the thing or its content and meaning. And this act shares with destruction in that each of them affects the content of the thing and properties, but it does not require that it reach the point of complete or partial distortion of the thing. Rather, it is limited to merely defecting it in a certain way, which would not achieve its desired purpose. No matter how efficient the tool, by which an offender resorts to achieve his purpose, might be, it would become unfit for use in a permanent or temporary capacity, in whole or in part.¹¹

Thus, it seems to us that the waste and destruction of hydrocarbon wealth is the use of inappropriate methods to extract and invest the hydrocarbon wealth in the form of an underground reservoir. The result is an accelerated depletion of reservoir in less time than planned and extraction of smaller quantity than is actually present in the reservoir due to the speed of production and lack of the presence of restrictions on the flow, which leads to a loss of reservoir pressure and deposition of unwanted fluids, and sand accumulation in the pores and thus impedes the strength of the flow, and does not allow the permeability of hydrocarbons represented by oil and gas in the reservoir.

2.2 The Geological Nature of Reservoir

Oil or gas reservoir can be defined as a geological structure of porous and permeable rocks containing oil and gas, that is, it is a trap containing oil or gas, or both.¹² In general, there are three types of rocks that make up Earth’s crust: sedimentary, igneous and metamorphic. Most important of all is sedimentary rocks, and this type of rock forms fossil fuels, and sedimentary rocks such as oil shale can contain large amounts of kerogen, which can be extracted to obtain oil. Natural gas can also be trapped in oil shale, which is used to manufacture multiple products. Besides, sedimentary rocks are common rocks in which oil reservoirs are located¹³ and have great importance as they collect oils inside them. Sedimentary rocks have several characteristics, including porosity, permeability, saturation and compressibility. Compressibility is one of the most important characteristics of these rocks by which sedimentary rocks accumulate oil inside, and this characteristic is summarized in the soil’s ability, sometimes to a large degree, to change its structure under the impact of external influences to a more compact or integrated structure at the expense of reducing its porosity.¹⁴ Oil is created in the source or mother rocks, and when the quantity of oil reaches a certain limit, as it leaves the rocks in which it arose and migrated into other porous rocks called reservoir rocks or storage rocks. This migration is known as the primary migration. There is a secondary migration occurring within the porous reservoir rocks over

long distances, and this migration is of different direction, and depends on the difference in pressures from one place to another.¹⁵

The fluid production flow in an affordable approach also ensures that fluids be transported from the storage (reservoir) to the treatment facility. During production and transportation of crude oil, knowledge of fluid properties and operating conditions is essential to prevent formation and deposition of unwanted solids, for example, hydrates, waxes, asphaltene. Under high temperatures and pressures, methane gas hydrates or asphaltene can crystallize or accumulate in the production pipe, and if not properly controlled, hydrate crystals or asphaltene or wax particles may precipitate and agglomerate to the point of blocking the production pipe. Removing water or asphalt components from subsea production pipelines can be highly expensive and dangerous. The challenges of ensuring flow increases due to the transition from normal oil reserves to depleted oil fields.¹⁶ As the reservoir is invested by force of gravity only, the pressure of the layer will decrease with the speed of increasing production,¹⁷ and this speed in increasing production leads to the loss of the reservoir rocks to their porosity and permeability, and thus not draining all the reserves available in the reservoir.¹⁸

The Hydrocarbon Wealth Law stipulates that the production from each well and reservoir be carried out at rates that do not lead to damage to the reservoir, well or facilities, provided that the total rate of production in the reservoir shall not exceed the specified quantities as approved by the production plan.¹⁹ Thus, it is necessary for the pressure of the storage (reservoir) to ascertain whether the policy of the reservoir has actually depleted. If the mechanism that drives the reservoir is depletion, then the reservoir pressure in the main wells will indicate whether the depletion is equally distributed, but if the area around the well is not in contact with the rest of the field, then it indicates unexhausted pressure.²⁰

Therefore, constant gauges must be set to measure the permanent pressure in each production well, and thereby measuring the level of reservoir pressure escalation in order to be able to control the pressure flow restrictions in the reservoir. The throttle valve measurement reduces as the reservoir pressure decreases in order to preserve the hydrocarbon wealth inside the reservoir and not to waste to better exhaust it and achieve the longest period and sustainable rate of reservoir production.

III. Elements of the crime

One requirement for the crime of wasting, squandering, loosing or decimating hydrocarbon wealth is its material element, that is, an abuse on the hydrocarbon wealth inside the reservoir (i.e. crude oil and gas) as this represents the object of the crime. Such a crime requires not only a criminal conduct to be completed, but also the fulfillment of the moral requirements of criminal intent, and we will discuss this in the following two sections.

3.1 The Material Requirements

3.1.1 The Criminal Conduct

The criminal act of the wasted and squandered hydrocarbon wealth takes several forms, including (waste, squandering, destroying, and making the thing unusable) as previously referred to in Section 1. The result is that all of these forms differ among themselves, but they one thing in common, that is waste and damage. The realization of the criminal behavior in this crime does not entail the loss of the hydrocarbon wealth permanently, or makes it unfit for extraction. Rather, it makes it difficult to extract that wealth from the reservoir or render it unable to extract all the available reserves; only part of that wealth as smaller as 20% of the available reserve.

It is worth noting that Article 8/First of the Hydrocarbon Wealth Preservation Law No. (84) of 1985 stipulates, “The working entity shall take the necessary precautions in accordance with the most effective methods to prevent the waste of hydrocarbon wealth throughout all operations and stop any operation that may lead to the loss or damage to a well, reservoir, field or oil facility.”²¹ Thus, the law did not specify the character of the perpetrator of the crime and this formula includes citizens and foreigners, whether they are natural or legal persons.

It is noted that the oil licensing rounds have headed in the same direction as the Hydrocarbon Wealth Preservation Law No. (84) of 1985. This is evident in the terms of those contracts which imposed an obligation on oil companies to preserve the hydrocarbon wealth from waste and damage. Such obligations are usually expressed, “due diligence and optimal use of the oil field and measures to prevent oil loss,”²² or sometimes, “best practices for the petroleum

industry.”²³ Notwithstanding these contracts are devoid of penal penalties against those who violate the terms, but merely pointed to the termination of petroleum operations.

The Qatari legislator, in an effort to preserve the hydrocarbon wealth, also referred to the requirement in the Petroleum Wealth Preservation Law, “Petroleum operations and projects must be carried out in accordance with technical principles, applicable rules and equal standards in the petroleum industry, guaranteeing the best means for proper exploitation of petroleum wealth, investment, preservation, output development, products enhancement and thereby prevent its loss, destruction or waste.”²⁴

3.1.2 The Object of the Crime

The legal object of the crime, as being the interest protected by the criminal rule, is not in itself a presumed condition outside the legal model of the crime. Rather, it is the wisdom of imposing and adjudicating punishment for the described behavior. Such wisdom is not available unless certain conditions, stipulated expressly or implicitly by a legislator, become available. These conditions are nothing but the conditions assumed in the crime, and hence the linkage between the legal object of the crime and its assumed conditions. The object of the crime imposes and necessarily assumes the existence of these conditions.²⁵

If the legal object of the crime of waste and destruction involves ‘hydrocarbon wealth’ or abuse on this wealth, then it presupposes the presence of hydrocarbon wealth directly, and this is the presumed condition in the crime of waste and destruction of hydrocarbon wealth. The hydrocarbon wealth means the thing to which the violated rights and interests are related and upon which the criminal act is committed, that is the hydrocarbon wealth.

3.1.3 The Criminal Result

Crimes, in terms of their outcomes, can be divided into danger and harm crimes. A crime involves harming fund(s) owned by a group itself or one of its members, or exposing this fund to direct danger.²⁶ Harm is defined as any prejudice to a right or interest protected by law.²⁷ The crime of harming public funds does not occur unless the outcome required by the legal model of the crime is attained, namely a damage to state funds or interests.²⁸ The outcome of the crime against hydrocarbon wealth involves wasting and squandering or causing the loss of the reservoir or its destruction.²⁹ Such acts would undermine and harm the hydrocarbon wealth and consequently result in damages to the economic status of the country, for such wealth has an economic value; it constitutes almost the primary source on which the country relies.

It becomes obvious to us that the forms of the crime of wasting and squandering hydrocarbon wealth fall within the state security crimes as stipulated in Articles (163 and 164) of the Penal Code. For the Iraqi legislator extended the concept of danger crimes by stipulating, “2- Whoever conceals or embezzles something mentioned in the previous paragraph or made it possible for it to fall into the hands of the enemy, or intentionally mismanaged its manufacture or repair, or deliberately carried out an act that would render it unfit, even temporarily, to benefit from what it is intended for, or cause damage to it.”³⁰

Thus, it appears that the legal protection that the Iraqi legislator accorded to the hydrocarbon wealth is a dependency protection, since the protected interest is an internal and external security of the state or the national economy. The text of Article (164) failed to provide for the protection of hydrocarbon wealth; rather hydrocarbon wealth was overshadowed by the Iraq’s economic position that underlies its economy.³¹

3.1.4 The Causal Relationship

It is not sufficient for making up a crime to have a criminal conduct and an unlawful end result; there must be a causal linkage between the conduct and the end result, that is, the conduct shall lead to the occurrence of the harm.³² Therefore, the offender's conduct is what causes the occurrence of the harmful and dangerous result, namely the waste, damage or loss of hydrocarbon wealth. Only then the material element of the crime affecting the security of the state is completed, although from our perspective there is a clear scope for applying Article (340) of the Penal Code because we are going to have a multiplicity of genuine crimes.³³

3.2 The Moral Requirements for Crime and Punishment

3.2.1 The moral Element

Since the crime of wasting and squandering hydrocarbon wealth is a deliberate crime, the criminal responsibility of the offender does not hold unless he has the criminal intent. The Iraqi legislator has defined the criminal intent as, “the doer’s will be directed towards committing the act constituting the crime intended for an end result or any other criminal consequence.”³⁴ However, the Hydrocarbon Wealth Preservation Law No. (84) of 1985 came devoid of the requirement of the moral element of crimes against hydrocarbon wealth, and this is a natural issue, as it did not regulate the penalties for its violation. By reference to the Article (8) of the law, we find that it stipulates, preventing the waste of hydrocarbon wealth in all operations and stopping any operation that would lead to the loss or damage of a well, reservoir or an oil field or facility.”³⁵ Article (163) of the Penal Code as well stipulates, “Whoever intentionally sabotages, damages or malfunctions.” Since the protection provided for hydrocarbon wealth is a subsidiary protection, as we explained earlier, because the ground of protection is determined by the internal and external security of the state or its national economy. Therefore, the crime of wasting and squandering hydrocarbon wealth cannot be carried out without the criminal intent as stipulated in Articles (163) and (197) which stipulate, “Whoever deliberately destroys, demolishes, damages or causes severe damages.”³⁶ The expression ‘deliberately’ refers to a requirement that a perpetrator has knowledge of a crime, and therefore it is not possible to imagine the occurrence of a crime of wasting and squandering hydrocarbon wealth by mistake.

Just as the crime of attacking state security is a deliberate crime, the perpetrator must have knowledge of the object of attack, namely the state security, without being required to know the criminal nature of act for an ignorance of the provisions of the Penal Code may not be invoked. Besides, the intent must be completely directed to the act constituting the attack, with no proof of motive is required.³⁷ Since the crime of wasting and squandering hydrocarbon wealth is a deliberate crime in all its circumstances, an offender must show a general criminal intent and knowingly act on wasting and squandering the state-owned wealth.³⁸ The criminal intent in this category of crimes is twofold: criminal intent and knowledge of a crime against the security of the state, with intent to carry out criminal act regardless of the result. It is enough for the legislator to have a criminal act within the scope of state security crimes without waiting for a certain result. Therefore, the criminal intent is achieved whenever the offender’s will is directed to achieve the end result constitutes it, that is, it involves an intentional harm once inflicted on one person by another, the crime is completed without having to wait for the end result to be achieved.³⁹

3.2.2 The Punishment for the Crime

If all the elements of the crime of wasting and squandering hydrocarbon wealth are present, punishment shall be required. It is noted that the Iraqi legislator did not explicitly specify a punishment for the said crime, neither in the Penal Code nor the Hydrocarbon Wealth Preservation Law No. (84) of 1985, but rather made it subordinate to the crimes against internal and external security of the state, or the economy of the country, as stipulated in the Penal Code under Article (163), which made it life or temporary imprisonment, as well as in Article (197), which made the penalty death or life imprisonment. Therefore, we are facing a lack of legislation and we hope the Iraqi legislator to remedy.

Likewise, the Qatari legislator in the applicable provisions of Penal Code No. (11) of 2004 has regulated the punishment in Section on Crimes of Public Danger which reads, “Whoever sets fire intentionally to inhabited places, places prepared for habitation or for money-saving, a ship, an oil well, machines or devices intended for production, refining, transportation of petroleum, an oil depot, a resource of public wealth shall be subject to punishable by imprisonment for a period of no less than five years, and not exceeding fifteen years.”⁴⁰ Additionally, the Qatari legislator applied administrative penalty, appropriate compensation and other penalties for each violation of the provisions of the Petroleum Wealth Conservation Law, which stipulates, “a violator must pay a fine not exceeding five hundred thousand riyals, and in case of a repeated violation within three years from the date of the previous violation, the fine shall be doubled. In all cases, an appropriate additional compensation is to be added to the aforementioned penalty if a violation results in any damage to the petroleum wealth... and the previous rules shall not preclude the application of various penalties.”⁴¹

3.2.3 Competent Judiciary

As to the competent judiciary in the crime of wasting and destroying hydrocarbon wealth, it sets out in Article (14) of the Iraqi Supreme Criminal Court Law No. (10) of 2005 in its entirety, “the jurisdiction of the court shall apply to the perpetrators of one of the following crimes. Second. Wasting and squandering national wealth, in accordance with the provisions of Paragraph (G) of the Law on Punishment of Conspirators on the Safety of the Nation and Corruptors of the System of Governance No. 7 of 1958.”⁴² However, there are two observations regarding the jurisdiction of the Supreme Criminal Court over the waste and destruction of hydrocarbon wealth. On the one hand, the jurisdiction of the court is confined to natural persons and not to legal persons, and on the other hand, it is within the specified period of crimes committed on the date of 7/17/1968 until 1/5/2005.⁴³ Crimes that had been committed thereafter, Courts competent in the crimes of waste and destruction of hydrocarbon wealth were identified, and thus, we believe, the criminal judiciary is referred to in the appellate region according to the territorial jurisdiction.

We would also like to point out that the Qatari legislator provided procedural protection for petroleum wealth, granting Qatar Petroleum Company employees who are authorized by a decision of the Minister of State for Energy Affairs, the status of members of the judicial control in implementing the provisions of the Law of Preserving Petroleum Wealth, and giving them the right to inspect and access records and data within the office of the Officer-in-Charge of Petroleum and at various work sites, as well as conducting investigations, tests, examinations and operations related to field, laboratory, administrative operations and others.⁴⁴ There is no such a provision in the Iraqi legislation.

IV. Conclusion

Having reached the end of our research entitled, “The Crime of Wasted and squandered hydrocarbon wealth,” we shall present its culmination by reviewing the findings and recommendations, as follows:

4.1 Findings

1. There are clear indications in the texts of the Iraqi constitution of 2005 that imply that the rights of future generations of hydrocarbon wealth should be respected.
2. The term hydrocarbon wealth as used by the Iraqi legislator was in line with the linguistic and legal concept of that wealth, and the legislator has rightly defined and used the term, ‘hydrocarbon wealth’.
3. The requirement of the Hydrocarbon Wealth Preservation Law that production from each well and reservoir be carried out at rates that do not lead to damage to the reservoir or well, and that the production rate should not exceed the specified production plan.
4. The rapid increase in crude oil production leads to the loss of the reservoir rock of its porosity and permeability, and consequently the impossibility of investing all the available reserves in the reservoir, or at least extracting the largest possible quantity of underground hydrocarbons.
5. The study demonstrated that the Iraqi legislator did not provide direct protection for the hydrocarbon wealth, but instead made it a subsidiary protection, whose primary goal and desired interest is to protect the internal or external security of the state or its national economy.
6. The Iraqi High Criminal Court formed by Law No. (10) of 2005 is competent to consider wasted and destroyed national wealth, including hydrocarbon wealth, dealing with crimes committed on the period from 7/17/1968 until 1/5/2005.
7. Unlike the Qatari legislator, the Iraqi legislator did not give the relevant officials of the Ministry of Oil the powers attributed to the members of the judicial police to search and investigate crimes of waste and destruction of hydrocarbon wealth.
8. There is a degree of specificity of the crimes of waste and destruction of hydrocarbon wealth because of its danger to the national economy of the country, making it worthy of legal protection.

4.2 Recommendations

1. In light of all the findings above, the Iraqi legislator is called to enact a special legislation that regulates the extraction and preservation of hydrocarbon wealth, and guarantees the rights of future generations to it.
2. We propose that the extractive companies, especially foreign ones, shall set fixed and permanent measurements in each well to measure the reservoir pressure level so that the production is consistent with

the pressure to preserve the hydrocarbon wealth and hold it inside the reservoir for future extraction, thus preserving it from waste and destruction.

3. We hope that the Iraqi legislator will give a legal protection to the hydrocarbon wealth, stipulating clear and explicit authentic texts, and avoiding seeing it as a subsidiary protection.
4. The need for a provision stipulating special penalties to punish whoever violates the law of preserving hydrocarbon wealth, and providing heavier penalties for those who deliberately waste and destroy that wealth.
5. The need for a provision stipulating the formation of a specialized technical body to oversight the extraction of oil and gas, and granting it the powers of judiciary members in order to search and investigate crimes of deliberate waste and destruction of hydrocarbon wealth.

Notes

- ¹ See the text of Article (32) of the Constitution of the Arab Republic of Egypt of 2014.
- ² See the text of Article (112/Second) of the Constitution of the Republic of Iraq of 2005.
- ³ . Ali Hadi Attia Al-Hilali, “Wilayat al-Mahkameh al-Ittihadia fi Dhamaan Hoqouq al-Ijyal al-Qadimeh” (The Jurisdiction of the Federal Court in Ensuring the Rights of Future Generations). Available on the Federal Court website at <https://www.iraqfsc.iq/news.4745/>. Accessed Jul. 2, 2022.
- ⁴ . See Article (1/Second) of the Hydrocarbon Wealth Preservation Law No. 84 of 1985.
- ⁵ . Article (1) of Qatar Amended Law No. 4 of 1977 on Preserving Petroleum Resources.
- ⁶ . Khaled Abdel Fattah Mohammed, *Qanoun al-Oqoubat al-Bahraini: Diraseh Moqaraneh* (Bahraini Penal Code: A comparative study), (Cairo: National Center for Legal Publications, 2010), p. 234.
- ⁷ . Mahmoud Najeeb Hosni, *Jara'im al-'Itida' ala al-Amwal* (Assault Crimes on Funds), (Beirut: Halabi Judicail Publications, 3rd Edition, n.d.), p. 580.
- ⁸ . Hassan Majed, “Al-Tharwa al-Naftiyya fi Fakh Thagharat al-Tashree” (Oil Wealth Trapped in the Legislation Gaps), MA Thesis, Lebanese University, 2019, p. 55.
- ⁹ . Hilali Abdel Ilah Ahmed, *Jara'im al-Ma'loumat al-Taqlaediya wa Tadbeqatuha fi al-Nidham al-Bahraini* (Traditional Information Crimes and Applications for the Bahraini System), (Cairo: Dar al-Nahda al-Arabiya, 2013), p. 197.
- ¹⁰ . Abdel-Fattah Mustafa Al-Saifi, *Al-Moutabaqa fi Majal al-Tajreem* (Correspondence in the Criminalization Area), (Alexandria: Alexandria University Press, 2017), p. 132.
- ¹¹ . Ahmed Fat'hi Sorour, *Al-Waseet fi Qanoun al-Oqoubat: Al-Qism al-Khass* (An Intermediary in the Penal Law, Special Section), (Cairo: Dar al-Nahda al-Arabiya, 1985), p. 59.
- ¹² . Aqeel Khairallah Nahar, *Daleel al-Moubtad'een fi Intaj al-Nafd* (Beginners' Guide to Oil Production), Baghdad: Maktabet Adnan for Publications, 2016), p. 13.
- ¹³ . Jordan Hananiah, Kailyn Stenhouse, Jason, Sedimentary rock. Available at <https://energyeducation.ca/encyclopedia/Sedimentary>. Nov. 13, 2015. Accessed June 28, 2022.
- ¹⁴ . Aqeel Khairallah Nahar, *Daleel al-Moubtad'een fi Intaj al-Nafd* (Beginners' Guide to Oil Production), Baghdad: Maktabet Adnan lil Nashr, 2016), p. 20.
- ¹⁵ . Hasan Abdulhameed, *Mosahama fi Tafseer ba'dh Profeelat al-Mas'h al-Siezmi al-Bahri* (Contribution to the Interpretation of Some Marine Seismic Survey Profiles), MA Thesis, Tishreen University, 2018, p. 70.
- ¹⁶ . “Dhamaan Tadaffoq al-Nifd al-Khaam” (Ensuring Crude Oil Flow). Available at https://www.mt.com/int/ar/home/applications/L1_AutoChem_Applications/L2_ParticleProcessing/Solids-Droplets-Crude-Oil.html. Accessed 25, 2022.
- ¹⁷ . Mus'ab al-Baridi, Hendseset al-Makamen (Reservoir Engineering), (Damascus: Syrian Private University Press, n.d.), p. 94.
- ¹⁸ . “Depleted reservoir” means the extraction of oil and gas within a reservoir gradually to extract and exhaust all that is there within it to the last bit of it. To figure out what ‘depletion means, refer to Al-Maani Dictionary at <https://www.almaany.com/ar/dict/ar->. Accessed July 4, 2022.
- ¹⁹ . See Article (32) of the Hydrocarbon Wealth Law No. 84 of 1985.
- ²⁰ . Frank Jahn et. al. *Hydrocarbon Exploration and Production*, (Aberdeen: Elsevier, 2008), p. 520.
- ²¹ . See Article (8) of the Hydrocarbon Wealth Preservation Law No. (84) of 1985.
- ²² . Yasser Amer Hassan, “Al-Aathar al-Qanaouniyah li Aqd al-Khidmah al-Nafti” (The Legal Effects of the Oil Service Contract), MA Thesis, the Middle East University-Amman, 2017, p. 151.

- ²³ . Article (1/39) of the service contract executed by and among the Ministry of Oil, LUKoil and Inpex for the exploration, development and production of block 10.
- ²⁴ . Article (3) of Qatar Amended Law No. 4 of 1977 on Preserving Petroleum Resources.
- ²⁵ . Majeed Khudher Ahmed Abdullah, *Nadhariyat al-Ghalad fi Qanoun al-Oqoubat* (The Theory of Error in the Penal Code), (Cairo: National Center for Legal Publications, 2013), p. 143.
- ²⁶ . Al-Saifi, op. cit. 127.
- ²⁷ . Saad Ibrahim al-A'dhamy, *Maosou 'at Mostalahat al-Qanoun al-Jina 'ee* (Encyclopedia of Criminal Law Terms), (Baghdad: Dar el-Sho'oun al-Thaqafiya, 2002), p.199.
- ²⁸ . Fattouh Abdullah al-Shadhly, *Jara'im al-E'tidaa' ala al-Ashkhas wel-Amwal* (Assault Crimes against Persons and Money), (Alexandria: Alexandria University Press, 2002), p. 250.
- ²⁹ . The text of Article (8) of the Hydrocarbon Wealth Law No. (84) of 1985.
- ³⁰ . See Article (163/2) of the amended Iraqi Penal Code No. 111 of 1969.
- ³¹ . See the text of Article (164) of the amended Iraqi Penal Code No. 111 of 1969.
- ³² . Mahmoud Najeeb Hosni, *Al-Mosahama al-Jina'iyya fil-Tashree'at al-Arabia* (A Contribution to Arab Criminal Legislations), (Cairo: Dar al-Nahda al-Arabiya, 2nd Edition, 1992), p. 21.
- ³³ . See Article (340) of the amended Penal Code No. 111 of 1969, as it states, "Any employee or civil servant who intentionally causes damage to the funds or interests of other persons or an entity for which they work or to which they are connected by virtue of position, shall be punished with imprisonment or detention for a term not exceeding seven years).
- ³⁴ . See the text of Article (33) of the amended Iraqi Penal Code No. 111 of 1969.
- ³⁵ . See Article (8) of the Hydrocarbon Wealth Preservation Law No. (85) of 1985.
- ³⁶ . See the text of Article (197) of the amended Iraqi Penal Code No. 111 of 1969.
- ³⁷ . Samir Alia, *Al-Wajeez fi Sharh al-Jara'im al-Waqi'ah al am al-Dawla* (A Concise Explanation of the Crimes against State Security), (Beirut: University Foundation for Studies and Publishing, 1999), p. 101.
- ³⁸ . It is recalled that the Iraqi legislator requires the existence of a special criminal intent in any offence that undermine State security in Article (197), stipulating, "with the intention of overthrowing the system of government as established in the Constitution).
- ³⁹ . Mohammed Ali Abdulridha Aflouk and Shaima Jasim Tuman, "Jareemat Takhreeb al-Tharwa al-Hydrocabooniya" (The Crime of Sabotaging Hydrocarbon Wealth), Basra: Basra studies journal, Issue 36, 2020), p. 53.
- ⁴⁰ . See the text of Article (233) of the applicable Qatar Penal Code No. (11) of 2004.
- ⁴¹ . See the text of Article (11) of Qatar Law No. 4 of 1977 on Preserving Petroleum Resources as amended by Law No. 18 of 2019.
- ⁴² . See Article (14) of the Iraqi Supreme Criminal Court Law No. (10) of 2005.
- ⁴³ . See Article (1/Second) of the Iraqi Supreme Criminal Court Law No. (10) of 2005.
- ⁴⁴ . The text of Article (8) of Qatar Law No. 4 of 1977 on Preserving Petroleum Resources as amended by Law No. 18 of 2019.

Bibliography

I. Books

- (1) Mohammed, Khaled Abdel Fattah, *Qanoun al-Oqoubat al-Bahraini: Diraseh Moqaraneh* (Bahraini Penal Code: A comparative study), Cairo: National Center for Legal Publications, 2010.
- (2) Hosni, Mahmoud Najeeb, *Jara'im al-'Itidaa' ala al-Amwal* (Assault Crimes on Funds), Beirut: Halabi Judicail Publications, 3rd Edition, n.d.
- (3) Ahmed, Hilali Abdel Ilah, *Jara'im al-Ma'loumat al-Taqleediya wa Tadbeqatuha fi al-Nidham al-Bahraini* (Traditional Information Crimes and Applications for the Bahraini System), Cairo: Dar al-Nahda al-Arabiya, 2013.
- (4) Al-Saifi, Abdel-Fattah Mustafa, *Al-Moutabaqa fi Majal al-Tajreem* (Correspondence in the Criminalization Area), Alexandria: Alexandria University Press, 2017.
- (5) Sorour, Ahmed Fat'hi, *Al-Waseet fi Qanoun al-Oqoubat: Al-Qism al-Khass* (An Intermediary in the Penal Law, Special Section), Cairo: Dar al-Nahda al-Arabiya, 1985.

- (6) Nahar, Aqeel Khairallah, *Daleel al-Moubtad'een fi Intaj al-Nafd* (Beginners' Guide to Oil Production), Baghdad: Maktabet Adnan lil Nashr, 2016.
- (7) Al-Baridi, Mus'ab, *Hendeset al-Makamen* (Reservoir Engineering), Damascus: Syrian Private University Press, n.d.
- (8) Jahn, Frank, Mark Cook and Mark Graham. *Hydrocarbon Exploration and Production*, Aberdeen: Elsevier, 2008.
- (9) Abdullah, Majeed Khudher Ahmed, *Nadhariyat al-Ghalad fi Qanoun al-Oqoubat* (The Theory of Error in the Penal Code), Cairo: National Center for Legal Publications, 2013.
- (10) Al-A'dhamy, Saad Ibrahim, **Maosou'at Mostalahat al-Qanoun al-Jina'ee** (Encyclopedia of Criminal Law Terms), Baghdad: Dar el-Sho'oun al-Thaqafiya, 2002.
- (11) Al-Shadhly, Fattouh Abdullah, *Jara'im al-E'tidaa' ala al-Ashkhas wel-Amwal* (Assault Crimes against Persons and Money), Alexandria: Alexandria University Press, 2002.
- (12) Hosni, Mahmoud Najeeb, *Al-Mosahama al-Jina'iyya fil-Tashree'at al-Arabia* (A Contribution to Arab Criminal Legislations), Cairo: Dar al-Nahda al-Arabiya, 2nd Edition, 1992.
- (13) Alia, Samir, *Al-Wajeez fi Sharh al-Jara'im al-Waqi'ah al am al-Dawla* (A Concise Explanation of the Crimes against State Security), Beirut: University Foundation for Studies and Publishing, 1999.

II. Theses and Dissertations

- (1) Majed, Hasan, "Al-Tharwa al-Naftiyya fi Fakh Thagharat al-Tashree'" (Oil Wealth Trapped in the Legislation Gaps), MA Thesis, Lebanese University, 2019.
- (2) Abdullameed, Hasan, Mosamah fi Tafseer ba'dh Profeelat al-Mas'h al-Siezmi al-Bahri (Contribution to the Interpretation of Some Marine Seismic Survey Profiles), MA Thesis, Tishreen University, 2018.
- (3) Hassan, Yasser Amer, "Al-Aathar al-Qanaouniyah li Aqd al-Khidmah al-Nafti" (The Legal Effects of the Oil Service Contract), MA Thesis, the Middle East University-Amman, 2017.

III. Legal Researches

- (1) Aflouk, Mohammed Ali Abdulridha and Shaima Jasim Tuman, "Jareemat Takhreeb al-Tharwa al-Hydrocabooniya" (The Crime of Sabotaging Hydrocarbon Wealth), Basra: Basra studies journal, Issue 36, 2020.

IV. Electronic Sources

- (1) Al-Hilali, Ali Hadi Attia, "Wilayat al-Mahkameh al-Ittihadia fi Dhamaan Hoqouq al-Ijyal al-Qadimeh" (The Jurisdiction of the Federal Court in Ensuring the Rights of Future Generations). Available on the Federal Court website at <https://www.iraqfsc.iq/news.4745/>. Accessed Jul. 2, 2022.
- (2) Jordan Hananiah, Kailyn Stenhouse, Jason, Sedimentary rock. Available at <https://energyeducation.ca/encyclopedia/Sedimentary>. Nov. 13, 2015. Accessed June 28, 2022.
- (3) "Dhamaan Tadaffoq al-Nifd al-Khaam" (Ensuring Crude Oil Flow). Available at https://www.mt.com/int/ar/home/applications/L1_AutoChem_Applications/L2_ParticleProcessing/Solids-Droplets-Crude-Oil.html. Accessed 25, 2022.
- (4) Al-Maani Dictionary at <https://www.almaany.com/ar/dict/ar->. Accessed July 4, 2022.

V. Legislations

- (1) Constitution of the Republic of Iraq, 2005.
- (2) Constitution of the Republic of Egypt, 2004.

- (3) The amended Iraqi Penal Code No. 111 of 1969.
- (4) Hydrocarbon Wealth Preservation Law No. (84) of 1985.
- (5) The amended Qatari Petroleum Wealth Preservation Law No. (4) of 1977.
- (6) The applicable Qatari Penal Code No. (11) of 2004.
- (7) Iraqi Supreme Criminal Court Law No. (10) of 2005.