

Criminal Measures Against Offenders of Environmental Pollution Crimes in Iraq After 2003

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Abstract

A major challenge in the protection of the Iraqi environment from pollution is the difficulty of determining the perpetrator's criminal responsibility for environmental pollution crimes. As such, there must be a set of legal procedures and punishments to combat environmental pollution crimes. Fixed legal procedures must be followed after a crime is detected and it should include investigations, arrests, court trials and enforcement of the punishment if the perpetrator is found guilty. The Iraqi legislative authority has acknowledged the perils of environmental pollution through the issuance of procedures and laws for the protection and control of the environment. These laws have made the punishments for the offenders more severe in order to serve as a general and private deterrent in order to remove the consequences of violation of the environment and restore the situation. This paper deliberated on the concept of public criminal responsibility in conformity with the Iraqi Penal Code Law No. 111 of 1969, the Iraqi Protection and Improvement of the Environment Act, Law No. 27 of 2009 as well as determined the offender's criminal responsibility for offenses under the aforementioned laws. Also, there is a statement of the damage the U.S. occupation has inflicted upon Iraq including the pollution of the environment caused by the use of internationally forbidden weapons in 2003. On this matter, the qualitative research method was adopted as this method involves both primary and secondary sources. As such, people from the judiciary and academia who were involved in criminal law were personally interviewed. This study discovered that there are several legal issues and constraints and they are linked to weaknesses of Iraqi laws for the protection of the environment. On top of that, the many sources of environmental protection in Iraq has slowed down the rectification of the constraints and this in turn has significantly affected the determination of the offenders' responsibilities for environmental pollution crimes.

Keywords: Criminal procedures; Environment pollution; Penalties; Offenders; Iraq.



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1. Introduction

Rapid scientific development coupled with the immense competition between the various countries to develop their products and military weapons have resulted in the various environmental problems. Environmental pollution is regarded as one of the most serious type of pollution and is of great concern to many countries and its people. This type of pollution is the cause of various respiratory diseases such as asthma and lung cancer. In addition, the burning of waste gives rise to an obnoxious stench in the neighborhood and it pollutes the environment (Amar, 2004). This has made many countries recognize the importance of the environment and thus the need to protect the environment from pollutants for the good of mankind. Environmental pollution is now a massive problem in Iraq and its citizens are concerned about the negative impact it can have on their quality of life. Environmental pollution can reduce renewable and non-renewable natural resources and is a major threat on the life of future generations. Environmental experts concur that the present environmental problems of Iraq was caused by the three great wars and during which Saddam Hussein and the earlier regime used all kinds of internationally prohibited weapons. The damage to the environment of Iraq and its neighbors caused by the Second Gulf War (in 1991) is so great that it has been compared with the Chernobyl nuclear reactor disaster of 1986 (United Nations Scientific Committee on the Effects of Atomic Radiation, 2008).

The Second Gulf War resulted in massive oil leaks and widespread oil well fires and it seriously damaged the coastal areas of the countries in the region, and this has polluted the water as well as led to global warming. Oil leaks from shipping stations and sunken ships have been estimated to be about 8.4 billion barrels. A significant point to note here is that the environment was also damaged by radiological, chemical and electro-magnetic pollutions (Jenn, 2009). This massive and unfortunate incident has had an adverse effect on the people, especially the inhabitants in the affected areas. Besides that, other serious environmental crimes such as the burning of solid remnants, trafficking of hazardous toxic waste and chemicals as well as the storage and illicit dumping of the said dangerous chemicals were also carried out in Iraq (Ali M., 2000). The indiscriminate incineration and negligent handling of hazardous pollutants have also polluted the environment thus endangering the lives of people and other living beings in the area. In addition to that, individuals or institutions have built oil installations without any basic environmental safety mechanisms or features close to heavily populated cities and towns. These installations have polluted the environment by discharging toxic dust-sized particles and other toxins, and this has resulted in the precipitation of acid rain in the area. Other than being a risk to people, the acid rain also affects the growth of plants and damage historical and natural relics and landmarks (Salim, 2010). Presently, Iraq has two pieces of legislation to deal with environmental pollution issues. The first law is the Iraqi Penal Code, Law No. 111 of 1969 which covers all crimes

irrespective of whether they are ordinary or environmental crimes. The second one, specifically legislated to protect the environment, is the Protection and Improvement of the Environment Act, Law No. 3 of 1997, subsequently amended by Law No. 27 of 2009. The provisions in this law are to protect the environment, cities and individuals from pollution by criminalizing acts that assault the environment. Furthermore, the punishments for perpetrators of these crimes, irrespective of whether they are natural persons or corporate bodies, are carried out using criminal law. These two laws are the main tool that is used by the Iraqi criminal courts to arrest and punish perpetrators of environmental pollution crimes.

2. The Criminal Procedures in Environmental Pollution Crimes

Criminal procedures is defined as a set of rules that is used to regulate the conduct of criminal action the moment a crime occurs until a court's decision is made and enforced (Kaufman, 1980). This definition has basically adopted criminal procedures because once a crime of environmental pollution occurs the aforesaid procedures are based on three fundamental principles. The first of which is the right to take legal action against the criminal conduct. The second principle is linked to the concept of standard of proof in criminal law. In this instance, the standard of proof is higher than that of civil cases as the judge must be "fully" convinced that the accused is guilty as charged. Thirdly, cases involving environmental pollution are adjudicated in courts handling criminal matters. Criminal procedure, as defined by the UK Procedure and Investigations Act of 1996, is a set of measures or actions that specify the mechanism that can be used for investigating criminal offenses, arrest of criminal suspects, gathering of evidence, determining the accused's culpability for the crime as well as the appropriate punishment to be meted out to the guilty party (UK Criminal Procedure and Investigations Act 1996, 2014). However, the U.S. defined it in the Code of Criminal Procedure of 1966 as a set of procedures to govern the administration of justice on matters involving environmental pollution right from the initial stage of investigating individuals suspected of carrying out criminal activities right through arrest and pre-judgment investigations, arraignment, investigation, court hearing, bringing the accused to justice, securing a punishment in case of a guilty verdict and placing the convict on probation and parole procedures (Orfield, 1966). The Iraqi legislature defined it, in its Criminal Procedure Code Law No. 23 of 1971, as a set of rules that is used to regulate the conduct of criminal acts that arise from environmental pollution related matters from the instant the crime takes place until a court ruling is issued and enforced (The Iraqi Criminal Procedure Code No 23, 1971).

2.1. The Investigation of Environmental Pollution Crimes

When an environmental pollution crime occurs, the pertinent state authorities will initiate all the suitable actions with regards to investigating the crime and the collection of evidence (McMurry and Stephen, 1986). The police will gather preliminary information related to the crime and remand the alleged criminals to assist in their investigations. If enough evidence to support the case is collected, the perpetrators of the alleged offense will be arrested and interrogated. Subsequently, they will be tried in a court of law and if they are found guilty the court will mete out the appropriate punishment for the offense to the guilty parties (Jennifer, 1989). When an environmental pollution crime occurs, just like any other type of crime in Iraq, the procedures as prescribed in the Iraqi Criminal Procedure Code, Law No. 23 of 1971 shall be applied. Environmental pollution crimes are unique in nature because they are purely technical and difficult to detect and prove (Mohammed, 2001). Unlike conventional crimes, they require specialists and qualified persons with sufficient expertise to detect and prove the occurrence of such crimes as well as ensure that the alleged offenders are successfully prosecuted. (Cohen, 1992). The usage of the judicial officers department is one of the most renowned methods in contemporary legislation. The court by itself does not have the capability to investigate crimes and gather all the relevant information of the alleged crimes and offenders because there are too many tasks to be carried out (Newburn *et al.*, 2012). Therefore, the state had to create a new system to lighten the investigation authorities burden and assist them in the performance of some of the functions thus freeing them from the arduous tasks of searching, investigating and collecting evidence related to the crime as well as arresting the alleged offenders. The judicial officers' territorial competence is specified in Article 23 of Law No. 23 of 1971. It stipulates that the judicial officers' territorial competence is divided into three areas, namely: (1) the place the environmental pollution crime occurred; (2) the offender's place of residence; and (3) the place where the alleged offender was arrested. If the aforementioned places are located within the judicial officer's jurisdiction, the said officer would have carried out his duty lawfully and within the scope of his authority although the procedure may have been carried out in a place that is away from his territorial competence (Mohammad, 2002). Administratively and technically, the judicial officers are under the executive authority and they are supervised by officers from the executive authority. But, when it comes to performing their duties they fall under the authority of the public prosecutor who in actual fact supervises them in the performance of their duties. This is in consonant with the provisions of Article 40 of Law No. 23 of 1971 which clearly states that the judicial officer is linked to the public prosecutor who will also supervise his activities (Fawzia, 1986). The public prosecutor also has the power to request the competent authority to investigate judicial officers for breach of duty or negligence. In addition, he may also recommend that punitive criminal proceedings be taken against the judicial officer. However, the aforementioned actions does not prevent him from initiating criminal proceedings against the judicial officer.

One of the problems judicial officers faced when carrying out their duty of detecting environment crimes is the problem of insufficient resources. For instance, they lack equipment, tools and mobile laboratories that are needed for them to carry out proper investigations and collection of evidence. They also do not have enough cars equipped with the necessary facilities to help them to reach the crime scene as soon as possible. As a result, this has impeded the enforcement of environmental laws and the consequences are increase pollution and deterioration of the

environment. The Iraqi environmental institutions are given very low budgets and this can be seen from the poor living standards of the judicial officers. The limited funds have also affected the judicial officers' performance because the institutions do not have funds to send them for specialized training in order to upgrade their skills as well as enabled them to utilize modern equipment in order to make them more effective in monitoring and reducing the number of incidences of environmental pollution.

When one of the respondents was asked about the usage of equipment, tools, laboratories and expertise for the detection of environmental pollution crimes in Iraq, the response was that Iraq suffers from an acute shortage of the aforementioned facilities which are crucial in the fight against environmental pollution crimes. He stressed that this is especially so in areas involving radioactive contamination caused by depleted uranium shells used by the U.S. during its occupation of Iraq in 2003 and remnants of the Iraqi wars. The lack of equipment and technical resources to focus on and combat such crimes can be attributed to the Iraqi legislature's failure to allocate physical as well as technical resources to fight these crimes. On top of that, the legislature also failed to public and private laboratories which can also help to combat this kind of pollution. He opined that the state ought to play an active role in the reduction of environmental pollution crimes (Amer, 2017).

In the same context, another respondent expressed the view Iraq's poor financial position is reason why it does not have sufficient facilities such as laboratories, monitoring equipment and other modern technologies that can be used to detect environmental pollutions. The procedures and equipment that Iraq currently possesses are out-dated and spoilt. Furthermore, most of the laboratories distributed all over Iraq are out of order because there is no money to maintain the laboratories. Also, Iraq has difficulty in setting up committees for the investigation and detection of contaminants. The aforementioned situation has led to greater deterioration of Iraq's environment (Ihsan, 2017).

On the contrary, the Clean Air Act 1991 of the U.S. states that the Environmental Protection Agency (EPA), which specializes in the investigation of environmental crimes, ought to be furnished with all the required equipment and tools including cutting-edge fixed and mobile workshops. All such equipment and tools should be provided for by the government. It is also the responsibility of the government to provide funds for the technical team members to attend training to increase their expertise in the detection and investigation of environmental pollution crimes. It also provides for a center that specializes in investigating environmental pollution crimes in cooperation with the Department of Justice and the said center has broad investigation and inspection powers to unveil environmental crimes (Devaney, 1994).

When interviewed, one of the respondents who was interviewed, said that if this type of crime was to occur in the U.S. or U.K. their institutions responsible for investigating the crime will use cutting-edge equipment, machineries and laboratories to assist them in their investigation. However, although Iraqi Law No. 27 of 2009 stipulates that the environmental institutions should use high-tech devices to combat environmental crimes, the said institutions were not provided with such equipment as well as expertise. In practice, it takes several months for the laboratories to come out with the results of their analysis and as a result the evidence that is needed to prosecute the offenders for the crime is lost (Ali A. I., 2017a).

Getting the judicial officers to the scene of the crime is a very important factor in the fight against environmental crimes. This is because only the judicial officers may have the expertise to recognize that an environmental pollution crime has occurred. They are the only people with the knowledge and expertise to carry out follow-up actions and collect information at the crime scene. The information collected can subsequently be studied and researched and may help them to find solutions and proposals that can be used to prevent such incidents from occurring again (Ignacia, 2012). Article 40 of Law No. 23 of 1971 requires the judicial officers to carry out the necessary inspections as it may help them to uncover the truth. They are also authorized to take all the necessary precautions to preserve the evidence of the crime and prevent the evidence from being tampered, sabotaged or destroyed. There are no laws to prevent the judicial officers from seizing the evidence and sealing it in the case of environmental pollution crimes (Raef, 2009). The judicial officers shall, as soon as they receive information of an environmental offense, proceed to the crime scene regardless of whether it involves an industrial enterprise, corporation or any other institution. They are competent with the provisions of environmental laws and upon their arrival at the crime scene investigate, collect information and samples, measure and conduct tests related to the incident, and try to determine the cause of the pollution. In order to achieve their objective, they will obtain information and data the senior management of the corporation where the crime occurred or its employees or any other persons. They have the authority to gain access to existing records at the scene of the accident and examine all the recorded data. The aforesaid authority is in addition to their right to inspect the crime scene with the purpose of clarifying the reasons why the environmental pollution crime occurred (Labib).

The judicial officers often encounter many obstacles when they want to gain access to the environmental crime scene and this difficulty that they encounter hinders their work. A review of the Iraqi Environment Protection Act of 2009 reveals that the law does not authorize them to enter a public workplace when their presence is needed. The law also does not state the time when they can enter a public workplace and this is even when a crime has taken place and their presence at the crime scene is required. Article 43 of Iraq's Criminal Procedure Code of 1971 authorizes the judicial officers to confirm the occurrence of a crime. This implies that the legislature's intention is that the general rules of the Criminal Procedure Code shall be used to resolve crimes. As such, the judicial officers are authorized to enter crime scenes even during non-working hours and public holidays so long as an environmental pollution crime has been committed (Younis, 2015).

In the case of the U.K., Article 108 of the Environment Act 1995 stipulates that an officer affiliated to the Environmental Protection Agency (EPA), the body the body in charge of investigating environmental pollution crimes, has a broad range of powers to investigate and conduct an official inquiry. The law allows the said officer to

enter buildings where an environmental crime is suspected to have occurred at any time as long as they are not residential buildings. The same law also allows for investigations and it includes sampling, measuring, photographing and interrogating individuals with the objective of uncovering the truth of the environmental pollution crime. In case of an emergency, the investigating authority can acquire legal license to forcefully enter premises where environmental crimes are committed frequently (Mitsilegas).

A judge who was interviewed confirmed that the Iraqi Penal Code of 1971 authorizes judicial officers to enter the crime scene when he receives a complaint or notice about the occurrence of an environmental pollution crime. The judicial officers must forthwith proceed to the corporation and enter the building as long as the public are allowed to enter the same. They must then perform their duties which include carrying out the legal procedures to confirm the occurrence of the crime and to prove it. But, more often than not the judicial officers have difficulty in gaining access to the crime scene when the crime is committed during the non-working hours of the corporation, i.e. at night or during public holidays. For instance, corporations that deliberately pollute the environment will resort to working at night so as to escape detection by the enforcement authorities. When this occurs the judicial officers are in a predicament because the Protection and Improvement of the Environment Act, Law No. 27 of 2009 does not provide any procedure or solution to resolve the issue (Saad, 2017a).

2.2. The Sentencing of the Offenders of Environmental Pollution Crime

The court trial is the most important stage of the criminal proceedings taken against the perpetrators of environmental pollution crimes because it is during this stage that the guilt of the accused is established or is not established. The investigating authority transfers the environmental pollution case to a court of law in order to obtain a legally valid judgment against the accused. The said authority must prove that the accused is guilty as charged by tendering sufficient evidence to support their case and attribute the same to the accused. However, procedural legitimacy requires that the court must be convinced of the validity and weight of the evidence against the accused. Procedural legitimacy includes giving the accused the means and guarantees to defend himself and the trial is conducted fairly and equitably as provided for in Article 19 of the Iraqi Constitution of 2005. The aforesaid Article 19 clearly states that the accused is presumed to be innocent until he is found guilty by a court of law and in addition to that the accused must be given the opportunity to defend himself (The Iraq Constitution of 2005, 2005).

Since environmental pollution crime is very technical and specialized the court may not have a good understanding of the environmental issues. In this regard, the judge requires experts in the relevant and latest scientific fields to help him to arrive at a fair and equitable decision. There is a need to use cutting-edge methods to solve crimes because the criminals are now resorting to new scientific methods to cover up the evidence of their misdeeds. An excellent example of this type of crime is environmental pollution crime for this type of crime is not only complex, it also involves many scientific concepts. Therefore, the judge has no choice but to call upon people with the relevant scientific expertise to assist him come to a just and equitable decision. (Joseph and Ira, 2010). After the judge has evaluated all the evidence together with its strength, he will then assessed the weight of the evidence including what happened in the judicial investigative proceedings. After that the court shall declare whether the accused is guilty as charged or is acquitted (Graham *et al.*, 2013).

And, a more recent piece of legislation, Law No. 27 of 2009 failed to provide for the establishment of a specialized court to adjudicate cases involving environmental pollution crime. Instead, the ordinary criminal courts were left with the task of adjudicating this type of cases. As a result, Iraq faces great difficulties in resolving many environmental issues. Without a specialized court to handle environmental crimes, the problems associated with environmental pollution continue to become bigger. However, if Iraq has judges specializing in environmental crimes, they will have the experience and knowledge on why this type of crime occurs. They will also acquire the ability to study the character of perpetrators of this type of crime. It will enable them to hasten the resolution of these issues and impose sanctions that commensurate with the severity of the crime so as to deter others from committing such crimes in future (Fathi, 1986).

However, some countries have already set up a dedicated court that specializes in adjudicating environmental pollution crimes. For instance, Sweden first set up its specialized court in 1999 to handle environmental pollution-related crimes. The court is has decision-makers and technical experts as well as full judicial authority. In the (Amirante Domenico, 2011). Austrian system, there is a specialized environmental court and an independent council on the environment, consisting of 10 judges and 32 legal experts, and their areas of specialization are related to or revolve around the law on environmental impact assessment (Lavrysen, 2014). Similarly, the U.S., which has played a prominent role in backing environmental laws, has established environmental courts known as the Vermont Environmental Court. The aforementioned court is basically a group of quasijudicial institutions. This court, when it discharges its duties, relies on many environmental laws and it also employs independent and competent court officials (Amirante Domenico Environmental Courts in Comparative Perspective, 2011). Likewise, Malaysia set up its first national environmental court or “green court” in 2012. The court is made up of senior judges under the aegis of the chief justice of the Supreme Court of Malaysia. The objective of setting up the court was to settle environmental issues and enhance the capability of the judges to deal with environment-related issues. The court has the authority issue punitive sanctions against multinational corporations found guilty of polluting the environment. It can also sanction individuals for breaking environmental laws and impose very severe financial and corporal punishment on them (Nathaniel Sario, 2015).

One of the respondents, who was interviewed, agrees that the failure to set up a competent court or appoint a specialized judge to adjudicate environmental crimes definitely contributed to the increasing pollution problems in Iraq. The presence of a competent court is needed to reduce the dangers of environmental pollution because the

existence of this court will help to resolve environmental issues rapidly. The judge of the environmental court will have the necessary experience and knowledge to identify the causes of environmental crimes and will be able to issue fairer judgments against the offenders. Therefore, the existence of a specialized court will lead to fewer environmental pollution crimes (Shukri, 2017).

Another respondent, who is an academician, emphasized that modern criminal policy requires the setting up of special courts to deal with environmental pollution crimes. The effects of this type of crime are so serious that it threatens the security and safety not only of the environment but also that of humans. He also noted that although the Iraqi legislature recently issued a special law to protect and improve the environment, i.e. Law No. 27 of 2009, it does not have any provisions for the setting up of a court that specializes in crimes involving environmental pollution. As a result, the ordinary criminal court was left with the task of adjudicating these crimes. The legislature's failure to provide for special courts to handle environmental crimes has resulted in more environmental crimes being committed. He also said that such crimes can only be settled by special courts for the ordinary courts do not have the experience and technical and scientific know-how to do the job. In addition, if the judge from the special criminal court adjudicates the environmental pollution crime, he will be able to assess the offender's personality and thus have a better understanding what type of criminal he is, and will be able to mete out the most appropriate punishment. (Ali A. I., 2017a).

3. The Punishments for Offenders of Environmental Pollution Crimes

The legislature uses punishment as one of the methods to reduce the crime rate. Generally, the sanctions imposed by the courts on a person found guilty of a crime will curb the person's personal rights although the court's action is merely a response to the person breaking a law. If no sanction is imposed, then the law will only be recommendations and its compliance will depend on the goodwill of the citizens. Punishment is a social response of the state exercising its authority on behalf of society. Society's response to environmental pollution crime will be one of two possible forms. The first is a purely punitive form of punishment whereby its objective is to counter a previous offense whilst the second one is a precautionary measure that has a protective character to counter the environmental pollution crime (Hoskins, 2010). As such, the punishments and measures that can be taken against the perpetrators of environmental pollution crimes may vary depending on the severity of the crime as well as the dangers posed by the perpetrator. It is on this basis that the Iraqi Penal Code, Law No. 111 of 1969 adopted a criminal penalty system that the courts can rely upon to punish the offenders of crimes. This system is applicable to all the "regular" and environmental crimes and based on this system the punishment is meted out. This system contains two types of punishment, i.e. basic punishment (imprisonment and fines) and precautionary measures (closing down of polluting firms and adverse publicity).

3.1. Punishments That Restraining Freedom

Punishments that restrict or limit a person's freedom can be defined as dispossessing a person of his freedom and a court limiting his freedom under a law that provides for such a punishment on a person guilty of a crime and detaining him in a government facility that was built for the purpose (Greenawalt Kent, 1983). This is the most common form of punishment. Punishments that restrict a person's freedom (imprisonment) have given rise to a lot of debates and it is controversial because the punishments that restrict freedom vary depending on the severity of the crime. Also, the same punishment is applied for all types of crime and only the duration of imprisonment is different as it is dependent on the type of crime (Abdul, 2013).

In fact, the Iraqi legislature has implemented diverse punishments that restrict the offender's freedom and the punishments include life imprisonment, temporary imprisonment and severe or simple detention. The Iraqi legislature purposely criminalizes the actions so as to enable the state authorities to identify whether the action compromises the environment or not and has adopted them into the relevant penal laws. The Iraqi legislature has also predetermined the punishment for the crime and this is contained in Article 34 of Law No.27 of 2009 states that a person that violates the provisions of the Act and its regulations and instructions shall be imprisoned for not less than three months. But, if the guilty party is a legal entity, Article 80 of the Iraqi Penal Code of 1969 allows the court to substitute the prison sentence with a fine. The said penal code states that the court can only fine corporate bodies or forfeit or other similar precautionary measures that are prescribed by law for the offence. Imprisonment is rarely applied for environmental pollution crimes in Iraq as the courts will only impose it if the crime resulted in the death of one or more persons or if there were serious injuries such as permanent disability. Generally, the courts prefer to impose financial punishments for this type of crime. The courts believe that financial punishment is more suitable for environmental pollution crimes that do not cause serious damage or permanent disability and where it is impossible (in most cases) to identify the natural person that is responsible within the facility (Nyan, 2014).

In contrast, the U.K.'s legislature has, under Section 33 of the Environmental Protection Act 1990, made the punishment more severe and as such any person found guilty of an environmental pollution crime may be imprisoned for a period not exceeding 5 years or a fine not exceeding GBP£50,000 or both (UK Environmental Protection Act 1990, 2012). Similarly, the U.S.'s legislature amended the Clean Environment Act of 1990 and ordered all industrial and commercial enterprises to comply with it. The amendment stipulated that anyone found guilty of committing an environmental pollution crime can be imprisoned for a maximum period of 15 years (Clean Air Act – U.S, 2004) The judiciary adopted this idea in *Wisconsin v. Doyle* in 1982 when it sent fined the corporation \$90,000 polluting the environment and its chairman was fined \$10,000 and was also ordered to be imprisoned for 10 years. Similarly, In *California v. Loren*, the owner of a corporation found guilty for polluting the environment was imprisoned for 5 years and the corporation had to pay a fine amounting to \$1 million (Riihijärvi,

1992). A criminal court judge who was interviewed pointed out that it is difficult to impose a prison sentence in cases involving environmental pollution crimes because the offenders are usually corporations or industrial facilities. Therefore, in the aforesaid scenario how can a corporation or industrial facility serve a prison sentence? In the majority of cases, it is difficult to ascertain the natural person who is responsible for the crime. He also verified that when the competencies of the corporation is more inter-twined and the administrative relations get more complicated, it becomes more difficult to determine the person responsible for the crime (Saad, 2017b).

3.2. The Fine

The imposition of a fine is one of the most basic sentences in environmental pollution crimes (Anthony, 2002). Most Iraqi criminal legislations tend to favor the use of financial punishment in environmental pollution crimes as it will reduce the financial position of the corporation. Article 91 of Law No. 111 of 1969 defines a fine as the sum of money that the guilty party has to pay to the government as determined by the court. Its intention is to inflict pain on the guilty person and is not a compensation for the fine is a punishment that is meant to hurt the financial position of the offender (AL-Feel, 2009). In cases involving environmental pollution crimes, the fine is important because these crimes are mostly committed by corporations or industrial facilities whose objective is to maximize their profits. For instance, these corporations elect not to install the equipment that is needed to prevent pollution of the environment because the equipment are expensive. Therefore, the legislative authority decided to impose financial sanctions against the corporation so as to hurt their financial position. As such, the imposition of a fine appears to be the most suitable penalty to discourage the commission of this type of crime. Since the corporations are motivated by achieving higher financial gains and illegitimate profits, imposing financial sanctions against them will serve as a deterrent. Therefore, under the said circumstances the imposition of a financial sanction should prevail as it will affect the offender's financial health (Coffee, 1981).

However, the use of the fine as a deterrent in cases involving environmental pollution crimes has given rise to some problems. In criminal jurisprudence, this sanction is not appropriate for punishing corporations guilty of polluting the environment because more often than not the fine is either too high or too low. When the quantum of the fine is too high, the corporations may experience very severe financial trouble. On the other hand, if it is too low it becomes a legal license to continue to pollute the environment. Also, the corporations actually consider the fine to be one of the risks of running their business and if they are fined then the cost incurred will be passed to their customers and consumers. The fine is also considered to be a weak measure to persuade the corporations to discard their unfavorable practices. Then again, the corporation may treat the fine as another fee that must be paid and then pass the extra cost of running its business to its customers of consumers. Although public interest is an acceptable and foreseeable consequence of the imposition of a penal sanction, it is also an unavoidable effect of the imposition of a sanction for the maximum good.

It is arguable that, in theory, the corporation will restate its position on environmental policies and practices, but in practice no such response to a fine has ever been given. A 1978 study showed that 40% of offenders who were fined for breaching the Australian Trade Practices Act did not introduce any organizational reforms. As such, it can be said that companies that were fined may not subsequently introduce new preventive measures (Fisse, 1990). Another weakness of this sanction is that it does not aid in the cleaning up of the environment and the victims of the crime are also not financially compensated. The fines when it is paid go to the government coffers and more often than not it is used elsewhere and not for cleaning up the environment. If small corporations are fined, they may then be short of funds to implement new pollution control measures.

Article 80 of the Iraqi Penal Code states that the corporate bodies are responsible for the crimes committed by its employees, board of directors or agents working for its benefits. The court may fine them or confiscate or take other precautionary measures as provided for by law for that crime. In spite of the legislature regarding financial punishment as an important tool prevent the pollution of the environment, the fines imposed by the court on the perpetrators do not commensurate with the gravity of the damage inflicted on the environment .

In contrast, the developed countries used fines as a tool to deter environmental pollution crimes. It has a significant impact in reducing the risk of environmental pollution. In the U.S., under the Clean Environment Act, individuals found guilty for violating the provisions of this Act may be fined a maximum of \$250,000 and if it is a corporation then the punishment is a fine not exceeding \$1,000,000 or imprisonment of up to 15 years or both. (Alexa, 1992). Likewise, in the U.K., under the Clean Environment Act 1973 the fine that may be imposed on the offenders of environmental pollution crime is a maximum of GBP 250,000. If the same party repeats the crime then the penalty shall be more severe (Mitsilegas).

Another judge who was interviewed contended that a fine has no deterrent effect if the crime brings about significant economic advantage. This is because the fines imposed by the courts on the corporations guilty of environmental pollution crimes are often very small. Even when the law provides for severe fines, the courts are rarely required to use them because for the said fines to be applicable the prosecution will have to establish real damages or the risk to life, health or the environment. The problem here is that the prosecution will find it very difficult to establish real damage or the risk to life, health or the environment because of the special nature of the crime (Mohsen, 2017).

When responding to the simple punishments as well as its impact on environmental pollution an academician who was interviewed pointed out that in general one of the important factors that worsened the problems of environmental pollution is just the estimation of the fines to be imposed on those found guilty of committing environmental pollution crimes. The estimation of the fine is likened to giving a license to pollute the environment because the corporations or industrial concerns deem the fine to be minor when compared to the benefits they can

derive from it. The fine is so much less than the cost of complying with the measures and requirements imposed by the law to protect the environment from pollution (Amer, 2017).

3.3. Closing Down of the Corporations

The most important precautionary measure imposed by the environmental law is the punishment of closing the corporation or factory. This precautionary punishment is only meant for corporations that are found guilty of committing environmental pollution crimes. There are several ways to close the corporation for it can be partial or complete, or temporary or permanent, but the current preferred way is temporary partial closure. To close the corporation will result in work stoppage of the corporate body even if it is operating under another name or management. Article 121 of Law No. 111 of 1969 provides that the court may, when sanctioning a corporation for a felony or misdemeanour, close the corporation that was used to commit the offence. The Iraqi legislature took the permissive approach in using closure as a punishment, i.e. except for some special cases the court has the prerogative in the imposition of this punishment (The Iraqi Penal Code No. 111 of 1969, 2005).

One of the respondents, who is a judge, said that stopping the corporation's operations for polluting the environment is an extremely important punishment. It puts an immediate stop to the dangerous activities that affects the country's economy and health of its citizens. In addition, this punishment puts a stop to the turmoil caused by environmental pollution and prevents its recurrence. He also said that this sanction is useful in cases where the corporations' activities can cause severe damages that may be difficult to be remedied or threaten the health of many people. The activities carried out by these corporations may subsequently cause serious environmental damage to the area and allowing the operations to continue will cause further damage to the environment that will be more difficult to rectify.

In support of the aboihsanve-mentioned opinion, an academician stressed upon the importance of the closure of corporations or industrial facilities polluting the environment if their activities posed a real threat to people and the environment. He opined that it is wrong to substitute this punishment with other penalties. For example, placing the corporations under 24 hour observation not be suitable under the Iraqi environmental legislation because it will require the government to employ more employees because the department tasked with protecting the environment are already under staffed. Furthermore, such measures do not strengthen the deterrent factor and reduce the harm on the environment in serious cases. These deterrent-related measures will only have a comparatively limited effect on the corporations (Ali R., 2017b).

In contrast, an Iraqi Ministry of the Environment's senior engineer when interviewed contended that shutting down the industrial facilities or corporations for polluting the environment is at one with the principle of punishment. It is because its effect not only affects the corporation but it also affects the innocent employees. In addition to that, the corporation's closure will have an impact on the economy of the community especially if the corporations are pretty large. He also wondered about the practicability of this penalty when there is an economic crisis or when the jobless rate in the community is very high. He cautioned that these measures should be handled wisely (Kamal, 2017).

4. Conclusion

The Iraqi environment was badly damaged before and after the 2003 U.S. occupation of Iraq. It had an adverse effect on the people of Iraq as well as other living organisms. The wars and the usage of weapons prohibited by the international community by the U.S. during the occupation period had a large effect on the worsening environment pollution in the country. This was in spite of Iraq having legislations such as Law No. 111 of 1969 and Law No. 27 of 2009 that criminalize acts that pollute the environment. However, these laws have been ineffective in tackling the pollution problems in the country because the laws and its prescribed sanctions against the wrong-doers are weak. The law also does not provide for the imposition of deterrent penalties on the perpetrators of environmental crimes. In addition to that, the weaknesses and imprecision of the environmental laws are among the factors that hinder the effective application of the environmental laws against the corporations.

Therefore, the existing laws should be made more effective by allowing for the imposition of stricter sanctions against the violators and thus strengthen its deterrent effect against opportunists. Environmental pollutions crimes committed by corporations can be tackled more effectively through the imposition of larger fines or application of alternative penalties like shutting down or liquidating the corporations. However, the alternative penalties can only be effective in some of the cases because fining the corporations will only target the corporations' cash reserves and if the corporations have large cash reserves the fine will have a minimal impact on them. As such, it is proposed that secondary liabilities should be adopted by the Iraqi legislations. The law should recognized the central role played by certain individuals in the corporation for they play may play a major role in the violation of the environment.

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