

Legal and Educational measures to reduce environmental crimes in Algeria

التدابير القانونية والتربوية للحد من الجرائم البيئية في الجزائر.

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Abstract :

ملخص :

Environmental crimes are considered to be one of the most important newly emerged crimes, which have developed due to their rapid spread and their negative effects on the environment and human life. Algeria, like other countries, has put in place a set of sanctions in the event that this type of crime is committed against the environment were causing damage, and even helping to do so, in accordance with the developments and foreign legislation which has made crimes against environment an important, and common subject for the entire international community.

Scientific research has contributed to the development of this kind of emerging crime, due to the destructive acts that had to accompany the emergence of the industrial revolution, which has a negative impact on an individual's life and the whole society. Therefore, the present research paper aims to shed light on this type of crime by high lighting the occurring areas, and its impact on people's health, and the environment, with reference to some mechanisms to deal with it in Algeria.

Keywords : legal, education, environmet, crime.

تعتبر الجرائم البيئية من أهم الجرائم المستحدثة التي ظهرت مؤخرا واتسع مجالها نظرا لانتشارها السريع وآثارها السلبية المؤثرة على البيئة وحياة الإنسان. والجزائر كغيرها من الدول عمدت إلى وضع مجموعة من العقوبات في حال ارتكاب هذا النوع من الجرائم في حق البيئة أو إلحاق الضرر بها، وحتى المساعدة على الإضرار بها، تماشيا مع التطورات الحاصلة وتلاؤما مع التشريعات الأجنبية التي جعلت من الجرائم البيئية موضوعا مهما ومشتركا بين كل الأطراف الدولية.

ولقد ساهمت البحوث العلمية في بلورة هذا النوع من الجرائم المستحدثة التي مردها للصور المستحدثة للسلوكات الضارة بالبيئة، المترامنة مع ظهور الثورة الصناعية، التي كانت لها انعكاسات سلبية على حياة الفرد والمجتمع. وعلى هذا تسعى هذه المحاولة البحثية إلى تسليط الضوء على هذا النوع من الجرائم بإبراز مجالات نشاطها وانعكاسها على صحة الفرد والبيئة، مع الإشارة إلى بعض آليات مواجهتها في الجزائر.

الكلمات المفتاحية: الجريمة، البيئة، التربية، القانون.

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INTRODUCTION:

In recent years, the issue of environmental crimes has aroused great interest, which has led most countries to include the issue of environmental protection in their national agendas, in addition to enacting legislation against any violation of the environment, and guaranteeing the right of individuals to a healthy environment. National efforts to protect the environment, together with international efforts, by signing several global agreements and treaties that regulate environmental protection in a tight framework that guarantees effective protection of the environment.

In addition, based on the fact that we now live in the shadow of a booming world in industrial activities, regardless of what some of them cause serious damage to societies health, including the violation of people's right to a clean environment. Environmental crimes have justified a fundamental challenge which stands in the way of the development of countries and their efforts to attract investment and aspirations for a better economic and environmental situation. Therefore, this issue needs to be given greater importance in light of the results of environmental crimes. And Algeria, like other countries that have suffered from effects of these crimes, focuses on the implementation of various laws that define sanctions if this crime is committed. The Algerian legislature has not defined the crime against environment as defined by the legislation of other countries such as French or Egyptian legislation, despite the importance of defining the conceptual framework of this crime given its nature, for it affects an important factor affecting the lives of individuals and societies, and its effects extend to different aspects of the composition of society as a whole. But he deliberately adopted legal provisions by which it aims to impose sanctions on anyone who commits a crime against the environment, or to cause damage, or contribute. In accordance with the developments, and is compatible with foreign legislation that made environmental crimes an important topic shared by all international parties. At regional and national levels, including the institutions, bodies and individuals, in hopes of reducing the risks to the ecosystem as a whole.

Therefore, we will try through this research paper to answer the following questions:

1. What is meant by environmental crime?
2. what are the elements/pliers?
3. What are the classifications of environmental crimes?
4. What are the sanctions approved by the Algerian legislature against the perpetrators of environmental crimes?

1. What is environmental crime ?

Environmental crime is marked by a lot of ambiguity, unlike the rest of the other crimes, so that the activity that caused the injury may be one of the important elements of the economy that depend on the state in development, the state is in itself of this activity. For this, we will try to focus on some specific definitions. Ashraf Helal defines crimes against the environment as: "any positive or negative act is illegal, either determined directly or indirectly by a penalty in law environment or precautionary destruction "(Ashraf Helal, 2005, p. 36).

Al Malkawi defined environmental crime as: "the act that violates a commission committed by the legislature with criminal sanctions, and that causes a change in the properties of the environment in a voluntary or involuntary manner, directly or indirectly, leading to damage to living or non-living beings, which affects the act of a person of his life naturalism" (Ibtisam Saeed Al Malkawi, 2008, p.33).

Also, Al Huraish defined environmental crime as: "an illegal voluntary act involving a breach of money and values are the basic elements of the environmental milieu in which living organisms live and develop, what the project plans to criminalize and punish the perpetrators of this attack, which takes the form of polluting these elements" (Al Faraj Saleh Al Huraish, 1997, p. 94).

Criminal jurisprudence has defined it as follows: "the illegal act emanating from a natural or legal person directly or indirectly harms the elements of the environment and deprives others of their natural right to an environment free from pollution" (Khaled Mostafa Fahmy, p. 365).

An environmental crime is "a violation of a legal obligation to protect the environment. In this way, it constitutes an unlawful attack on the environment, in violation of the legal rules prohibiting such an attack and laying down the sanctions which are imposed on it are planned". Consequently, environmental crime is described as a crime which can be defined as any act or omission which appears outwardly in the form of an attack on order, security and tranquility, and for what reason the law carries a sanction.

From the previous definitions, we can say that environmental crime is based on several elements:

- Committing an act that represents positive act, such as someone disturbing people with speakers or negative act, such as a doctor's refusal to vaccinate people against an infectious disease, so there is no environmental crime if no action, positive or negative, is committed.
- Whether the act is illegal, that is to say that the law on the environment or a special law on the environment contains a text prohibiting it.
- Whether the act is illegal, in the sense that the law on the environment or a special law on the environment contains a text prohibiting it.
- Whether environmental law or other environmental laws decide on a sanction or a precautionary measure.
- That environmental crime is transnational if it is committed by a person by violating provisions that include the preservation of the environmental balance, such as the elimination or elimination of pesticides or radioactive materials in an aquatic environment (Saidan Ali, 2008, p. 18).

2. Pillars of Environmental Crime :

The Algerian legislator addressed the definition of the environment in Law 03/10 relating to the protection of the environment, which consists of vital and non-vital natural resources such as air, atmosphere, water, the subsoil, plants and animals, including genetic patrimony and forms of interaction; as well as places and landscapes, but he did not specify his understanding of environmental crime. The Algerian legislator simply mentioned the elements of environmental crime, which were defined as follows:

a) The legal element of environmental crime :

Criminal legitimacy requires the presence of an earlier legal text for the act of aggression, and in this recognition of the most important principles of criminal law lies the principle of the legitimacy of crime and punishment, which requires that the criminal text penalizing the environment is clearly and precisely indicated, which will guarantee greater efficiency during its application. However, we find that this issue is largely excluded in environmental criminal legislation, but that environmental legislation has in itself become an obstacle due to the large number of laws in this

area, in addition to the technical nature that prevails over the law itself. In addition, the approval by the Algerian legislator of the precautionary principle, which requires providing criminal protection to the environment before the occurrence of environmental damage despite the absence of a penal text, makes the concept of the principle of the prohibition of the legitimacy of an expansion in this area, especially if there is a possibility of environmental damage, which is often continuous damage. The environmental criminal text published in the future rule has a retroactive effect, and this is to suppress the attack on the environment on the one hand, and the inability of the criminal to allow impunity on the other hand (Lahmar Nadjwa, 2012, p. 71).

b) The physical element of environmental crime :

The physical element of an environmental crime consists of external criminal conduct according to a legal text which causes prejudice to an interest protected by environmental law or other environmental laws and through it the executive actions of the crime are localized, and this element consists of three components which are criminal act and the causal relationship and the Criminal outcome.

- **The criminal act :**

It is prohibited act that undermines or endangers a fundamental value of society, is characterized by criminal act in environmental crimes, with certain advantages that define its essence and nature. This can be illustrated by the fact that criminal act takes a positive physical form by creating a change in the surrounding environment, or a form negative act, such as radiation, which don't respect the rules environmental's rights, or by preventing a person from performing a certain positive action which had to be carried out in certain circumstances, on the basis of a legal obligation to do so that prevent it has to have it done, but he willingly refused. (Mahmod Najib Hussein, 1996, p. 286).

- **Criminal outcome :**

One of the delicate problems that are difficult to prove in crimes of environmental aggression is the element of the outcome which can be obtained by committing an act harmful to the environment, and this is due to the nature of these crimes and with direct and tangible material consequences that they are not like traditional crimes, but rather in traditional crimes. In the case of environmental crimes, the investigation after a certain time may be lengthened or shortened, and this result may be obtained in place of the action and may be obtained elsewhere in the same country or may exceed it at the borders of another country as is the case in the offenses of environmental pollution, whether pollution of rivers, seas or space.

- **Causal relation :**

The causal relationship is considered the third element that is added to criminal act and the criminal result in order to complete the material element of the crime and for environmental crime to occur, there must be a causal relation between the criminal act and the criminal result, because the commission of this act can lead to the occurrence of criminal result, however, the problem which raised in this type of crime is the difficulty of determining the cause which led to the criminal result. When the achievement of the criminal result is tainted so that it is achieved at a place and at a time different from the time and place of the criminal act, which leads to the intervention of other causes to cause this result (Luqman Bamon, 2011, p. 52).

Therefore, we find that the solution of environmental legislation has widened with the introduction of risky crimes, since it occurs simply by proving act without obtaining any result, which offers the highest possible degree of protection from the

environment, and addresses the difficulty of proving the cause and effect relation between the criminal act and the outcome.

c) **The moral element of environmental crime :**

The moral element of any crime means criminal intent, that is, the intention (intention of a person) to harm others or property knowing that the elements of the crime, except that the majority of the environmental texts we find are without moral elements, which means that most environmental crimes are material crimes that the courts extract from the moral element. Material act itself, and the charge is sufficient to prove the legal and material element of the crime that involves the establishment of liability, the rule that the need to prove the existence of a criminal error on violations of the substance, which are in the field of the environment, has been extended to some environmental misdemeanors (Lahmar Nadjwa, 2012, p. 76).

3. Classification of environmental crime :

Classify environmental crimes according to the Algerian legislator into three types: Felonies, misdemeanors, and infractions. In other words, depending on their nature, they are divided into land-related crimes and maritime crimes, and air-related crimes. Each of the categories is detailed below:

3.1. Classification of environmental crimes according to the Algerian legislator :

Regarding criminal procedure, the Algerian legislature adopted the laws in the Criminal Code, on the one hand, and the laws set by the environment legislation on the other, these procedures are an important approach for those which are provided by the Penal Code, which is in the actual embodiment of the principle of maintaining human rights, particularly the rights to live in a healthy environment free from all forms of pollution, various diseases, without forgetting that's a constitutional right guaranteed by most constitutions of the world.

In accordance with the environmental law n° 09/10 relating to the protection of the environment within a sustainable development framework, the legislator has devoted criminal protection for all natural area, by preventing violation or prejudice to the diversity Sociological, atmospheric environment, and aquatic environment, as well as to the terrestrial environment and to the reserves in addition to the forest zones supported by law n° 84/12 relating to the general regime of forests modified by law n° 91/05, through various legislations texts that included penal provisions applicable to those who raped them, without violating the criminal law of article 25 which divides crimes into three types: felony, misdemeanor, and infraction (Lahmar Nadjwa, 2012, p. 71).

3.1.1. Felonies :

This type of crime was not mentioned by the Algerian legislator in the Environmental Protection Law, but was mentioned in legislation related to the environment, such as the Algerian Maritime Law. This type of crime is achieved by the availability of its three elements that are already mentioned.

We can say that environmental crimes find their application in the provisions of Algerian penal code, as well as in maritime law, we find the text of article 396 of the penal code which stipulates that "the crime is considered as a crime and liable to temporary imprisonment for 10 to 20 years in the event that a person intentionally burns the money. It does not belong to him, like forests, planted fields and logging".

We also find in maritime law, in its article 500 which stipulates the crime of intentionally throwing radioactive waste at the captain of the Algerian or foreign ship

in the waters of the national maritime territory. (Article 500 of Ordinance 76/80 of 23/10/1976 modifying and supplementing Article 42 of Law 98/05 of June 23, 1998).

Similarly, Law n° 83/17, as amended by Ordinance 96/13, in its Article 149, in accordance with the provisions of Article 406 of the Penal Code, anyone who intentionally damages water installations, we also find environmental legislative texts which classify crimes within crimes such as the sanitary law and the law on waste and its elimination (Luqman Bamon, 2011, p. 56-57).

3.1.2. Misdemeanors :

The legal texts of the environmental crime qualified as a misdemeanor creates difficulties because the large number of legislation on the one hand and on the other hand, of the predominant technical nature in environmental law in itself, this legislative wealth which we note so much at the level nationally than internationally. Where it covers all areas of the environment and includes them with protection, the legislator has therefore criminalized aggression or damaged biodiversity, atmospheric environment, and aquatic environment, as well as the natural environment.

Regarding the environmental crime classified as a misdemeanor, it is divided into three types of misdemeanors:

✓ **Environmental formal crimes :**

An offense of this type occurs when the administrative, civil, or technical and organizational obligations, are not respected such as the absence of a license, or the exercise of an activity not in conformity with the regulation; as the non-respect of the conditions of transport of goods, and sensitive materials, and this is what is stated in articles 4 and 5 of legislative decree 94/16 concerned the conditions of the practice of the guard of the silver and sensitive materials.

This type of criminalization allows the protection of the environment before damage occurs.

✓ **Environmental crimes by refrain :**

This type of crime occurs as a result of negative behavior from a misdemeanor, i.e. as a result of his failure to perform a specific act ordered by law.

✓ **Environmental crimes by result :**

These crimes only occur through physical assaults on any area of the environment, either directly or indirectly, including the crimes of physical assault on animal wealth, and marine wealth (Fayçal Boukhalifa, 2017, p. 130).

3.1.3. Infractions :

The Algerian legislator has established texts to protect the environment and approve sanctions in the event of violation of its dispositions. The Algerian legislator has put the provisions for the protection of the environment and sanctions approved in violation of its provisions, all areas covered by environmental protection and what are applied to misdemeanor, are also applied to infractions. It is through these texts to prevent aggression, or prejudice to biological diversity, atmospheric environment, and aquatic environment, as well as the ground environment, and even cultural environment. Violations are many in the environmental field. These crimes were mentioned in many legal texts related to environmental protection. Indeed, most of the penalties prescribed for violating the provisions of these texts are misdemeanors and violations (Lahmar Nadjwa, 2012, p. 82).

Infractions in environmental crimes are achieved through the availability of its three pillars: the legal element, the physical element and the moral element.

4. Classification of environmental crimes according to their nature :

4.1. Environmental crimes related to the atmosphere :

Environmental crimes related to the atmosphere consist of polluting the environment when introduced by Western compounds into natural components, whether solid, gaseous, liquid or radioactive, bacteriosically with air in the form of particles, or organic or non-organic particles, which are the result of various human activities, and these substances do not. It is absorbed into the ecosystem and poses a danger to humans and environmental elements (Sayed Ashour Ahmed, 2006, p. 21).

As is the case when the gases proportions that make up the atmosphere are inexorably occupied by living organisms and renders invalidates the living conditions of these organisms, as defined by section 44 of Law 03/10, and Article 84 of the same law specifies sanctions for the protection of air and atmosphere.

There is no doubt that air pollution due to industrial activity is one of the most common types of environmental crime in Algeria, especially in coastal cities, characterized by the density of industrials areas like Arzew, where there is a multi-activity industrial zone (for example Zonart, Ex Asmidal).

In 2005, the Oran's city health department conducted a study in coordination with a specialized French Foundation, which revealed a danger due to substances that were thrown into the atmosphere, especially ammonia which causes serious respiratory diseases such as asthma, allergies, irritation of the mucous membranes of the nose and throat, and eyes. The same study mentioned that during the inspection of the industrial complex periphery the composition of a black cloud in the air along the coast between Arzew and Mostaganem was watched, which contains many types of carbon dioxide (CO₂), whose annual volume is estimated at more than 1,284,634 tonnes, in addition to unpleasant odors (ammonia) (Djerroud Nassima, 2012, p. 48).

Among the most important industrial units which cause problems of environmental pollution, we find the cement plants, which are an important source of flow of combustion gases, and polluting particles. The following table shows the pollution weights (tonnes / year) emitted by the various cement plants in relation to production.

Based on these data, cement plants in Algeria are ranked in the black column according to the National Bureau of Statistics, due to the combustion gases, and the dust from their ovens. In addition, the failure of filters or the lack of quality and efficiency in most factories has made dust emission levels sharp or more dangerous for the ecological balance.

The following table shows the pollution weights (tonnes / year) emitted by the various cement plants in relation to production.

Table 1. includes the pollution load of the various cement plants in Algeria

CEMENT PLANTS	NOX Fe:6.62	CO Fe:1.84	COV Fe:0.673	Dust Fe:150	CO2 Fe:0.0096
Raïs Hamidou	3.38	66	24	37.800	

Sour El-Ghozlane	270	75	28	75.900	Negative
Meftah	267	74	27	75.00	
Chlef	434	120	44	121.65 0	
Zahana	723	201	54	91.800	
Beni Saf	574	159	58	91.200	
Saïda	283	79	29	26.550	
Hamma Bouziane	228	91	33	92.100	
Hadjar-soud	226	63	23	67.500	
Ain Kebira	453	126	46	127.00 0	
Ain-Touta	415	143	52	144.00	
Tébessa	258	72	26	28.250	
Total	4469	1269	464	1.019.3 5	

Table (1) includes the pollution load of the various cement plants in Algeria (National Economic and Social Council, 1997).

The city of Skikda, which has the largest complex for diluting gas in Algeria, and transporting gas through the city's port, as well as an industrial zone that includes 43 industrial units, and 14 quarries that use dynamite to dynamite rocks, making Skikda the first city in terms of industrial pollution. At the top of the list we find the industrial complex for cementitious materials, mercury, industrial complex natural gas dilution, the national company for plastic materials that produce poisonous gases and impurities stuck in the atmosphere such as lead, mercury and Alomniet. What prompted the Department of Environment and Planning and territory to classified Skikda ranks first nationally in terms of pollution, which resulted in the closure of industrial complex (mercury plant Azzaba) that caused acid rain and contaminated water resources with mercury secretes by industrial complex (Abbas Flori, 2006, p. 28).

In ghazaouet (Tlemcen city), there is also an industrial complex for zinc analysis which produces zinc, sulfuric acid, and cadmium (an element similar to thin) which is an important source of sulfur dioxide emission in the atmosphere, and emissions of polluting heavy metal particles. In the internal cities, we find the outskirts of Blida (Meftah), whose inhabitants suffer from an epidemic of lung cancer due to the amenity's substance used in the manufacture of construction panels (eternity plates) of the factory (materials and derivatives center), adjacent to residential sites, this substance pollutes the atmosphere with the emissions it produces in the form of dust, and it causes cancer for those who inhale it. Most of the time, despite the treatment, and despite the fact that several countries have banned the use of this material, Algeria still produces around 1000 tonnes per year, notably the Meftah factory, and another factory in Mascara city, and Bordj Bouarrerdj city. Although these factories have

improved many conditions for the production of this material, replacing the raw material before use, this is not enough, since lung cancer lesions are still recorded, especially among workers in these factories and those residing in the municipality of Mofteh (Djerroud Nassima, 2012, p. 52).

What can be said about the crime of atmosphere pollution is that industrialization has played an important role in the spread of this crime. It was accompanied by a serious violation of natural resources, the environment in which individuals live, and even the lives of individuals themselves.

4.2. Environmental crimes related to the Sea :

It is difficult to count all environmental crimes related to the sea and waters; because it is difficult to know the source of pollution that renewable and developed. Environmental crimes related to the sea have been mentioned in the maritime law under ordinance 76-80, the maritime fishing law 07-04, the waters law 12-05, and the environment law 10-03, and the legislator have imposed harsh penalties on anyone who has caused a crime related to marine pollution.

Algeria has a seafront stretching over 1,200 km, and most of the municipalities and industrial units located on the coast of Algiers aim to dump their waste into the sea, without any prior process, which has led to the pollution of this environment, where there are 25 landfill points located in the port of Algiers (National Economic and Social Council, 1997).

In addition, the polluted waters of Oued El Harrach, are thrown into the sea without process, which affects maritime wealth. About 56,894 cubic meters of contaminated water per day are emptied into Oued El Harrach, Oued Mézard, Oued Beni Massous and Oued Reghaia. This has exposed many beaches to pollution due to the flow of industrial waste and sewage. In the summer of 2003, hundreds of people were affected with several diseases due to this pollution, which prompted the authorities to close a number of beaches, and more than a hundred people afflicted with eye inflammation, diarrhea, and skin inflammation after sea swimming, especially in Ozone Beach, the Palm Beach, and also Beach of Pine Club, along with taking samples to analyze from the coastal waters, show that they contain a large amount of germs (Sayed Ashour Ahmed, 2006, p. 183).

Some ships and tankers also contaminate the water with petroleum, which threatens thick wealth. Algeria has been affected by this situation. About 100 million tonnes of oil transits each year from Algerian ports and 10,000 tonnes are lost and infiltrate the sea during these operations, and these spills which constitute a danger to the environment, because 1 tonne of oil can cover a thin cloud covering an area of 12,000 hectares of the sea surface, and when the evaporated part of the oil slick evaporates, the parts of the heavy slick seep into the depths, damaging wealth marine (Fishes and Plants).

oil pollution affects the fish's respiration, and marine birds, in addition the aquatic organisms; also oil pollution exposes them to death. In addition, oil pollution affects the economics of coastal cities in general, and it is likely that kind of pollution occurs during maritime disasters. The city of Skikda in the east of the country is one of the most polluted cities. Especially after a fire in the water cooling station of the oil refining complex on 09/15/2005, and the leaking of a large quantity of oil into the sea, which caused great pollution of the port surface, and surface water (Djerroud Nassima, 2012, p p. 62-63).

This is a sample of marine environments crimes that pose a threat to human life, and to marine organisms.

4.3. Crimes related to the land :

Multiple crimes related to the land are governed by numerous laws that fully punish assault and exposure to living and non-living things, whether natural or non-natural.

The Algerian legislator sanctioned any aggression, or prejudice to biological diversity, as well as the terrestrial environment, and the reserves, as well as the forest zones under the law on hunting, the law of the environment, and the law of protection of the coast, as well as the special protection of the cultural environment, and even new cities in the context of the protection of the urban environment According to law 02/08 relating to the creation and preparation of new cities. Pollution of the working environment has also been criminalized by Law 19/19 on the handling and control of waste (Radia Mechri, 2013, p. 5).

indeed, many facts concerning crimes committed in nature are revealed to us, including what they contain. If we talk about the land and its biases, we will see that the extensive and illegal use of pesticides and chemical fertilizers in the long term poses a serious threat to the fertility of agricultural soils.

The Algerian territory comprises 87% of the vast desert zones, the dry steppe regions which constitute 09%, and 04% share the coastal strip and the mountainous heights over 238 million hectares; or 18.75%, which are almost entirely in the northern regions, and these lands are prone to deterioration, and desertification, the latter indicating environmental degradation. Desertification is a natural disaster which expresses a certain imbalance between the various components of ecosystems, and the degradation of their vital properties, and is closely linked to the excessive, or inappropriate exploitation of land which leads to the exhaustion of soil, to deforestation, as well as grazing and authorized pastoralism, which has led to vandalism of the vegetation (Abbas Flori, 2006, p. 29).

This brings us to speak about crimes related to forests, which have become in a state of serious deterioration, for several reasons, in particular the fires, because they have devoured many Algerian forests. In addition, they suffer from pollution, notably smoke, dust, as well as acid rain which affects its growth, its yield in a negative way, and contributed to the death of rare tree types (Sayed Ashour Ahmed, 2006, p. 183).

Speaking of forest or plant wealth and its degradation, we must speak of the degradation of animal wealth. Some animals are threatened with extinction, due to the degradation processes that have occurred concerning the primary plants which are their first pillar, because young mammals such as rodents of Mediterranean origin are threatened. Disappear in the near future, and the same is said for animals with udders and crawling (Djerroud Nassima, 2012, pp. 72-73).

While the voices of associations active in the environmental field have risen to stop the activity of poachers who have committed crimes against nature and wildlife, by wildly hunting rare and endangered animal species, such as the hyena, the fox, and the hare, in the Atlas mountain region of Blida.

5. Prescribed sanctions for environmental crimes :

The sanctions provided for by Algerian law against the perpetrators of environmental crimes are determined in two aspects as original and complementary sanctions, and what follows is an explanation:

5.1. Original sanctions for environmental crimes :

The original sanctions as defined by law are four types: execution, imprisonment, incarceration and fine.

✓ **capital punishment :**

This sanction, and in fact, this type of sanction is rare in Algerian environmental legislation, and it was determined in the event of aggression on the ocean, or to introduce a substance, or dispersing it in the air, in the subsoil, or in the waters; including territorial waters, which threatens the health of humans, animals, or the natural environment. This is what is decided in article 87 bis of the Criminal Code.

✓ **Imprisonment :**

The sanction which comes at the second degree in terms of severity, because it restricts the freedom of the person, and takes two forms: life imprisonment and temporary imprisonment, and the Algerian legislator stipulated it in the Penal Code; the authors are punished by imprisonment for 10 to 20 years, if the fraudulent material causes, or corruption in an incurable disease, loss of use a member with permanent disability (Lahmar Nadjwa, 2012, p. 89).

Article 66 of Law 19/01 on waste management, control and elimination provides: "A prison sentence of Five (5) to Eight (8) years and a fine of One million dinars (1,000,000 DA) to Five million (5,000,000 DA) or by one of these two sanctions only, whoever imports or exports hazardous waste or works in its transit in violation of the provisions of this law.

✓ **Incarceration :**

It is a negative sanction for freedom, for suitable crimes, such as misdemeanors, and infractions without crimes, and it varies according to the legal adaptation of the crime. Considering that most environmental crimes are conditioned as misdemeanors, or infractions, the requirements of contemporary punitive policy have prompted the legislator to adopt a diversified, progressive punitive use concomitant with the legal adaptation of environmental crimes.

Most of the sanctions against environmental crimes provided in the legislation protecting the Algerian environment have been the subject of a prison sentence by the legislator, since most of the environmental crimes are misdemeanors and infractions.

An example of the Incarceration sentence in Law 10/03 relating to the environment protection what is indicated in the text of article 81, which punishes Incarceration from (10) days to 3 months for anyone who abandons or abuses a domestic animal or a tamed animal or imprisoned it in public or hidden or displays it with a serious act, in the event of a repeat offense, the penalty is doubled (Fayçal Boukhalfa, 2017, p. 132).

✓ **The fine :**

The sanction of a fine affects a person's financial abilities, and it is one of the most effective sanctions, since most of those convicted of environmental crimes are economic investors. They are strongly affected by this type of sanction, in addition to the fact that most environmental crimes are crimes resulting from economic activities.

To note on this subject, that the Algerian legislator underlined the crimes which threaten the marine environment because of its gravity, which would cause pollution, or would spoil the marine environment, the water and the coast. It is registered in article 99 of the environment protection law within the framework of sustainable

development, which punishes any one who violates the provisions of its article 57 with a fine of 2 million dinars to 10 million dinars if this results in an oil spill or a mixture of hydrocarbons in the waters subject to Algerian space.

5.2. Complementary Sanctions :

Complementary sanctions are secondary sentences, the estimation is due to the criminal court, which made the decision pronouncing the initial sentence, and which is not pronounced by the judge in dependently, but which rather supplements the initial sentence (Fayçal Boukhalifa, 2017, p. 137).

The most important of these complementary sanctions, and the more widespread the sanctions regarding environmental crimes are the following: confiscation, and publication of Judgment, and closing establishment.

✓ **Confiscation :**

Confiscation is also considered a financial sanctions, which is the expropriation of something from its owner by coercion and addition to state property without charge, or it is a procedure for the purpose of property by the state of controlled things linked to the crime exclusively of its owner and without compensation (Luqman Bamon, 2011, p. 145).

An example is the text of article 82 of law 01/11 relating to sea fishing, which stipulates that in the event of the use of explosive materials, the fishing vessel is seized if the violation is committed by its owner.

✓ **Publication of Judgment :**

Algerian courts have made their judgments public by classifying them as supplementary judgments, which are broadcast or extracted in their entirety and accessible to the public, in accordance with Article 18 of the Penal Code, The dissemination of convictions is of particular importance in the fight against crime and prevention, as well as in adopting definitions of perpetrators and the public of their content, in order to prevent the continued or repeated crime. Given the usefulness of this sanction, the Algerian legislator has decided to include it in the future of crimes against the environment (Fayçal Boukhalifa, 2017, p. 140).

✓ **Closure of establishment :**

The sanction of closing establishment is one of the most important in-kind sanctions. It has the effect of preventing the establishment from carrying out its activity temporarily or permanently at the place where it was committed or because of that activity. Continuing to work there would lead to further crimes, and then the activation of this sanction would make it easier to commit a crime (Omar Salem, 1995, p. 200).

The Algerian legislator adopted it in the Penal Code by Article 18 bis, which stipulates that the temporary closure of the establishment may not exceed five years.

In view of this sanction, it is clear that, despite its importance in the fight against environmental crimes, it is obliged not to harm the interests of the beneficiaries of the activity of the premises who did not contribute to the crime. So that the closure does not prevent compliance with legal obligations; and the judge has the right to try the owner of the institution or establishment to sponsor his employees, and to guarantee them their salaries, as well as all compensation and royalties during the period of arrest or closure.

6. The educational dimension of the environment :

As mentioned previously, we can say that people face several challenges, every time they confront new phases in the civilian life, they face new difficulties, where

environmental crimes are issues that can no longer be overlooked, and increase with growing pollution, and misuse of environmental resources due to what the manufacturing sector is witnessing, as pollution has become one of the most serious issues threatening the safety of the environment.

As a result, the Algerian legislator has imposed some measures, as mentioned above, to prevent the spread of crimes that affect the environment, but there are many problems that we have put an end to; Including those related to the difficulty of determining what environmental crime is due to the complexity and interwoven of environment elements. Environmental crime is often instantaneous and difficult to determine the causes.

In many environmental crimes, it can be caused by someone contributing to the national economy, so the Algerian lawmaker has criminalized dangerous outcomes, but the question remains: are the laws and legislation sufficient to protect the environment of these attacks? There is no doubt that, despite all efforts to protect the environment through the establishment of environmental regulations that regulate the exploitation of natural resources, their maintenance is not sufficient to ensure environmental protection.

The educational dimension is primarily based. The educational dimension is considered to be one of the important dimensions in addressing environmental crime, by spreading environmental awareness, based on an ethic that calls on everyone to socialize, inform individuals of anything that protects the environment, and preserves it. The educational dimension also develops a positive feeling of belonging to planet earth. Moreover, all of this must be included in the system of social values which guide the behavior of the individuals and construct the aspect of individual responsibility, which is called "Environmental Education" (UNESCO, 2014).

Environmental education can contribute to reducing environmental crimes in its preventive dimension, by an awakening critical awareness of the economic, political, technological, and moral factors underlying the environmental problems. Also, developing moral values that improve the nature of the relationship between the individual and the environment; Through education, individuals' behavior can be developed in line with the importance of natural resources and other elements of the environment in their lives.

The interest in the role of education facing the environmental problems and related crimes has increased through the holding of several conferences, such as the Stockholm Conference on the Human Environment, which was held on June 6th, 1972, in Sweden. Participants made several recommendations, including Recommendation No. 96, which stresses the need to establish an international multi-disciplinary educational program for the environment; It applies inside and outside the school, covering all levels of education directed to all (Ibrahim Esmat Mutawe, 1995, p. 29).

The same conference also affirmed that the individual belongs to his environment and that it is he who creates the environment in which he lives simultaneously. This is an indication that environmental education aims to build a positive citizen, aware of environmental problems, and works to develop positive values, attitudes, and behaviors for rational management of the environment. Therefore, reduce environmental stresses in different groups of society. The commitment to environmental ethics aims to modify the behavior of individuals, pushing them to preserve the environment, in a way to guarantee the environmental balance. In this context, both the Secretary of State in charge of the environment and

the preparation of territory in collaboration with the Ministry of Education allowed their executives to improve their knowledge thanks to the training program organized in May 1999 in Canada. Emphasis was also placed on cooperation with international experts from the (UNESCO) on the need to include environmental concerns in educational programs at the level of educational institutions, through the development of a national strategy in the field of environmental education in schools. This is done by focusing on educational programs in its different areas which represent the strategic dimension of the educational process, and for this, the Algerian school programs were the main axis on which it was necessary to focus, and develop to achieve an environmental education which would educate the students, would make them aware of the problems, and violations against the environment (UNESCO, 2014).

This effort was supported as part of the comprehensive and profound reform of the Algerian education system in 2003, by integrating environmental education as an experimental stage in the educational and pedagogical path under the supervision of the Ministry of Education, and the Ministry of the Environment and Regional Planning. This process involved 133 educational establishments, covering the three phases (primary, middle, and secondary school) throughout the national territory. Where the Ministry of the Environment has allocated its financial coverage estimated at 250 thousand dollars, and it belongs to seven pilot states, and this process aims to open up new horizons for the education system by enriching the educational resources regarding the environmental aspect. To embody these objectives, the Ministry of the Environment, in cooperation with the Ministry of Education, has developed a teaching methodology based on the experience of teachers, educators, and activists of green clubs by contributing to various topics: recycling of waste, conservation methods, proper exploitation and rationalization of the use of drinking water. By studying, knowing the causes, and reducing pollution. The Ministry of the Environment also used the educational tools represented in the teacher's guide, which contains the most important concepts, challenges, and issues related to environmental education, and the methodology to be followed. In addition to a green wallet for the club, it includes the teacher's guide, the student guide, and a guide for those involved in the club.

In the scientific research area, during 2006, six research contracts were concluded in the field of the environment within the framework of the implementation of the study and research program linked to the activity of the Ministry of the Environment. 'Environment and the preparation of the territory. These contracts stipulate the protection of the air against pollution, biodiversity, the natural environment, the coasts, the treatment of industrial wastewater, and environmental education, and this initiative is part of the process. 100 researchers and 100 projects (Bouhankel Zoulikha, 2010, p. 329).

The state has endeavored to establish several institutes, and schools at professional and university levels, intending to achieve environmental development at all levels. In terms of belief in the educational role played by educational bodies in making individuals aware of the importance of taking care of the environment, in particular with the propagation of crimes committed directly or indirectly against the environment in which we live. One of the institutions that have played a major role in this area is the National Institute for Environmental Training; It is a public industrial, and commercial establishment, whose role is mainly to integrate environmental

education into the education system, and to sensitize all social and economic players to environmental issues (Belayadhi Amina, 2018, p. 730).

The educational role in the area of environmental protection was not limited to educational institutions but went beyond them to many associations active in the area of the environment, which played an effective role in highlighting the advantages, and importance of the environment in which people live, by raising awareness, identifying various problems, and crimes concerning the environment, and trying to find appropriate solutions to avoid them. These associations carry out targeted activities through volunteering, seminars, conferences, forums, and publications in journals and periodicals. For example, we mention the National Association for Environmental Protection and the Pollution Control State of Annaba, the Environmental Association (Ecology) for the State of Boumerdes, the Scientific Society for the environment (ecology and health) for the State of Bordj Bou Arreridj, the Association for White Algeria "Dzair El Beïda", as well as the Association of the World's Deserts, an international association created in 2002 Accepted as a permanent observer to the United Nations Economic and Social Council.

In 2002, the National Federation for Environmental Protection was adopted to support society in the environmental aspect. The National Federation includes more than 60 local associations from 38 wilaya, which are vectors of environmental knowledge. Besides, thus associations aim to train individuals to assume their responsibilities, to make decisions about their one behavior, and to make decisions that matter in the public interest; through participation, and influence in the management of public affairs for the environment at local and central levels. Environmental associations in Algeria look through their activities to achieve the following objectives:

1. Establish the principle of environmental citizenship based on preserving the environment from overexploitation and avoiding the depletion of environmental resources.
2. Educate citizens, and make them acquire environmental awareness of the serious problems and crimes against the environment, and contribute to creating an effective and positive way of living in a healthy environment.
3. The National Federation for the Protection of the Environment contributes to preserving individuals' health by eliminating the causes that threaten the environment through volunteer campaigns.
4. The implementation of informing principles, and the participation of specialized institutions by providing individuals with information about the environment, knowing the risks incurred, repairing them after they occur, or preventing expected damage as a precaution; rather than focusing on the intervention.
5. Disseminate environmental culture, and implant it among the different groups of society in order to give them an awareness allowing them to understand the gravity of environmental problems, and how to solve them (Yahia Ouanass, 2007, p. 131).

Depending on the objectives that environmental associations seek to achieve, we examine the educational role that these associations aim to achieve by correcting environmental concepts and behaviors, as well as by disseminating environmental awareness so as to ensure the establishment of an education that supports the principle of environmental citizenship. Environmental citizenship is a concept that aims to perpetuate the values of not harming the environment. Thus, environmental

associations are seen as a positive partner to strengthen the educational role in the field of environmental protection.

The media, as an involuntary socio-educational institution, play an important role in the reduction of crimes against the environment, through problems, environmental issues, and its various dimensions they raise, and methods of protection, development of the environment. In addition, the media cannot be exempted from strengthening environmental awareness through various audiovisual and written media activities, which are the most powerful institutional means in the field of environmental awareness in terms of the transfer of experiences, and knowledge to citizens through illustrative photos, children's programs, and documentaries with exciting methods (Hanna Jassim Al-Sabaawi, 2018).

In this regard, the Algerian media of all kinds paid attention to environmental issues and their problems. One of its main objectives was to raise environmental awareness and contribute to the environmental education of citizens. The Algerian media relied on it to broadcast environmental programs on almost all regional radio stations, such as Radio' s of Constantine, Annaba, Oran, Skikda, and Bordj Bou Arreridj. These programs carried several nominations such as environment and ocean, environment and development ... etc. Algerian television, for its part, presents environmental issues in special programs, or through news coverage. Al-Chorouk TV also presents an environmental program called "Environment Magazine", a bimonthly magazine concerned with the environment; which aims to educate citizens on the most important environmental issues. The newspapers have also helped to conduct field investigations into various environmental crimes, and related issues; such as garbage, dirty water, coastal pollution, untreated sewage, and violation of green spaces. Al-Chorouk TV was able to denounce some of the major environmental violations. In 2007, more than 301 articles dealing with the most important environmental problems in Algeria (Belayadhi Amina, 2018, p. 371).

What can be said, is that the media in Algeria were an open field to run environmental education of individuals, develop environmental awareness by providing information about the environment, and training trends, and attitudes towards environmental issues by mobilizing members of society to face all that harms the environment by denouncing violations and offense perpetrated against the environment.

The campaign objectives that environmental media try to achieve clarify their importance in solving environmental problems, and dissemination of environmental education, which we summarize as follows:

1. Achieve the environmental alphabet as a basis for acquiring strong environmental skills, and trends in a way that helps build a citizen who as a dominant environmental sense, or awareness to control his behavior on the right track, this is a strategic objective for environmental media.
2. Support a sense of responsibility, direct and indirect, towards environmental protection; on the premise that environmental protection is a joint responsibility.
3. To develop environmental maturity in a way that gives environmental dialogue suppleness, and positivity that helps to solve problems and limit offense perpetrated against the environment.
4. Development of mature environmental management, which can achieve a degree of continuous self-censorship, and effective in controlling the relationship between individuals and the environment (Zain Aldin Abdul maqsoud, 2000, p. 103).

In light of these objectives, it becomes clear the role that media play in promoting positive trends towards the environment. This encourages citizens to actively participate in solving environmental problems, to change negative behaviors that lead to offense perpetrated against the environment, to motivate them, and to develop their sense of shared responsibility with the authorities in the fight against anything that harms the environment.

CONCLUSION :

Environmental issues have become one of the most important challenges facing societies, due to their distinction not only in terms of foundations, rather than the elements on which those foundations were based on, and of their magnitude. It is a broad range of activities and behaviors that cause environmental damage. Behaviors, whether based on negligence, or on an intentional act, forced the Algerian legislator to criminalize all acts that harm the environment, or endanger it by enacting binding legal rules, regulations, and mechanisms to deal with it.

However, unlike some sensitive issues that can be dealt with through legal mechanisms, the issue of environmental protection remains a complex issue that cannot be controlled by legislation, but rather an educational issue in the first place. Perhaps the importance of the educational dimension lies in the fact that it creates an awareness of the individual, and works to develop concepts and perceptions, and shape values and trends, and encourage rational behavior towards the environment. All this, and others, have highlighted in this research paper, where the emphasis has placed on the legislative aspect, in addition to the educational aspect, through the measures taken by Algeria in these two aspects to fight against this type of crime in its legal aspects, both punitive and preventive.

Environmental protection can only be achieved through the existence of effective environmental legislation, and the existence of a specialized judicial system in the field of environmental crimes with an emphasis on the integration of institutions in a deliberate strategy that aims to make individuals aware of environmental issues, highlighting the seriousness, and dimensions of environmental crime and its repercussions on individuals. A number of suggestions can be included, which can be summarized as follows:

- The need to train and qualify those how are responsible for the application of environmental legislation on methods of detecting and proving environmental crimes.
- The need to spread environmental awareness in all segments of society.
- Exempt economic institutions which have included the environmental dimension in their investment plans from certain taxes, and adopt the principle of progressive taxation of companies having committed crimes against the environment.
- Activation of university research centers, in particular with regard to the treatment of industrial and hospital waste, which is one of the most serious crimes against the environment;
- Strengthen the partnership between the media, educational institutions, and environmental associations to raise awareness of environmental issues, and realize the principle of environmental citizenship.

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