ENVIRONMENTAL PROTECTION FROM THE ASPECT OF CRIMINAL LAW

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ABSTRACT

According to the Criminal Law, the protection of the natural human environment implies specific incriminations, i.e., environmental crimes that are punishable to preserve and create a healthy environment for the human species in line with the economic and technical development. Environmental problems created by society's progress (civilization) have political, economic, scientific, and legal, i.e., international legal dimensions. Today, a common topic is an ecological crisis caused by pollution and contamination of Earth, i.e., the disturbance of the balance and rhythm of the biosphere. Using the natural resources of our planet in a way that destroys it and prevents its regeneration requires special Criminal Law sanctions that will protect the natural environment and preclude our planet from becoming unsuitable for life. Therefore, we can increasingly use the term ecocide, i.e., utilizing natural resources without considering the necessity of developing a strategy for the use, harmonization, and preservation of a healthy human environment. This is a dualistic approach that links the protection of nature as an independent asset to protect the human quality of life as an individual and social issue. The paper will analyze the effectiveness of environmental protection from the Criminal Law aspect and point out the need for a more significant application of Administrative Law measures, especially the preventative ones, as a more effective tool for environmental protection.

KEYWORDS: *environment, environmental protection, environmental crimes, environmental law.*

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1. INTRODUCTION

The paper analyses the extent to which the Republic of Croatia managed to reconcile the economy's contradictory interests and the need to preserve and protect the environment by accepting guidelines for sustainable development. This paper aims to point out the subsidiarity of criminal law and the low efficiency of criminal policy measures in environmental protection.

The fundamental transformation of Croatian law towards the most modern solutions in foreign laws, the attitudes of Croatian and foreign case-law at the time of dynamic changes in economic conditions have resulted, among other things, in the introduction of a special group of environmental offenses with the aim of the legal protection of the natural human environment through appropriate incriminations from the aspect of criminal law. Since environmental protection is the community's primary objective, these citizens to a healthy environment is also proclaimed by the provisions of the Constitution of the Republic of Croatia and the obligation of the central government to ensure the preservation of nature.¹

Environmental law (ecological law) is, by its very nature, interdisciplinary, which requires a comprehensive and versatile active participation of all stakeholders in matters of survival and interdependence of all living beings in all areas of social and public life.² Ecology is a science about the relationship between humanity and nature and deals with survival and the necessary interdependence between man and the environment, joint existence, and co-existence. Today's civilization's significant problems are the ecological ones that have a political, economic, scientific, and international legal dimension. The Earth is a living organism with its limitations in the sense of excessive extraction of natural wealth and regeneration possibilities. Since there has been a devastation of the global environment where forests are disappearing, air, rivers, soil, and seas are polluted, and many animal and plant species are endangered, ecocide is rightfully mentioned. Although the Earth is a living organism that regulates and maintains the connection and interdependence of all its parts, we must be aware that its wealth is neither inexhaustible nor limitlessly capable of regenerating without disturbing the balance and rhythm of the biosphere.³ The fact is that we are not even aware of the disturbances in the natural balance of the environment and the resulting problems with our atmosphere's ozone layer,

¹ Horvatić, Ž.: Novo hrvatsko kazneno pravo, Organizator, Zagreb, 1997, p. 488.

² Omejec, J.; Uvodna i osnovna pitanja prava okoliša, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 23.

³ Bačić, F.; Pavlović, Š: Kazneno pravo, Posebni dio, Informator, Zagreb, 2001, p. 285.

contamination with poisons, and radioactive substances, which will make the Earth unsuitable for living.

The global devastation of the environment requires society to elaborate and implement a political strategy to preserve and create a healthy human environment and constant rising of social awareness of sensibility regarding environmental issues. To regulate this complicated situation that society is facing, it is necessary to actively involve stakeholders in different legal areas, mainly administrative, civil, and criminal law, emphasizing administrative law.⁴

The preservation of ecosystems, biodiversity, i.e., environmental protection, implies each country's obligation to contribute to the overall protection and conservation of biodiversity by developing its legal system by implementing normative values by which it will achieve this objective.⁵

2. DETERMINATION OF THE CONCEPT OF HUMAN ENVIRONMENT

2.1. GENERAL CONSIDERATIONS

Like any other living being, man is surrounded by an environment that determines his mental, technical, economic, and social living conditions. There is a strong interdependence between the human environment and the environment of many different living species, so the environment is the subject of research in different sciences such as biological, technical, and social, from the point of interest of each of them.⁶

Three restrictive concepts can be derived from the extensive definition of the concept of the environment: the concept of the social environment, the concept of the natural environment, and the environment resulting from human work and creation.

In addition to interpersonal relations, the concept of social environment includes the social and economic system and the state institutions in man's environment. The natural environment implies soil, air, water, flora, fauna, and microorganisms in man's living areas. Material goods such as houses, factories,

⁴ Medvedović, Dragan, Pravna zaštita zraka, Croatian Academy of Sciences and Arts, Round Table, 26 January 2016, Zagreb.

⁵ Medvedović, D.: Pravo okoliša, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 95.

⁶ Lončarić Horvat., Olivera: Okoliš s porezno-pravnog stajališta, third amended edition, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 283.

roads, bridges, monuments, etc. conceptually define the environment resulting from human work and creation.

With rapid and accelerating economic development, the environment is becoming increasingly endangered, requiring the state's intervention in its protection and preservation. As the threat to humanity from environmental pollution intensifies and is caused, among other things, by excessive exploitation of raw materials and the production of noise and vibrations, it is a warning to the central government to take more effective measures to maintain the human environment within limits that will not endanger its survival and health. State ecological measures are multiple administrative measures reflected in specific bans and orders and the implementation of more complex and varied measures in the form of agreements, recommendations, physical planning, guarantees, etc. To protect the environment, modern countries must engage more in environmental education measures, providing environmental services by disseminating information, advice, and other measures.

3. CURRENT ENVIRONMENTAL PROTECTION FROM THE ASPECT OF CRIMINAL LAW

3.1. GENERAL ENVIRONMENTAL OFFENCES

The concept of environmental protection from the aspect of criminal law implies a complex of ethical, criminological, penal, penological, and other contents, functionally integrated by general criminal policy efforts in its protection. From everyday experience in terms of punishable behavior in the area of ecology, it can be concluded that the difficulty of this problem is understated. This group of criminal offenses' fundamental criminological significance refers to so-called non-victim criminal offenses, i.e., offenses in which the victim is "abstract" because the consequences of an infringement of a protected asset usually occur with a significant time gap from the commitment of a criminal offense.⁷

Environmental crimes are placed in Title XX. of the Criminal Code (Official Gazette, No. 125/11, 144/12, 56/15, 61/15-amended, 101/17, 118/18, and 126/19 – hereinafter referred to as the CC)⁸ and form a heterogeneous group because,

⁷ Cvitanović, L.; Pravo okoliša, Kaznenopravna zaštita okolišs, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 206.

⁸ Criminal offence – Environmental Pollution (Article 193), criminal offence – Endangerement of the Ozone Layer (Article 195), criminal offence – Endangerment of the Environment with Waste (Article 196), criminal offence – Endangerment of the Environment with a Plant (Article 197), Endangerment of the Environment with Radioactive Substances (Article 198),

in addition to incriminations that can be marked as real ecological crimes, there are incriminations that do not fit into the system of ecological crimes.

The environment is, under Article 1 of the Environmental Protection Act (Official Gazette No. 80/13, 153/13, 78/15, 12/18, 118/18), defined as a two-component natural environment consisting of air, soil, water, and sea, climate, flora, and fauna, as well as cultural heritage, i.e., part of the human-created environment.⁹

Criminal law intervention is important and necessary, accompanied by administrative environmental law as governed by the penal codes of German and Austrian legislation. In addition to primary administrative-legal protection, the justification of penal intervention is evident at a time of dangerous and unacceptable ecological pollution that jeopardizes people's lives and health.

The offenses referred to in this title are mainly blanket, which is why it is necessary to supplement the respective incriminations in practical application with acts and subordinate legislation relating to veterinary activities, hunting, fishing, forests, as well as with regulations relating to the circulation of toxic substances, plant protection, destruction of protected natural resources, etc.

The consequence of these criminal offenses is endangerment with specific or abstract danger, while qualified forms of most criminal offenses exist in case of severe violation of the subject of protection. The perpetrator may be anyone, except for criminal offenses arising from the endangerment of the environment with a plant when the perpetrator appears as a responsible person in a legal entity and veterinary malpractice when the perpetrator is a veterinarian or veterinary assistant. The criminal offenses of this group are mainly carried out with inappropriate treatment. Negligence is evident in criminal offenses of environmental pollution, endangerment of the environment with waste, endangerment of the environment with noise, vibrations or non-ionizing radiation, endangerment of the environment with a plant, etc. Certain criminal offenses

Endangerment with Noise, Vibrations or Non-Ionising Radiation (Article 199), Destruction of Protected Natural Values (Article 200), Destruction of Habitat (Article 201), Trade in Protected Natural Values (Article 202), Unlawful Introduction of Wild Species or GMOs into the Environment (Article 203), Poaching Game and Fish (Article 204), Killing or Torture of Animals (Article 205), Transmission of Contagious Animal Diseases and of Organisms Harmful to Plants (Article 206), Production and Circulation of Harmful Products for the Treatment of Animals (Article 207), Veterinary Malpractice (Article 208), Devastation of Forests (Article 209), Change in the Water Regime (Article 210), Unlawful Exploitation of Mineral Resources (Article 211), Unlawful Construction (Article 212), Active Remorse (Article 213), Serious Criminal Offences against the Environment (Article 214)

⁹ Pavišić, B., Grozdanić, V., Veić, P.: Komentar Kaznenog zakona, Official Gazette, Zagreb, 2007, p. 590.

also require the implementation of a security measure – confiscation of objects – if public security is endangered (e.g. for a criminal offense of poaching game and fish – Decision of the Supreme Court of the Republic of Croatia, Kzz-32/03 of 27 January 2004).

3.2. CRIMINAL OFFENSE – ENVIRONMENTAL POLLUTION (ARTICLE 193 OF THE CC)

Since the basic principles of environmental protection are common to national and international environmental law, planned and coordinated activities of countries are required at the international level for its conservation.¹⁰ As a rule, environmental pollution is carried out almost unnoticeably, but continuously, which results in an untimely reaction of relevant social factors or a misjudgment that it is the kind of pollution that the environment can absorb and that it is a matter of general social progress. This reflection of relevant social factors leads to the failure to report the offenses and the emergence of the so-called "dark figure," as well as an increase of criminal offenses with unknown perpetrators.

Criminal offense environmental pollution (Article 193) is committed by whoever, contrary to regulations, discharges introduce, or emits many materials or ionizing radiation into the air, soil, underground, water, or sea, which can over a longer period or to a considerable degree jeopardize their quality or to a considerable degree or over a wider area jeopardize animals, plants or fungi, or the lives or health of people, and the perpetrator shall be punished by imprisonment from six months to five years (paragraph 1). According to the legal description of the commitment of a criminal offense, it is to be concluded that it is an act of abstract endangerment with a blanket disposition (the perpetrator acts contrary to regulations, regardless of whether they are acts or subordinate legislation).¹¹ It is important to point out that, if perpetrators act under the relevant regulations and decisions, they will not be liable for any pollution.

¹⁰ Herceg, B., Ilić, I.: Onečišćenje okoliša/zagađenje životne sredine kroz prizmu hrvatskog i srpskog kaznenog/krivičnog zakonodavstva, Ekologija i pravo, Niš, Faculty of Law in Niš, 2011, p. 255; Herceg, Pakšić, B.; Vuletić, I., Kohalmi, L., Kaznenopravna zaštita okoliša u Mađarskoj i Hrvatskoj u kontekstu usklađivanja s regulacijom Europske unije, Pečuh-Osijek, Grafika, 2013, p. 371.

¹¹ Hygiene, health and the environment – Article 11 of the Building Act... It is prescribed that "a construction work must be designed and built in such a way that it will, throughout its life cycle, not be a threat to the hygiene or health and safety of workers, occupants or neighbours, nor have an exceedingly high impact, over its entire life cycle, on the environmental quality or the climate, during its construction, use or demolition, in particular as a result of any of the following: 1. leakage of toxic gases; 2. emissions of dangerous substances, volatile

A more severe form of the respective criminal offense is committed by a perpetrator who discharges, introduces, or emits materials or ionizing radiation into the air, soil, underground, water, or sea, and thereby jeopardizes the lives or health of people, for which imprisonment sentence is prescribed of one to eight years (paragraph 2). This is an act of specific endangerment in which there is no blanket clause, and the perpetrator cannot invoke formal approvals from the managing authority.¹² If this criminal offense is committed by negligence, the perpetrator shall, for the lighter form of this criminal offense described in paragraph 1, be punished by imprisonment not exceeding two years, and for a more severe form of the criminal offense referred to in paragraph 2 of this Article, by imprisonment not exceeding three years.

It should be pointed out, as prescribed by the provisions of Article 11 of the Building Act (Official Gazette No.153/13, 20/17, 9/19, and 125/19), and to protect the environment, that it is stipulated that construction work must be designed and built in such a way that it will, throughout its life cycle, not be a threat to the hygiene or health and safety of occupants, nor have an exceedingly high impact on the environmental quality or the climate.

3.3. CRIMINAL OFFENSE – DISCHARGE OF POLLUTING SUBSTANCES FROM A VESSEL (ARTICLE 194 OF THE CC)

The Water Act (Official Gazette No. 66/19) regulates the legal status of waters, the water estate and water management facilities, management of water quality and quantity, protection from adverse effects of water, detailed amelioration drainage and irrigation, special activities for water management, institutional organization of performing these activities, and other issues related to waters and the water estate (Article 1). By acting contrary to the aforementioned provision of the Water Act, among other things, this is a characteristic of committing a criminal offense – discharge of polluting substances from a vessel. A criminal offense is committed by whoever, contrary to regulations, discharges polluting substances from a maritime object into the sea or from a vessel into fresh waters, which in conjunction result in the deterioration of their quality,

organic compounds (VOC), greenhouse gases or dangerous particles into indoor and outdoor air; 3. emission of dangerous radiation; 4. release of dangerous substances into ground water, marine waters, surface waters or soil; 5. release of dangerous substances into drinking water or substances which have an otherwise negative impact on drinking water; 6. faulty discharge of waste water, emission of flue gases or faulty disposal of solid or liquid waste..."; Eterović, Nikola, Pravo građenja, Građenje i nekretnine u prostoru, RRiF Plus, Zagreb, 2004, p. 169.

¹² Kaleb, Z., Pražetina, R., Gubitak prava na ograničenje odgovornosti brodara, Hrvatska pravna revija, No. 12. Inženjerski biro, Zagreb, 2007, p. 53.

which is punishable by imprisonment not exceeding three years (paragraph 1 of Article 194 of the CC).¹³

Dangerous substances are substances that can, by their composition, quantity, or other properties, endanger human life and health and animals and plants. Harmful substances may cause changes in the chemical, physical, bacteriological, and biological characteristics of water in terms of a significant deterioration of water's natural characteristics to prevent or restrict its use. Criminal offense – discharge of polluting substances from a vessel – is the act of specific endangerment, and the qualifying circumstance of the offense is the conclusion that the perpetrator acted out of self-interest. If this criminal offense is committed by negligence, the perpetrator shall be punished by imprisonment not exceeding one year.¹⁴

3.4. CRIMINAL OFFENSE – ENDANGERMENT OF THE ENVIRONMENT WITH WASTE (ARTICLE 196 OF THE CC)

Criminal offense — endangerment of the environment with waste (Article 196) is committed by whoever, contrary to regulations, carries out in a single shipment or in several shipments which appear to be linked prohibited transport of waste in a non-negligible quantity, and shall be punished by imprisonment not exceeding two years (paragraph 1). A more severe form of this criminal offense is committed by whoever, contrary to regulations, discards, disposes of, collects, stores, processes, imports, exports or transports waste, or mediates in such an activity, or in general manages or handles waste in a manner that can over a longer period or to a considerable extent jeopardize the quality of air, soil, underground, water or sea, or to a considerable degree or over a wider area jeopardize animals, plants or fungi or the lives or health of people, for which they shall be punished by imprisonment from six months to five years (paragraph 2). For a lighter form of the criminal offense – endangerment of the environment with waste – committed by negligence, the prescribed sentence is

¹³ Garačić, A., Novi kazneni zakon, Sudska praksa – from the decision of the Supreme Court of the Republic of Croatia, IV Kž-88/01, of 23. 10. 2001, Organizator, Zagreb, 2013, p. 429.

¹⁴ Provisions of Art. 49. of the Water Act (Official Gazette No. 66/19) prohibits the release of dangerous substances: "Dangerous substances and other pollutants shall be prohibited from being released or introduced into waters and disposed of in places from which there is a possibility of pollution of waters and the aquatic environment, except under conditions laid down by this Act or regulations adopted under this or special laws"; Mrčela, M., Aktualna pitanja kaznenog zakonodavstva, Obrazlaganje izbora vrste i mjere kazne, Inženjerski biro, Zagreb, 2003, p. 116.

imprisonment not exceeding one year, while a more severe form described in paragraph 2 of this Article results in imprisonment not exceeding two years.

The Waste Act (Official Gazette No. 178/04, 153/05, 111/06, 110/07, 60/08, 87/09) regulates waste management in a manner that respects the principles of environmental protection. The term 'waste' within the meaning of this Act implies substances, matters, which are generally or concerning the activity of a particular production process, hazardous, harmful to the environment. The danger of waste is reflected in explosiveness, radioactivity, flammability, irritability, harmfulness, infectivity, carcinogenicity, the toxicity of emission of toxic gases.¹⁵

The offense consists of rejecting, disposing of, collecting, storing, processing, or transporting the waste or in any activity contrary to regulations and in such a way as to jeopardize the quality of air, land, watercourses, sea, seabed, or seafloor in a broader area and to the extent that may impair the living conditions of humans or animals, or jeopardize the survival of forests, plants or other greenery.¹⁶

Therefore, the act of commitment is alternatively defined as discard, disposal, collection, storage, processing, transport, or other activities. The manner of committing the unlawful act is also important for the existence of the offense – contrary to regulations, which points to the blanket character of the offense since the environmental law regulations stipulate the manner, procedure, activity, and conditions of waste treatment.¹⁷ This means that any action in a manner that deviates from the above-mentioned regulations may constitute an act of committing this action if it causes a consequence that may occur in two forms:

- 1. as an endangerment of the quality of air, soil, water, watercourses, sea, seabed, or seafloor assuming that the consequence occurred in a broader area and to the extent that may impair the living conditions of humans or animals or jeopardize the survival of forests, plants or other plants; and
- 2. as a cause of danger to the life and health of humans or animals, or as destruction or significant damage to forests, plants, and other greenery in a broader area.

¹⁵ (The properties of the harmfulness of waste are described in detail in the annexes to the Act on the Ratification of the Convention on Supervision of Transboundary Movement of Waste – Official Gazette, International Treaties, No. 3/94).

¹⁶ Tomić, Z., Krivično pravo II, Faculty of Law of the University of Sarajevo, Sarajevo, 2007, p. 275.

¹⁷ Garačić, A.: Novi Kazneni zakon – Sudska praksa, Decision of the County Court in Bjelovar, Kž-340/02 of 24. 10. 2002, Organizator, Zagreb, 2013, p. 430; Kalambura, S., Staničić, F., Sarvan, D., Luttenberger, A., and Turudić, M.: Round Table, Croatian Academy of Sciences and Arts, Zagreb, 17 October 2017, Informator, No. 6496/2017, p. 20.

Here too, the consequence may appear in two ways, namely as a substantial danger or as a violation (destruction or damage) of a larger scale or in a broader area, the identification of which represents a factual issue in each specific case. The perpetrator can be anyone, and intent and negligence are possible regarding guilt.

3.5. CRIMINAL OFFENSE – ENDANGERMENT OF THE ENVIRONMENT WITH A PLANT (ARTICLE 197 OF THE CC)¹⁸

The offense consists of the use, i.e., operation of a plant contrary to regulations or derogating from production processes which release dangerous substances that may jeopardize the quality of air, soil, water, watercourses, or sea in a broader area, and marine ecosystems to the degree that may jeopardize the living conditions of human beings or animals or jeopardize the survival of forests, plants or other greenery or failure to install purification devices or permitting building, putting into service or operation plants that pollute the living environment by violating regulations by a responsible person in a legal entity.

The subject of protection is the living environment (air, soil, water, watercourses, sea, or marine ecosystems), and the subject of the attack are plants that release dangerous substances that endanger the living environment.¹⁹

Depending on the manner of commitment of the offense and capacity of the perpetrator, the unlawful act appears in two forms:

- 1. endangerment of the environment with a plant, and
- 2. endangerment of the environment by a responsible person.

The first form of this unlawful act is committed by whoever, contrary to regulations, puts into service or operates a plant or derogates from production processes that release dangerous substances that may jeopardize the quality of air, soil, water, watercourses, seas in a broader area or the marine ecosystem to

¹⁸ The criminal offence Endangerment of the Environment with a Plant (Article 197 of the CC) is committed by whoever, contrary to regulations, operates a plant in which dangerous procedures take place or where dangerous substances or preparations are stored which can, outside the plant, permanently or to a considerable degree, jeopardise the quality of air, soil, underground, water or sea, or to a considerable degree or over a wider area, jeopardise animals, plants or fungi, or the lives or health of people, for which the prescribed imprisonment is from six months to five years (paragraph 1.). The perpetrator shall be punished by imprisonment not exceeding two years if they commit this criminal offence by negligence (paragraph 2).

¹⁹ Tomić, Z., Krivično pravo II, Faculty of Law of the University of Sarajevo, Sarajevo, 2007, p. 273.

the degree that may jeopardize the living conditions of humans or animals or jeopardize the survival of forests, plants or other greenery.

To achieve the characteristics of the commitment of the offense – endangerment of the environment with a plant – the plants must be used contrary to the relevant regulations, which indicates the blanket character of this act. The result of the act is substantial danger in the form of endangering the quality of air, soil, water, watercourse, sea, or marine ecosystem. The perpetrator can be anyone, and dolus is required in terms of guilt.

Another form of the act is committed by a responsible person in a legal entity²⁰ who, by violating regulations, fails to install purification machines or permits building, putting into operation or use of the plant in any way that pollutes the environment.

The act of perpetration is alternatively defined as an omission (in the form of failure to install prescribed purification devices) or as an act (in the form of permitting building, putting into operation, or use) of devices and plants that pollute the environment.

3.6. CRIMINAL OFFENSE – ENDANGERMENT OF THE ENVIRONMENT WITH RADIOACTIVE SUBSTANCES (ARTICLE 198 OF THE CC)²¹

Act on Protection against Ionizing Radiation (Official Gazette No. 91/10 and 114/18) implies that the waste substance is produced with sources of ionizing radiation regardless of its physical form and chemical properties, containing radioactive substances whose activity, concentration, or radiation is above the limits laid down in an ordinance issued by the Minister responsible for health.²²

²⁰ Pavlović, Š.; A responsible person is a natural person who manages the activities of a legal entity or who is entrusted with the performance of activities in the field of activities of a legal entity, Komentar Zakona o odgovornosti pravnih osoba za kaznena djela, Inženjerski biro, Zagreb, 2005, p. 22.

²¹ Endangerment of the environment with radioactive substances (Article 198 of the CC) – "Imprisonment from six months to five years shall be imposed on anyone who, contrary to regulations, produces, processes, handles, uses, possesses, stores, transports, imports, exports or disposes of nuclear material or other hazardous radioactive substances in such a way that it can permanently or to a considerable degree jeopardise the quality of air, soil, underground, water or sea, or over a wider area, jeopardise animals, plants or fungi, or jeopardise the life or health of people because it thereby constitutes a criminal offence of endangering the environment with radioactive substances (paragraph 1). Imprisonment not exceeding two years shall be imposed for committing the respective offence by negligence (paragraph 2). "

²² Pavišić, B., Grozdanić, V., Veić, P.: Komentar Kaznenog zakona, Official Gazette, Zagreb, 2007, p. 594.

3.7. CRIMINAL OFFENSE – ENDANGERMENT WITH NOISE, VIBRATIONS OR NON-IONIZING RADIATION (ARTICLE 199 OF THE CC)

Criminal offense – endangerment with noise, vibrations, or non-ionizing radiation (Article 199) is committed by whoever, contrary to regulations, produces noise, vibrations, or non-ionizing radiation and thereby endangers the lives or health of people. For the committed criminal offense, imprisonment is prescribed not exceeding three years.

Under the Criminal Code, noise is created by production contrary to regulations, which is suitable for causing severe damage to human health.²³ According to the Environmental Protection Act and the Noise Protection Act, we make a distinction between the conceptual definitions of noise. According to the Environmental Protection Act (Official Gazette 80/13, 153/13, 78/15, 12/18, 118/18), the term 'noise' implies the release of energy as a harmful emission, which gives it the character of an environmental offense. Within the meaning of the Noise Protection Act (Official Gazette, No. 30/09, 55/13, 41/16, 114/18), noise is any sound whose intensity exceeds the legally permitted level. It is an act of abstract endangerment that is always determined depending on its potential or suitability for causing severe damage to human health (Article 2 of the Act). The act is qualified as a more severe consequence if a severe violation of human health has occurred.

Furthermore, the provision of Article 13 of the Building Act (Official Gazette, No. 153/13, 20/17, 9/19, and 125/19) also prescribes protection against noise in such a way that construction work must be designed and built in such a way that noise perceived by the occupants or people nearby is kept to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions. Noise protection should be achieved primarily by preventing noise production, identifying and monitoring noise levels, and eliminating and reducing noise to the permitted level.²⁴

²³ Pavlović, Š.: Komentar Zakona o odgovornosti pravnih osoba za kaznena djela, Inženjerski biro, 2005, p. 9.

²⁴ Medvedović, D., Upravnopravna zaštita okoliša, Croatian Academy of Sciences and Arts, Zagreb, 2015, p. 40.

3.8. CRIMINAL OFFENSE – POACHING GAME AND FISH (ARTICLE 204 OF THE CC)²⁵

Criminal offense poaching game and fish (Article 204) is committed by whoever hunts game during the closed season or in an area where hunting is forbidden or hunts without having passed the hunting examination. The perpetrator shall be punished by imprisonment not exceeding one year (paragraph 1). Whoever hunts game catches fish or other freshwater or marine organisms in such a manner or by such means that cause their massive destruction or by using prohibited accessory equipment, shall be punished by imprisonment not exceeding three years (paragraph 2). Imprisonment not exceeding one year shall be inflicted on whoever permanently takes abroad a top game trophy (paragraph 3). The objects intended to be used or used to committ a criminal offense, as well as the catch, shall be confiscated (paragraph 4).²⁶

The criminal offense is of a blanket nature, which is legally regulated by the provisions of the Law on Hunting (Official Gazette No. 99/18 and 32/19),²⁷ The Marine Fisheries Act²⁸, and the Freshwater Fisheries Act.²⁹

3.9. CRIMINAL OFFENSE – DEVASTATION OF FORESTS (ARTICLE 209 OF THE CC)

Forests and forest lands are specific natural resources that require a particular way of management and treatment because they are public goods of interest to the Republic of Croatia.³⁰

The Forest Act (Official Gazette No. 68/18, 115/18, 98/19) regulates the system and manner of management, treatment, use, and disposal of forests and forest land on sustainable management principles, economic and environmental

²⁵ Garačić, A.: Novi Kazneni zakon, Sudska praksa, Decision of the County Court in Šibenik, Kž-155/02, of 26. 9. 2002, Organizator, Zagreb, 2013, p. 436.

²⁶ Garačić, A., Ibid, Decision of the Supreme Court of the Republic of Croatia No. Kzz-32/03 of 27. 1. 2004, Organizator, Zagreb, 2013, p. 435.

²⁷ Garačić, A., Ibid, Game hunt includes searching, waiting for, observing, luring, shooting, and catching live game – the decision of the County Court in Bjelovar, Kž-157/03, of 26. 6. 2003 – illegal hunting referred to in Article 258, paragraph 2 of the CC, p. 435.

²⁸ Article 1 of the Marine Fisheries Act (Official Gazette No. 62/17, 130/17, and 14/19)

²⁹ Article 1 of the Freshwater Fisheries Act (Official Gazette No. 63/19).

³⁰ Medvedović, D., Ibid, Public forest functions: protection of soil from water and wind erosion, cleaning polluted air, mitigation of the effect of "greenhouses of the atmosphere" by carbon sequestration and oxygenation of the environment, improvement of human environment by the existence of forest ecosystems as high-value natural capital, p. 43.

eligibility, and social responsibility (Article 1). Acting contrary to the provisions of the respective act leads, among other things, to the commitment of a criminal offense – the devastation of forests, as described in Article 209 of the Criminal Code.³¹ The characteristics of the commitment of a criminal offense: the devastation of forests is committed by whoever, contrary to regulations, cuts down or clears or otherwise devastates a forest and thereby commits no other criminal offense for which a more severe punishment is prescribed. A perpetrator shall be punished by imprisonment, not exceeding two years (paragraph 1). Whoever commits the criminal offense referred to in paragraph 1 of this Article in a forest that is a constituent part of an area which, under a competent authority's regulation or decision, has been declared a protected natural value, shall be punished by imprisonment not exceeding three years (paragraph 2). The objects intended to be used or used to committ a criminal offense or which are the product of the commission of a criminal offense shall be confiscated (paragraph 3).

Unlawful cutting down of forests is one of the most widespread forms of ecological crime, the harmful consequences of which may jeopardize many segments of society's functioning with long-term negative impacts.³²

In general, the processes of globalization, urbanization, strong development of technology characterize today's way of life.³³ Traditional values and resources are ignored and considered secondary. Although it brings numerous benefits, the modern age also jeopardizes the existence of certain existential living conditions.

3.9.1. FOREST MANAGEMENT

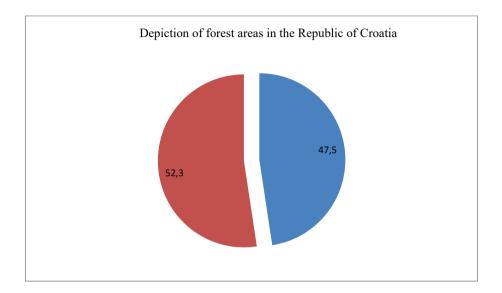
Forest is a renewable natural wealth that needs to be treated as a vegetation form that fulfills the ecological-social, raw-material, and energy function of the infrastructure. Forests are an essential factor for the survival of humanity. In the capacity of infrastructure, forests should perform hydrological, water-protection, anti-erosion, climate, anti-chemical, environmental, genetic, biological, health, recreational, and tourism functions.

³¹ Garačić, A., Ibid, Decision of the County Court in Koprivnica No. II Kž-119/01 of 25. 5. 2001, Organizator, Zagreb, 2013, p. 438.

³² Vončina, F.: Čovjekova okolina, Informator, Zagreb, 1982, p. 59.

³³ Omejec, J.: Uvodna i osnovna pitanja prava okoliša, Pravo okoliša, Third amended edition, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 23.

Forestry is a significant industrial sector that is also very important for a healthy life in general. The total land area of the Republic of Croatia amounts to 56.594 m², of which forest-covered areas occupy as much as 47.5% of the land surface. Thus, the Republic of Croatia is one of the more forested European countries.³⁴



The forestry management area of the Republic of Croatia is divided into economic units of state forests and economic units of forest owners' forests. Today, on the state territory, there are about 770 economic units formed in forest owners' forests. Economic units are formed for forest owners' forests, which include one or more cadastral municipalities. Each economic unit has its management base developed based on sustainable management principles, according to which forests are treated as renewable natural resources with expressed public benefits, provided that restoration of forests is encouraged, completed, and improved where necessary.³⁵

In general, in order for forests to fulfill their fundamental roles: ecological, economic, and social, they need to be managed in the best and the most qualitative manner. There is a Forest Advisory Service in the Republic of Croatia with a special Department of Forestry whose task is to monitor the state of for-

³⁴ Tipurić, D.: Strateška analiza Hrvatskih šuma d.o.o., University of Zagreb, Faculty of Economics Zagreb, 2009, p. 27.

³⁵ Historical overview of forestry development in the Republic of Croatia, Hrvatske šume d.o.o., p. 7.

ests, provide management guidelines and transfer optimal technological procedures for forest cultivation and protection to employees of the Service and forest owners.³⁶ Forests and forest-related activities, as well as forest land, are regulated by the Forest Law, which had several amendments after its adoption.

According to the ownership structure, 2,106,917 hectares of forests and forest land are owned by the Republic of Croatia, and private forest owners own 581,770 hectares. The majority of state-owned forests are managed by Hrvatske šume d.o.o. (2,018,987 hectares), and state administration bodies, i.e., legal entities founded by the Republic of Croatia, use a smaller share of the forests.

3.10. CRIMINAL OFFENSE – CHANGE IN THE WATER REGIME (ARTICLE 210 OF THE CC)

The Water Act (Official Gazette No. 66/19) regulates the legal status of water, the water estate and water management facilities, management of water quality and quantity, protection from adverse effects of water, detailed amelioration drainage and irrigation, special activities for water management, institutional organization of performing these activities, and other issues related to water and the water estate (Article 1 of the Act).

Criminal offense — change in the water regime (Article 210) is committed by whoever, contrary to regulations, changes or disrupts a water regime and thereby commits no other criminal offense for which a more severe punishment is prescribed. A perpetrator shall be punished by imprisonment, not exceeding two years (paragraph 1). Whoever commits this criminal offense in an area that has been declared a protected natural value under a competent authority's regulation or decision shall be punished by imprisonment not exceeding three years (paragraph 2). The objects intended to be used for the purpose of committing a criminal offense or which are the product of the commission of a criminal offense shall be confiscated (paragraph 3). The attempt of the criminal offense referred to in paragraph 1 or 2 of this Article shall be punishable (paragraph 4).

³⁶ Advice — Forestry available at https://www.savjetodavna.hr/podrucje/46/sumarstvo/

3.11. CRIMINAL OFFENSE – UNLAWFUL EXPLOITATION OF MINERAL RESOURCES (ARTICLE 211 OF THE CC)

The subject of protection from the criminal offense – Unlawful exploitation of mineral resources is environment as an independent legal asset, so it can also be committed by anyone who owns the land on which mineral resources are exploited contrary to regulations (see the decision of the County Court in Pula, Kž-342/07, of 4. 1. 2008).³⁷

A characteristic of the commitment of the criminal offense – unlawful exploitation of mineral resources (Article 211) reads:

"Whoever, contrary to regulations, exploits mineral resources, and thereby causes considerable damage, shall be punished by imprisonment not exceeding three years (paragraph 1). Whoever, contrary to regulations, exploits mineral resources in an area which, under a competent authority's regulation or decision, has been declared a protected natural value, shall be punished by imprisonment from six months to five years (paragraph 2). The objects intended to be used or used to committ a criminal offense or which are the product of the commission of a criminal offense shall be confiscated (paragraph 3). The attempt of the criminal offense referred to in the Article shall be punishable (paragraph 4)."

3.12. CRIMINAL OFFENSE – UNLAWFUL CONSTRUCTION (ARTICLE 212 OF THE CC)

The Building Act (Official Gazette No. 153/13, 20/17, 39/19, 125/19) regulates the designing, construction, use, and maintenance of buildings to ensure protection and planning of space in accordance with regulations governing physical planning (Article 1 of this Act).

Criminal offense — unlawful construction (Article 212 of the CC) is committed by whoever, contrary to regulations, constructs an edifice in an area which, under a competent authority's regulation or decision, has been declared a protected natural value, cultural property, or other areas of particular interest to the state. The perpetrator shall be punished by imprisonment from six months to five years. A security measure may be imposed upon a perpetrator of the criminal offense — unlawful construction in addition to the fundamental penalty — prohibition from engaging in a specific duty or from exercising a particular profession within the meaning of Article 71 of the CC.

³⁷ Garačić, A.: Novi Kazneni zakon, Sudska praksa, Organizator, Zagreb, 2013, p. 430.

The act of commitment consists of the execution of construction works without a building permit or contrary to that permit or building regulations, and the perpetrator can be whoever participated in the illegal construction. The criminal offense can only be committed with a dolus because a perpetrator cannot invoke a misconception of illegality considering the imperative building standard only based on an appropriate permit and the overall activity of the society in preventing unlawful construction as an expression of elementary demands and needs of society (Decision of the County Court in Osijek No.: Kž-147/09-4 of 27 March 2009; Decision of the County Court in Gospić, No. Kž-1/08-7 of 8. 9. 2008).³⁸

4. APPLICABLE ENVIRONMENTAL LAW

Environmental offenses can be classified into three categories:

- The genuine environmental offenses referred to in the provisions of the Criminal Code that protect the environment/living environment as a whole;
- Non-genuine environmental offenses referred to in the provisions of the Croatian Criminal Code, but within the framework of criminal offences belonging to other groups;
- Additional environmental criminal offenses outside the Criminal Code in the provisions of legislation regarding the environment/living environment.

In recent history, growing international trade and migrations of the population have influenced the need to regulate environmental issues at the international level.³⁹

The international community has therefore adopted numerous conventions, protocols, declarations in various areas of the environment⁴⁰:

- International Convention for the Prevention of Pollution of the Sea by Oil (London, 1954);
- Convention on the High Seas (Geneva, 1958);
- The 1971 Convention on Wetlands of International Importance, amended in 1982 and 1987;

³⁸ Mršić, G.: Građenje u kaznenopravnoj praksi – protupravna gradnja i opasno izvođenje građevinskih radova, Hrvatska pravna revija, No. 7-8, Inženjerski biro, Zagreb, 2010, p. 97.

³⁹ Seršić, M.; Međunarodnopravni aspekti zaštite i očuvanja okoliša, Pravo okoliša, Ministry of Environmental Protection and Physical Planning and Organizator, Zagreb, 2003, p. 247.

⁴⁰ Derenčinović, Davor, Neka zapažanja o utjecaju međunarodnih konvencija na razvitak hrvatskog kaznenog prava, Aktualna pitanja kaznenog zakonodavstva, 2004, Inženjerski biro, Zagreb, 2004, p. 21.

- The 1972 Convention for the prevention of marine pollution by dumping from ships and aircraft, amended by the 1996 Protocol;
- The 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage;
- The 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- The 1973 Convention for the Prevention of Pollution from Ships, amended by the Protocol of 1978 – also known as the MARPOL Convention;
- The Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona, 1976, 1995);
- The Convention on Long-Range Transboundary Air Pollution (Geneva, 1979);
- Convention on the Conservation of Migratory Species of Wild Animals, 1979;
- The 1982 UN Convention on the Law of the Sea;
- The Vienna Convention for the Protection of the Ozone Layer from 1985, with Protocols;
- The United Nations Framework Convention on Climate Change (Rio de Janeiro, 1992);
- Convention on the Transboundary Effects of Industrial Accidents (Helsinki, 1992);
- Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, (Basel 1992);
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1992, Helsinki;
- The Convention on Biological Diversity, adopted in 1992, Rio de Janeiro;
- The United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (Paris, 1994);
- Convention on the Use of Watercourses for Purposes Other Than Navigation, 1997, UN;
- The European Landscape Convention (Florence, 2000);
- The Convention on the Prior Informed Consent Procedure and the Stockholm Convention on Persistent Organic Pollutants, 2004;

- The Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Basel;
- Europe's Convention on the Conservation of European Wildlife and Natural Habitats, Bern, etc.

The UN Conference on the Human Environment was organized in Stockholm in 1972, and it is considered one of the most important ones. Representatives of 113 countries and numerous international organizations attended the conference and adopted the Declaration on the Human Environment⁴¹ consisting of twenty-six principles for the protection, conservation, improvement of the human environment, and an Action Programme containing 109 recommendations for the countries' specific activities. The Declaration and recommendations stressed the countries' general duty to protect the environment and the duty not to cause environmental damage to other countries and the environment outside the borders of national jurisdiction.

The next important conference, dedicated to the further development of humanity, was held in June 1992 in Rio de Janeiro, attended by 179 countries and several hundreds of NGOs' representatives. Five documents were adopted at the conference: the Rio Declaration on Environment and Development, Agenda 21 (Action Plan for the 21st century), the Framework Convention on Climate Change, the Convention on Biological Diversity, and the Statement of Principles on Forests.

One of the essential pillars of sustainable development at the global level is the Convention on access to information, public participation in decision-making, and access to justice in environmental issues – the Aarhus Convention. Each signatory country submits an annual national report on the implementation of this Convention, and the signatories to the Convention regularly hold meetings. The Convention and its Protocol play a crucial normative role and help strengthen civil society involvement, including environmental associations, local communities, academia, and marginalized decision-making groups. The Declaration highlights the vital role of the PRTR Protocol (Protocol on Pollutant Release and Transfer Registers) in developing an environmental pollution information platform that helps the policymakers apply the relevant decisions for the development of the green economy.⁴²

⁴¹ Priručnik za ekoaktivizam, Zelena akcija 2012, p. 8.

⁴² Maganić, A., Orlić Zaninović, S.: Aarhuška konvencija, Faculty of Law of the University of Zagreb, Zagreb, 2018, p. 3.

5. CONCLUSION

The committing of environmental crimes is continuously increasing, which jeopardizes the efficiency of environmental protection and human rights to environmental protection. The key is the understanding of the scientific policy of combating criminality since repressive measures cannot effectively enough achieve the reduction of punishable behavior. Therefore, contemporary politics needs a preventive orientation reflected in the development of general awareness of people about everyday life, which implies a complex system of activities regarding the contents and forms of suppression of unlawful behavior. Non-governmental protection, focused mainly on preventive measures undertaken in a planned and organized manner to reduce the causes of environmental pollution in general.

In environmental protection, the main objective is to raise the level of environmental awareness and management. In addition to the environmental information system, it is necessary to continuously educate the population on environmental issues at all levels, starting with preschool children. Furthermore, it is necessary to disseminate information to business entities about the use of environmentally friendly technology and investing significant funds into the preparation of professional and scientific projects and programs that will enable more appropriate and better-quality environmental protection in production activities.

Therefore, it is necessary to emphasize the need to raise the environmental awareness of the public regarding the preservation of the natural values of the environment, forests, water, and other natural resources, to foster the establishment and functioning of a system for the disposal of specific categories of waste, involving all society stakeholders, from producers to consumers, and to strengthen the capacities of NGOs whose activities are oriented to environmental protection in terms of human resources and finance.

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- 6. Water Act (Official Gazette 66/19),
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