



Environmental Crimes: Their Nature, Scope, and Problems in Identification

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Abstract

Environmental crimes are illegal acts that directly harm the environment. They can cause considerable damage to ecosystems, increasing the risk of disease, environmental disaster, food chain contamination, pollution, wildlife degradation, reduced life expectancy, and increased rates of human morbidity. Environmental crime is the fourth largest criminal enterprise in the world. (INTERPOL-UN) These crimes include illegal logging, wildlife trafficking, hazardous waste dumping, illegal fishing, and the trade of endangered species, among others. Despite their wide-ranging implications, identifying and prosecuting these offenses remain challenging. This paper explores the nature and scope of environmental crimes, the difficulties in their identification, and the need for improved detection and enforcement mechanisms to tackle these illegal activities effectively. By examining the current state of environmental crime, the paper seeks to provide a comprehensive understanding of the issue, contributing to the development of more effective policies and strategies to combat this growing global problem. The European Space Agency is offering technical support and funding to companies developing innovative and commercial services that use space technology to combat environmental crimes. The paper also discusses the role of organized criminal networks and the relationship between environmental crimes and other types of criminal activities such as money laundering, corruption, and human trafficking. From the other side, it examines the challenges posed by the complexity of environmental crimes, the need for specialized knowledge and expertise, and the role of corruption and other factors that hinder effective identification and enforcement.

Keywords: Environmental Crimes, Identification, Expertise, Prosecuting

1. Introduction

Environmental crimes encompass a broad range of illegal activities that harm the environment and threaten human health, biodiversity, and economic growth. These crimes include illegal logging, wildlife trafficking, hazardous waste dumping, illegal fishing, and the trade of endangered species, among others. Although the definition of "environmental crime" is not universally agreed, it is most commonly understood as a collective term to describe illegal activities harming the environment and aimed at benefitting individuals or groups or companies from the exploitation of, damage to, trade or theft of natural resources, including, but not limited to serious crimes and transnational organized crime.¹

In the last decades, it has become increasingly clear that the protection of the environment is not only about a specific nature-related interest, but also about the systemic preservation of the commons of nature, which is essential for

¹ UNEP, *The rise of environmental crime*, 2016

the life conditions of human beings and flora and fauna. The trade in endangered species puts not only their survival at risk; it deprives humanity of natural resources for their own survival and damages the biodiversity of planet earth.

Environmental crimes have global implications, affecting both developed and developing countries. Countries that do criminalize environmental offences consider them mostly to be regulatory offences, *malum prohibitum*, which means that coercive measures are limited and sanctions are low. Nevertheless, some countries did include them in the criminal codes as *malum in se*.² However, their enforcement practice is still not in line with their mandatory duty to investigate, prosecute and adjudicate them. In this respect, some environmental criminality relates to the broader concept of serious human rights violations and positive duties for states to protect life and living quality standards, including those of minorities who live in areas with a great potential for natural resources to be exploited. In other words, there is a mix of criminal offences, human rights violations and societal harm at stake. Some of the violations could be qualified already today as war crimes under the Rome Statute of the International Criminal Court. When armed conflict activities cause extensive damage, the destruction or loss of ecosystems in a given territory can mean that the peaceful enjoyment of the inhabitants of that territory has been severely diminished. However, there are difficulties in detecting, investigating, and prosecuting environmental crimes, such as the lack of adequate legislation, limited resources, and insufficient enforcement capacity. To address the problems in identifying and combating environmental crimes, the paper outlines potential strategies for improving detection and enforcement efforts. These strategies include strengthening legal frameworks, enhancing international cooperation, increasing capacity building and training, promoting public-private partnerships, and raising public awareness about the issue. Over the past 15 years, there has been significant growth in awareness that environmental crime constitutes serious organized crime. There has also been a development of laws and policies to accompany that. However, despite the urgency and importance of the issue, responses still fall far short of what is needed.³

2. The Nature of Environmental Crimes

Environmental crime is the perpetration of harms against the environment that violate current law. The term environmental harm is often interchanged with environmental crime and, for some, any activity that has a deleterious effect on the environment is considered an environmental crime. At the other end of the spectrum, the harm may be conceived of as a crime per se only if it is subject to criminal prosecution and criminal sanction. The activities that are generally recognized as environmental crimes include:

- pollution or other contamination of air, land and water;
- illegal discharge and dumping of, or trade in, hazardous and other regulated waste;
- illegal trade in ozone-depleting substances;
- illegal, unregulated and unreported (IUU) fishing;
- illegal trade in (protected) flora and fauna and harms to biodiversity;
- illegal logging and timber trade;
- illegal native vegetation clearance; and
- water theft etc

Compared with other crimes, environmental crime has taken longer to be accepted as a genuine category of crime. Changing perceptions about the vulnerability of the environment, particularly with respect to long-term outcomes of environmentally harmful practices, has altered this view to the extent that most behavior with a potential environmental consequence is now tightly regulated. However, gauging the true extent of environmental crime is no easy task. The incomplete nature of published data and analyses cannot be used to accurately describe trends in the prevalence of environmental crimes and recent increased enforcement and a move towards stricter punishment of environmental offenders blurs the picture further. What the data does suggest is that there is no real abatement in the authorities of environmental offences, the cast of offenders is predictably diverse and offences run the spectrum of genuine ignorance of laws to deliberate environmental degradation.⁴

² John A.E. Vervaele and Daan P. van Uhm, *Criminal Justice and Environmental Crime : How to tackle organized crime and ecocide*, 2017

³ Simone Haysom and Mark Shaw, *An analytic review of past responses to ENVIRONMENTAL CRIME and programming recommendations*, 2022

⁴ Samantha Bricknell, *Environmental Crime in Australia*, 2010

The Impacts of Environmental Crime

Environmental crime is one of the most profitable criminal enterprises, generating around USD 110 to 281 billion in criminal gains each year. It covers a wide range of unlawful activities such as illegal logging, illegal wildlife trade and waste trafficking.⁵ Environmental crime can have negative impacts of various types:

I) Environmental, such as loss of species illegally hunted and collected; destruction of ecosystem or habitat from illegal activity (e.g. illegal waste dumping or clearing of forest for timber)

II) Economic, such as loss of income to legitimate businesses or loss of tax revenue

III) Social, such as health impacts, e.g. harm caused by toxic pollution

Understanding the nature and extent of the impacts of environmental crime enables enforcement authorities to focus on those crimes that cause the most harm. It also helps to raise awareness about the importance of criminal activity and to guide policy-making processes and legal review. Often the focus can be on the immediate or obvious impacts, such as the poaching of elephants. However, their loss also negatively impacts local communities that depend on tourism. Yet, identifying the impacts of environmental crime can be a challenge. In principle, there are three ways in which each impact of environmental crime can be described:

a) Qualitatively, where the impact is described without putting figures on the impact. As long as some impact is known about, a qualitative description is always possible.

b) Quantitatively, where the impact is described with figures referring to the scale of the impact. This could be tonnes of illegally traded waste, numbers of animals illegally killed, etc.

c) On the basis of quantified data on impacts, estimates of the financial or monetary impact of environmental crime can be developed. Monetary figures express direct financial impacts (e.g., loss of trade for legitimate businesses)⁶. Other estimates would be based on methods to assess what value a certain function of nature or "service" has. For example, a healthy forest could provide an income to certain groups as well as reduce illness-related costs to the health system by providing cleaner air, cleaner water and a space for recreation. Health impacts can be monetized as well, relying on established methods.

However, a general problem with assessing the impacts of environmental crime, in whatever terms, is that it is difficult to establish what behaviour constitutes a crime in the first place. As pointed out in the introduction, environmental crime can be defined in different ways; not all of them require a certain act to be illegal in order to be considered a "crime". And even if one adopts a definition whereby an environmental crime necessitates illegal behaviour, it is often not easy to determine whether a certain act was actually illegal or not. Even where crime levels are known, the impacts of such crimes may be mixed with those from legal activities, so that differentiating between the impacts of legal and illegal activities respectively is difficult.

3. Environmental Harm Prevention

Fundamentally, discussion of pracademics and applied green criminology point in the direction of 'praxis' – the synthesis of theory, research, and intervention. Praxis is the unity of 'theory' and 'practice' in motion at the ground level of action. We learn by 'doing'; we learn by 'reflecting'.⁷ How we act in preventing and responding to environmental crimes and harms depends on the sophistication of our understanding of the issues. It also depends on the skillfulness of our interventions in communities and across diverse social contexts. For pracademics the importance of praxis is that it bridges artificial divisions between academic study and grounded practice.

We stand at a pivotal point in human history, one that is witnessing systematic destruction of the basic environmental contours of our planet. The three greatest threats to humankind and myriad other species, ecosystems and the Earth generally are climate change, rapidly diminishing biodiversity, and pollution and contamination of land, air and water. Social intervention to counter these trends, and the implementation of suitable mitigation and adaptation strategies, is urgently needed. The field of criminology and its associated disciplines such as law, sociology, psychology, political science, international relations, and economics should and must play a part in the needed institutional shake-up and system transformation. This requires concerted activity around environmental issues. It also demands creative thinking and innovative ways in which to construct professional roles.

For instance, we can start by analyzing *environmental harm* as a crime scene. Some preliminary work along these

⁵ FATF President Marcus Pleyer, Message to the G7 on tackling environmental crime, 2020

⁶ European Union Action to Fight Environmental Crime, *Environmental Crime and the EU*, 2016, Berlin

⁷ Rob White, *Environmental Crime and the harm prevention criminalist*, 2022

lines has already begun⁸ This kind of re-imagining also suggests a new type of investigator: the harm prevention criminalist. This position could have wide and diverse applications including contributions to effective disaster relief, policing, emergency service provision, and more. There is urgent need to develop an integrated approach to environmental harms. Creating this new occupational category, informed by criminological theory and practice, is a means by which to do this. The vision is of improved assessments of environmental harm, and collaborative methods of response. Courts, police, and environmental protection agencies are crucial actors here, as are the emerging environmental enforcement networks⁹ – along with scientific experts, non-government organizations, and citizen scientists.

4. Environmental Crimes in EU

Environmental crimes are one of the biggest threats not only to ecosystems and protected species, but also to our economy and our society. They disrupt the integrity of territories and of communities, damage companies and individuals working and living in a sustainable way, and threaten the very existence of fragile and carefully protected habitats across Europe.

Most member states have equally failed so far to deliver a national definition of environmental crime: among the member states most active on the issue, the French criminal code does not provide any specific characterization for *envicrime*¹⁰, if we exclude the very limited notion of “Ecologic Terrorism” under articles 421 and 422 of the code. Similarly, the comprehensive Italian “Codice dell’Ambiente” (Environmental Code), both in its original 2006 text¹¹ and in the latest, 2019 update, does not include any definition of this sort. Law 68 of 2015 introduced into the Italian criminal code the notion of “delitti contro l’ambiente” (crimes against the environment), improving the overall framework, listing a series of critical offences and also addressing the involvement of organised crime, yet failing to provide a comprehensive definition including, for instance, wildlife trafficking.¹²

In an EU where sustainability, environmental protection and coexistence with nature are now key values leading both political and economic action, environmental crimes are an existential threat to the very future of Europe. This is a global problem: waste trafficking, illegal timber trade, emissions fraud and other old and new offenses are on the rise worldwide – some situations gaining more attention (illegal logging in the Amazon, rhino poaching), others less (bird poaching in sub Saharan Africa, illegal logging in Siberia). The EU is however one of the focal points of these worrying trends; as the foremost economic and trading bloc in the world, the European Union is one of the leading destinations or transit hubs for illegal trade linked with environmental crimes, as well as the origin for others. The unique natural resources of member states such as Romania or Poland, and the significant demand for cheap waste disposal in countries such as Italy or Germany, make Europe an appealing theatre for traffickers. Despite this, the general picture of environmental crimes in Europe is that of a complex, growing and already serious threat which, regardless of increasing attention by policymakers and enforcement agencies, is still largely missing an effective, coherent and integrated action¹³. As regulations and budget on environmental matters are expected to further grow in the next years, adequate enforcement and generally speaking a full framing to counteract environmental crimes will be fundamental for the success of the EU and its Green Deal. If successful, this European system could become a model for many other regions in the world; a leadership by example that the EU has already developed in other sectors, climate action in particular, and which could be replicated also for the growing threat of environmental crime.

Despite recent improvements, the EU as a whole and most member states are still far from effective action against environmental crimes. One of the key obstacles is the lack of a shared definition There is not a comprehensive delimitation of what environmental crimes are, either in the EU (the old *envicrime* Directive and the proposed new one are both missing this) or in the majority of member states. While some countries have partial or full definitions in their criminal code (as in the case of Spain or Italy), this is however not matched by similar statements on the administrative or political side, thus limiting effectiveness. This translates into a number of issues: some offenses have a strong recognition within

⁸ Lam A., Tegelberg M. (2021). *Criminal anthropocenes: Media and crime in the vanishing Arctic* (London: Palgrave Macmillan).

⁹ Pink G., Lehane J. (2012). “Environmental enforcement networks: Their role in climate change enforcement,” in *Climate change from a criminological perspective*. Ed. White R. (New York: Springer).

¹⁰ Floriana Bianco, Annalisa Lucifora and Grazia Maria Vagliasindi, *Fighting Environmental Crime in France: A Country Report, Study in the framework of the EFFACE research project, February 2015*,

¹¹ Italy, Decreto legislativo 3 aprile 2006, n. 152: *Norme in materia ambientale*, 2006,

¹² Annamaria Villafrate, “I reati ambientali”, in *Studio Cataldi*, 4 April 2018

¹³ Lorenzo Colentano, Giulia Sarno, Margherita Bianchi, *Fighting Environmental Crimes in Europe, 2022*

national frameworks (illegal logging in Romania, for instance) but others do not (waste), despite their equally strong impact in the country. The same crime can expect significantly different penalties across countries, facing minor administrative penalties on one side of the border and heavy criminal sanctions on the other – this also leads to the creation of *envicrime havens* across the EU. A missing common definition prevents authorities, particularly policymakers and the judiciary, from understanding that environmental crimes are not isolated offenses, but part of an interconnected phenomenon in which each case can and likely does influence the others.

5. Conclusions

Unlike traditional crimes, environmental crimes (and environmental harms) frequently have long-lasting and irreversible effects. This raises questions about the effectiveness of justice systems in dealing with environmental offenders and the damage they cause.

As a result, new legislative, economic, policy and political tools can take on control environmental crimes even in the short to medium term. Centralised units, dedicated solely to environmental crimes, have proved particularly effective across the EU – this is the case for OCLAESP in France, SEPRONA in Spain and CUFA in Italy, for instance – because of their inherent specialisation, their ability to promote information sharing and coordination among agencies and, above all, because of their cross-sectorial, comprehensive approach on environmental crimes as a whole. Centralised units also make contacts across countries easier and more effective, as well as facilitating dedicated international operational activities.

Some member states have specialised enforcement bodies that are more aware of types of criminal misconduct. The Netherlands is a good example of how to ramp up the detection of environmental crimes. It coordinates and shares information between local authorities, port authorities, customs and the police. This creates quite an effective network because local police often aren't aware of the issue or don't have adequate resources to investigate organised environmental crime.

Despite their far-reaching implications, these offenses often go undetected and unpunished due to various challenges in their identification and enforcement. To effectively combat environmental crimes, it is crucial to develop a comprehensive understanding of the issue, addressing the underlying causes and strengthening the mechanisms for detection, investigation, and prosecution. By adopting a multifaceted approach, it is possible to mitigate the impacts of environmental crimes and contribute to a more sustainable future.

References

- UNEP, *The rise of environmental crime*, 2016
- John A.E. Vervaele, Daan P. van Uhm, *Criminal Justice and Environmental Crime : How to tackle organized crime and ecocide*, 2017
- Simone Haysom and Mark Shaw, *An analytic review of past responses to Environmental Crime and Programming Recommendations*, 2022
- Samantha Bricknell, *Environmental Crime in Australia*, 2010
- FATF President Marcus Pleyer, *Message to the G7 on tackling environmental crime*, 2020
- European Union Action to Fight Environmental Crime, *Environmental Crime and the EU*, 2016, Berlin
- Rob White, *Environmental Crime and the harm prevention criminalist*, 2022
- Lam A., Tegelberg M. *Criminal anthropocenes: Media and crime in the vanishing Arctic* (London: Palgrave Macmillan), 2021
- Pink G., Lehane J. "Environmental enforcement networks: Their role in climate change enforcement," in *Climate change from a criminological perspective*, (New York: Springer), 2012
- Floriana Bianco, Annalisa Lucifora and Grazia Maria Vagliasindi, *Fighting Environmental Crime in France: A Country Report*, Study in the framework of the EFFACE research project, February 2015,
- Italy, *Decreto legislativo 3 aprile 2006, n. 152: Norme in materia ambientale*, 2006,
- Annamaria Villafrate, "I reati ambientali", in *Studio Cataldi*, 4 April 2018
- Lorenzo Colentano, Giulia Sarno, Margherita Bianchi, *Fighting Environmental Crimes in Europe*, 2022