

Is Nature the Unsung Victim? A Critical Exploration of Environmental Harm through Green Criminology and Justice Frameworks

Ms. Chandini Chowdary R.*
Mr. Mohd Hammaad Siddiqui**

INTRODUCTION

In an era marked by unprecedented environmental challenges, the intersections of criminal behavior and ecological harm have given rise to a field of study known as “Green Criminology”. Green criminology is a unique and burgeoning field of study that examines the intersection of environmental harm, ecological degradation and criminal activities. It focuses on understanding and analyzing the ways in which both individuals and corporations contribute to environmental destruction and how these actions can be considered as criminal offences. Simultaneously, environmental justice emphasizes the need for fair and equitable distribution of environmental benefits and burdens, advocating for marginalized communities disproportionately affected by environmental harm.¹

At its core, green criminology challenges traditional notions of crime by expanding the concept to encompass offenses against the environment. It investigates a wide range of activities, from illegal logging, wildlife trafficking, and toxic waste dumping to white-collar environmental crimes committed by corporations. For instance, illegal sand mining across several states in India exacerbated the erosion of riverbanks and threatened aquatic ecosystems.² Additionally, the widespread fires in the Amazon rainforest which are driven by illegal logging and land clearing resulted in the devastating loss of biodiversity and increased carbon emissions.³ These instances highlight how uncontrolled extraction of resources generates both environmental and social harm. By examining the legal, social, and economic aspects of these actions, green criminology seeks to hold perpetrators accountable for their environmental transgressions.

* Ms. Chandini Chowdary R, Assistant Professor, Department of Law, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Guntur, Andhra Pradesh, India.

** Mr. Mohd Hammaad Siddiqui, School of Law, Graphic Era Hill University, Dehradun, Uttarakhand, India.

¹ Iris T. Stewart et. al., “The uneven distribution of environmental burdens and benefits in Silicon Valley’s backyard”, 55 *APPLIED GEOGRAPHY* 266 (2014).

² Matovu Baker et. al., “The Complexity of Sand Mining in Coastal Regions of India: Implications on Livelihoods, Marine and Riverine Environment, Sustainable Development, and Governance”, 15(2) *KMI INT. J. MARIT. AFF. FISH.* 63 (2023).

³ Richarde Marques da Silva et. al., “Deforestation and fires in the Brazilian Amazon from 2001 to 2020: Impacts on rainfall variability and land surface temperature”, 326(A) *J. ENV. MANG.* 116 (2023).

Environmental justice, on the other hand, addresses the unequal distribution of environmental benefits and negative consequences among different social groups.⁴ It advocates for policies and actions that rectify these disparities, ensuring that all individuals, regardless of their socioeconomic background, have the right to a safe and healthy environment.⁵ Historically, marginalized communities, often low-income and minority populations, have been disproportionately exposed to pollution, hazardous waste sites, and other environmental hazards. This unequal burden has led to health disparities and reduced quality of life for these communities. The opposition towards the mining projects by the indigenous communities of the Niyamgiri Hills, citing threats to their cultural heritage, water and land sources emphasizes how environmental injustice is closely related to ecological preservation and the protection of rights of indigenous communities.⁶

The link between green criminology and environmental justice is evident through their shared goal of addressing environmental harm and its impact on both ecosystems and society.⁷ Green criminology sheds light on the perpetrators behind environmental degradation, revealing how some corporations prioritize profit over ecological sustainability. This understanding is crucial in promoting accountability and advocating for legal and regulatory frameworks that deter environmental crimes.

Environmental justice, while focusing on the victims of environmental harm, aligns with green criminology by highlighting the social injustices that often accompany ecological destruction. Communities living near polluting industries, waste disposal sites, or deteriorating ecosystems are disproportionately burdened by health issues and economic challenges. By recognizing and addressing these disparities, environmental justice advocates strive to create inclusive policies that uplift marginalized voices and ensure equal access to environmental benefits.

Green criminology and environmental justice are interconnected fields that shed light on different aspects of the complex relationship between environmental harm and human society. While green criminology uncovers the perpetrators and mechanisms behind environmental offenses, environmental justice strives to rectify the injustices faced by affected communities. Together, these fields contribute to a more holistic understanding of environmental issues and the imperative to protect both our planet and its inhabitants.⁸

⁴ *Ibid.*

⁵ *Supra* Note 1.

⁶ Annapurna Devi et. al., "Dead or Alive? Odishan and Appalachian Mountains as Partners in Activism", 71(2) *SOCIOLOGICAL BULLETIN* 232 (2022).

⁷ *Ibid.*

⁸ Avi Brisman and Nigel South, "Green Criminology and Environmental Crimes and Harms", 13(1) *SOCIOLOGY COMPASS* 42 (2019).

Michael J. Lynch⁹ coined the phrase “*green criminology*” in 1990. Later, Nancy K. Frank¹⁰ and Michael J. Lynch developed it in their 1992 book, “*Corporate Crime, Corporate Violence*”¹¹, which looked at the political and economic causes of green crime and injustice as well as the reach of environmental law. Following the 1998 release of a special issue on green criminology in the journal “*Theoretical Criminology*”¹², edited by Piers Beirne and Nigel South, the phrase gained increasing popularity.

THEORETICAL APPROACH

There are numerous approaches that draw from different philosophical, social, legal, and scientific traditions, according to Rob White¹³, who contends that there isn’t just one single green criminological theory. Environmental justice, ecological justice and species justice are the three “*theoretical tendencies*” he names as the cornerstones of an eclectic theoretical investigation of green criminology.

Environmental Justice – “*Environmental Justice*” is a concept that falls within the realm of green criminology, a field that examines the interactions between environmental issues and criminal justice. Environmental justice is concerned with the fair and equitable distribution of environmental benefits and burdens across different social groups, particularly focusing on the disproportionate impacts of environmental harms on marginalized and vulnerable communities.

Under the framework of green criminology, environmental justice highlights the ways in which certain groups, often those with less social and economic power, are disproportionately affected by environmental harms such as pollution, toxic waste disposal, deforestation, and other environmentally damaging practices. These groups might include low-income communities, racial and ethnic minorities, indigenous populations, and those with limited access to political influence.

The key principles of environmental justice under green criminology include:¹⁴

⁹ Michael J. Lynch is a Professor of Criminology at the University of South Florida, USA. He is the founder of the subfield of criminology known as ‘green criminology’.

¹⁰ Nancy Frank received her doctoral degree in criminal justice from the School of Criminal Justice at the State University of New York at Albany and is an Associate Professor at the University of Wisconsin – Milwaukee.

¹¹ Nancy K. Frank and Michael J. Lynch, *Corporate Crime, Corporate Violence* 163 (Harrow and Heston, New York, 1992).

¹² Nigel South and Piers Beirne, *Theoretical Criminology* 147 (Sage, London, 1997).

¹³ Rob White, “The Conceptual Contours of Green Criminology”, in Reece Walters, Diane Solomon Westerhuis and Tanya Wyatt(eds.), *Emerging Issues in Green Criminology*, 18 (Palgrave Macmillan, 2013).

¹⁴ Michael J. Lynch, Michael A. Long, *et.al.* (eds.), *Green Criminology and Green Theories of Justice* 25 (Palgrave Macmillan, 2019).

- **Distributional Equity:** This principle emphasizes that environmental benefits, like clean air, water and a healthy environment should be distributed fairly among all members of society, regardless of their socioeconomic status or cultural background.
- **Procedural Justice:** Environmental decision-making processes should be inclusive and participatory, allowing all affected communities to have a say in environmental policies and projects that might impact their well-being. This is particularly important to prevent decisions that could disproportionately harm marginalized groups.
- **Recognition of Rights:** Environmental justice advocates often emphasize the recognition of indigenous rights and traditional knowledge, acknowledging that many communities have longstanding connections to their environments and that these connections should be respected.
- **Cumulative Impacts:** Environmental justice considers the cumulative impacts of multiple sources of pollution or environmental degradation in a single community. Marginalized communities can be exposed to multiple sources of harm, leading to heightened negative effects on health and quality of life.
- **Externalities and Victim Blaming:** Environmental justice critiques the tendency to blame victims of environmental harms for their own conditions. It places responsibility on industries and institutions that create these harms and advocates for holding them accountable.
- **Intersectionality:** The concept of intersectionality recognizes that people's identities and experiences are shaped by multiple factors, such as race, class, gender, and more. Environmental justice aims to address the unique vulnerabilities that arise at the intersections of these factors.
- **Global Perspective:** Environmental justice is not limited to local issues; it acknowledges the interconnectedness of environmental and social problems on a global scale. For example, it may examine how environmental exploitation in one country affects the people and ecosystems in another.

Ecological Justice – “*Ecological Justice*” is a concept within the field of green criminology that emphasizes the fair and equitable distribution of environmental benefits and burdens among different social groups and communities. Green criminology is a subfield of criminology that focuses on the study of environmental harm, including crimes against the environment, animals, and humans, as well as the socio-legal responses to such harm.

The theory of ecological justice acknowledges that environmental harms, such as pollution, habitat destruction, and resource depletion, often disproportionately affect marginalized

communities, such as low-income neighborhoods, indigenous peoples, and communities of color. These groups often have less political and economic power to influence decision-making processes and are more likely to bear the negative consequences of environmental degradation. Ecological justice seeks to address this imbalance and advocate for equitable access to environmental resources and protection.

The key principles of ecological justice within the context of green criminology include:¹⁵

- **Distributive Justice:** This principle calls for a fair distribution of environmental benefits and burdens across all communities. It emphasizes the need to avoid concentrating environmental hazards in disadvantaged areas while ensuring that all communities have equal access to clean air, water, and other resources.
- **Recognition of Indigenous Knowledge and Rights:** Ecological justice recognizes the importance of indigenous knowledge and the rights of indigenous peoples to their traditional lands and resources. It challenges practices that lead to the dispossession and exploitation of indigenous communities.
- **Environmental Racism:** This concept highlights the intersection of environmental harm and racial discrimination. Ecological justice aims to address instances where vulnerable communities are intentionally or disproportionately exposed to environmental hazards due to their race or socioeconomic status.
- **Participatory Decision-Making:** Ecological justice promotes inclusive and participatory decision-making processes that allow all members of society, especially marginalized groups, to have a voice in environmental policies, regulations, and planning.
- **Global Perspective:** Ecological justice recognizes that environmental issues are often interconnected across borders and that addressing them requires international cooperation. It seeks to address disparities between developed and developing nations in terms of resource consumption, pollution, and environmental degradation.
- **Restorative Justice:** This principle involves seeking ways to repair the harm caused by environmental degradation. It includes efforts to restore ecosystems, compensate affected communities, and hold responsible parties accountable for their actions.

Species Justice – “*Species Justice*” is a concept within the field of green criminology that focuses on the rights and interests of non-human living beings and the need to address harm inflicted upon them by human actions. Green criminology is a branch of criminology that examines environmental harm and its intersections with social, economic, and political factors.

¹⁵ Rob White (ed.), *Theorising Green Criminology* 33 (Routledge, London, 2021).

Species justice recognizes that animals, like humans, have intrinsic value and are entitled to certain rights and protections. It challenges the anthropocentric (human-centered) perspective that often disregards the interests and well-being of non-human species. This theory argues for the consideration of animals as moral and legal subjects, rather than just objects or property.

The key aspects of species justice within the context of green criminology include:¹⁶

- **Recognizing Animal Agency and Interests:** Species justice emphasizes that animals are not passive entities but rather have their own agency and interests. This means acknowledging that animals can experience suffering, pleasure, and a range of emotions, and their well-being should be taken into account in human activities.
- **Legal and Moral Rights for Animals:** This theory calls for extending legal protections and rights to animals, much like how humans are granted certain legal rights. This might involve recognizing animals as sentient beings and granting them protections against unnecessary harm, exploitation, and cruelty.
- **Addressing Animal Exploitation and Harm:** Species justice highlights the various ways in which animals are exploited and harmed by human actions, such as through factory farming, wildlife trafficking, habitat destruction, and pollution. It aims to hold individuals, corporations, and institutions accountable for such actions.
- **Environmental Justice for Animals:** Just as environmental justice seeks to address the unequal distribution of environmental harms among human populations, species justice seeks to address the unequal distribution of harm among different animal species. This involves considering the impact of human activities on both domesticated and wild animals.
- **Promoting Animal Welfare and Conservation:** Species justice encourages efforts to improve animal welfare standards and engage in conservation efforts to protect and restore the habitats of various species. This might involve advocating for stronger animal welfare regulations and supporting initiatives to preserve biodiversity.
- **Reimagining Human-Animal Relationships:** This theory challenges the dominant view of humans as superior to animals and suggests reimagining more ethical and harmonious relationships between humans and other species.

LEGISLATIVE APPROACH

¹⁶ Nigel South and Avi Brisman (eds.), *International Handbook of Green Criminology* 61, (Routledge, London, 2012).

The major threats to the survival of humanity have been environmental problems including carbon emissions, climate change and ozone depletion, which have taken center stage since the “*United Nations Conference on Human Environment*” in 1972 and the “*Paris Agreement*” signed in 2016.¹⁷ Countries have partially criminalized environmental offenses through local legislation and are punishing offenders through their criminal justice systems. International environmental law has developed in a fragmented manner under various conventions, which forbid the trade in wildlife and endangered species, outlaw whaling, trans-boundary pollution, non-commercial use of Antarctica, prevent pollution of the seas, regulate the dumping of nuclear waste in the seas, preserve biodiversity and prevent pollution of space, to name a few notable areas governed by conventions.¹⁸ These agreements tend to be declarative and persuasive in nature, and they place duties on nation-states to enact domestic legislation to implement the convention, or in monistic nations, the convention becomes a part of the law once ratified. The majority of environmental treaties have their roots in international humanitarian law, which views the environment as a shared human possession. However, it is up to the ratifying nation’s choice to apply the convention in accordance with its legal framework and policy.¹⁹ Therefore, international environmental law adopts a soft law strategy, whereas international criminal law adopts a hard law strategy.

The limited connection between international environmental law and international criminal law is a result of international criminal law’s reluctance to impose criminal culpability for environmental offenses.²⁰ Environmental crimes may be included by a liberal reading of some “*Rome Statute*” articles. “*Article 6(c) of the Rome Statute*”, which forbids intentional acts that can change the conditions of existence and cause the physical destruction of a group of people or of a part of them, can be used to bring environmental crimes before the “*International Criminal Court*”.²¹ One of the elements of crime that can lead to genocide is the willful withholding of resources necessary for survival.²²

¹⁷ L. Flower, “Environmental Challenges in the 21st Century”, 9(4) *AUJT* 248 (2006).

¹⁸ Sebastian Jodoin and Marie-Claire Cordonier Segger (eds.), *Sustainable Development, International Criminal Justice and Treaty Implementation* 123, (Cambridge University Press, 2013).

¹⁹ Mary Clifford (ed.), *Environmental Crime: Enforcement, Policy, and Social Responsibility* 31 (Aspen Publishers, United States, 1998).

²⁰ Frederic Megret, “The problem of an International Criminal Law of the Environment”, 36 *COLUM. J. ENVTL. L.* 195 (2011).

²¹ Rome Statute of the International Criminal Court, 2187 UNTS 90, 17 July 1998, entered into force on 1 July 2002.

²² Kathleen F. Brickey, *Environmental Crime – Law, Policy and Prosecution* 45 (Aspen Publishing, United States, 2008).

Environmental problems including climate change, overuse of natural resources, and changes in land usage can rob people of resources and lead to genocide. The “*Whitaker Report*” had recommended including environmental destruction, which included irreparable damage to the environment under the purview of genocide, but this suggestion was rejected. The “*Genocide Convention*” was the forerunner to the “*Rome Statute*”.²³ Even if this recommendation had been approved, it would have been challenging to link the State’s development efforts to genocidal intent. According to the “*Whitaker Report*”, environmental degradation is more appropriately classified as a crime against humanity than as a subspecies of genocide because it only requires knowledge, as opposed to the intent required for genocide, as proof of *mensrea*. The extermination²⁴, forced population transfers²⁵, persecution²⁶ and other cruel actions²⁷ that are undertaken as part of a widespread or systemic deliberate attacks against any civilian population were all prohibited by “*Article 7 of the Rome Statute of 1998*”.²⁸

After the “*Vietnam War*”, a provision was added to “*Protocol I of the Geneva Convention*” that forbade “*methods and means of warfare which were intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment*” in times of international armed conflict. However, “*Protocol II of the Geneva Convention*”, which deals with non-international armed conflicts, did not receive the same amendment, so internal wars within a nation state were still a permissible space for green crimes.²⁹

Numerous environmental crimes unquestionably fall under the purview of “*Article 7 of the Rome Statute of 1998*”, which places the accused under criminal accountability. “*Article 8(2)(b)(iv) of the Rome Statute*”, which criminalizes environmental crimes during conflict, includes “*environmental destruction*” as a specific war crime; however, such environmental destruction should not be a military necessity.³⁰ This Article continues to be misused because no tribunal has brought any cases under this modified Article after the “*Nuremberg Trials*”.³¹

²³ B Whitaker (Special Rapporteur) Revised and Updated Report on the Question of the Prevention and Punishment of the Crime of Genocide, UN ESCOR, Human Rights Sub-Commission on the Prevention of Discrimination and Protection of Minorities, 38th Sess., UN Doc. E/CN.4/Sub.2/1985/6 (1985) (‘Whitaker Report’).

²⁴ Rome Statute of the International Criminal Court, Art 7(1)(b).

²⁵ Rome Statute of the International Criminal Court, Art 7(1)(d).

²⁶ Rome Statute of the International Criminal Court, Art 7(1)(h).

²⁷ Rome Statute of the International Criminal Court, Art 7(1)(k).

²⁸ Rome Statute of the International Criminal Court, Art 7.

²⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) 1125 UNTS 3, 8 June 1977, entered into force 7 December 1979, Art. 35(3) and Art. 55.

³⁰ In Polish Forestry Case No. 7150, the United Nations War Crimes Commission determined that German Administrators could be considered war criminals for cutting down polish Timber.

³¹ Rob White (ed.), *Environmental Crime – A Reader* 71 (Willan Publishing, 2009).

Since the “*Rome Statute*” was adopted in 1998, laws establishing ad hoc tribunals have begun to incorporate clauses punishing environmental degradation.³² Because ecological harm committed in the course of hostilities is not subject to punishment, it must be massive, severe, deliberate, and out of proportion to any military advantages. It is hard to impose criminal culpability for environmental destruction committed during international hostilities due to the high standards. These levels must be precisely established and understood in order for this Article to be successful in reducing environmental crimes committed during international conflict.³³ Future global conflicts over natural resources are expected, but sadly, international criminal law does not forbid or punish such “*green aggression*” and “*green wars*”.³⁴

The standard for environmental harm that would constitute a war crime should be lowered in order for international criminal law to establish a robust foundation for green crimes committed during combat. The green perspective can be used to interpret current crimes against humanity as including environmental harm as one of their elements.³⁵ In addition to calling for the establishment of the “*Fifth Geneva Convention*”³⁶ and a dedicated “*International Court for Environmental Offences*”, it has also been urged that the “*Statute of the Criminal Court*” be amended to include particular green crimes.³⁷

There have been suggestions to classify “*ecocide*” as a separate international crime. Crimes of ecocide have been added to the penal codes of Belarus³⁸ and Armenia.³⁹ The call for the crime of ecocide to be included in international law has so far been rejected by the international community.⁴⁰ The majority of green crimes take place within a nation-state, and when they are sanctioned by the nation-state, they might occasionally be transnational. However, because these crimes are not the outcome of international armed conflict, international law must take these crimes into account. The current nature of international criminal law makes it difficult to

³² ‘United Nations Transitional Administration in East Timor, on the Establishment of Panels with Exclusive Jurisdiction over Serious Criminal Offences’ UNTAET Reg. 2000/15, 6 June 2000, S. 6(1)(b)(iv) and Statute of the Iraqi Special Tribunal for Crimes Against Humanity (10 December 2003) Art 13(b)(5).

³³ Donald R. Liddick, *Crimes against Nature* 93 (Praeger Publishers Inc., 2011).

³⁴ Piers Beirne and Nigel South (eds.), *Issues in Green Criminology* 61, (Willan Publishing, 2007).

³⁵ Kathleen F. Brickey, *Environmental Crime – Law, Policy and Prosecution* 89 (Aspen Publishing, United States, 2008).

³⁶ Rob White (ed.), *Theorising Green Criminology* 33 (Routledge, London, 2021).

³⁷ Frederic Megret, “The problem of an International Criminal Law of the Environment”, 53 COLUM. J. ENVTL. L. 195 (2011).

³⁸ Art 131 of the Belarusian Criminal Code prohibits ecocide as such: “Intentional mass destruction of flora or fauna, or poisoning of the atmosphere or water, or committing other intentional acts that could cause an environmental catastrophe (ecocide) – shall be punishable with imprisonment for a term of ten to fifteen years”.

³⁹ Art 394 of the Armenian Criminal Code defines ecocide as “[m]ass destruction of flora or fauna, poisoning the environment, the soils or water resources, as well as implementation of other actions causing an ecological catastrophe, is punished with imprisonment for the term of 10 to 15 years”.

⁴⁰ Mary Clifford (ed.), *Environmental Crime: Enforcement, Policy, and Social Responsibility* 71 (Aspen Publishers, United States, 1998).

halt environmental harm that has state approval and is unsuited to prosecute environmental crimes.⁴¹

Environmental laws in India primarily address issues with air and water quality, sustainable development, waste management, precautionary and preventive measures, contaminant cleanup, safety in dumping, handling of chemical element dumping, and public trust. For example, the “*Water (Prevention and Control of Pollution) Act of 1974*”, the “*Environment (Protection) Act of 1986*” (passed in the wake of the Bhopal Gas tragedy), the “*Water (Prevention and Control of Pollution) Cess Act of 1977*”, the “*Air (Prevention and Control of Pollution) Act of 1981*”, amongst others.

India pursues its national commitment to advancing environmental preservation under the head of “*Fundamental Duties and the Directive Principles of State Policy*”. India has used these items as a reference point to ensure that its citizens live in a healthy environment. Since “*Article 21 of the Indian Constitution*”⁴² recognizes the fundamental substantive right to a healthy and pollution-free environment, all of these enactments, laws and the implementation of them are the outcome of several public interest lawsuits. Additionally, the 42nd amendment included “*Article 48A*”⁴³ and “*Article 51A*”⁴⁴ and the word environment to the Indian Constitution.⁴⁵

The “*Indian Penal Code, 1860*” (to be replaced by the *Bharatiya Nyaya Sanhita, 2023 with effect from July 1st 2024*), and the “*Code of Criminal Procedure, 1973*” (to be replaced by the *Bharatiya Nagarik Suraksha Sanhita, 2023 with effect from July 1st 2024*), both include a number of provisions that have an impact on environmental protection.⁴⁶ The IPC addresses offenses involving public health and safety under “*Chapter XIV (Chapter XV of the Bharatiya Nyaya Sanhita, 2023)*”.⁴⁷ “*Section 268 of the IPC (Section 270 of the BNS)*”⁴⁸ designates environmental offenses as public nuisances, and “*Section 290 of the IPC (Section 292 of the*

⁴¹ Rob White (ed.), *Environmental Crime – A Reader* 121 (Willan Publishing, 2009).

⁴² Protection of Life and Personal Liberty: No person shall be deprived of his life or personal liberty except according to procedure established by law.

⁴³ The State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country. This Article was added by the 42nd Amendment, 1976 and places an obligation on the State to protect the environment and wildlife.

⁴⁴ Article 51A (g) places a duty on the citizens of India to protect and improve the natural environment and have compassion for all living creatures.

⁴⁵ Lovleen Bhullar, “Environmental Constitutionalism and Duties of Individuals in India”, 34(3) *J. ENV. LAW* 399 (2022).

⁴⁶ Dr. R.P. Verma, “New Criminal Laws in India: Reform or Repackaging?”, *IAJESM* 82 (2023).

⁴⁷ *Ibid.*

⁴⁸ Public Nuisance – A person is guilty of a public nuisance who does any act or is guilty of an illegal omission which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger or annoyance to persons who may have occasion to use any public right. A common nuisance is not excused on the ground that it causes some convenience or advantage.

BNS)” punishes the offense by imposing a fine of up to Rs. 200 which is enhanced under BNS to Rs. 1000.⁴⁹ Water pollution is prohibited by “*Section 277 of the IPC (Section 279 of the BNS)*”, which carries a penalty of up to three months in prison, a fine of up to Rs. 500, or both, however, this penalty is enhanced under BNS to six months in prison, a fine of up to Rs. 5000, or both.⁵⁰ The phrase “*public spring*” or “*reservoir*” is used in the clause, but the courts have given it a very narrow construction that excludes rushing water from rivers, streams, and canals.⁵¹ Similar to this, “*Section 278 of the IPC (Section 280 of the BNS)*” imposes a fine of up to Rs. 500 which is enhanced under BNS to Rs. 1000 on anyone who voluntarily degrades the environment by making it unhealthy for anyone’s health in a general home, while conducting business in the neighborhood, or while passing by on a public pathway.⁵² In addition to this, “*Sections 426 (Section 324(2) of the BNS)*”,⁵³ *430 (Section 326(a) of the BNS)*⁵⁴, *431 (Section 326(b) of the BNS)*⁵⁵, and *432 (Section 326(c) of the BNS)*⁵⁶ of the *Indian Penal Code, 1860* punish any pollution brought on by mischief. From a procedural standpoint, *Chapter X of the Code of Criminal Procedure, 1973 (Chapter XI of the BNSS)* preventive and mitigating methods are offered for public nuisance cases involving water, air, soil, and unsanitary/unhygienic circumstances under.⁵⁷

⁴⁹ Punishment for public nuisance in cases not otherwise provided for – Whoever commits a public nuisance in any case not otherwise punishable by this Code, shall be punished with fine which may extend to two hundred rupees.

⁵⁰ Fouling water of public spring or reservoir – Whoever voluntarily corrupts or fouls the water of any public spring or reservoir, so as to render it less fit for the purpose for which it is ordinarily used, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine which may extend to five hundred rupees, or with both.

⁵¹ Anuj Aggarwal and Razit Sharma, “Legal Aspects of Water Pollution and its Control in India”, 6(2) *IJCRT* 1219 (2018).

⁵² Making atmosphere noxious to health – Whoever voluntarily vitiates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying on business in the neighbourhood or passing along a public way, shall be punished with fine which may extend to five hundred rupees.

⁵³ Punishment for mischief – Whoever commits mischief shall be punished with imprisonment of either description for a term which may extend to three months, or with fine, or with both. Imprisonment is extended to six months under BNS.

⁵⁴ Mischief by injury to works of irrigation or by wrongfully diverting water – Whoever commits mischief by doing any act which causes, or which he knows to be likely to cause, a diminution of the supply of water for agricultural purposes, or for food or drink for human beings or for animals which are property, or for cleanliness or for carrying on any manufacture, shall be punished with imprisonment of either description for a term which may extend to five years, or with fine, or with both.

⁵⁵ Mischief by injury to public road, bridge, river or channel – Whoever commits mischief by doing any act which renders or which he knows to be likely to render any public road, bridge, navigable river or navigable channel, natural or artificial, impassable or less safe for travelling or conveying property, shall be punished with imprisonment of either description for a term which may extend to five years, or with fine, or with both.

⁵⁶ Mischief by causing inundation or obstruction to public drainage attended with damage – Whoever commits mischief by doing any act which causes or which he knows to be likely to cause an inundation or an obstruction to any public drainage attended with injury or damage, shall be punished with imprisonment of either description for a term which may extend to five years, or with fine, or with both.

⁵⁷ Lalit Prakash and Dr. Prashant Kumar Srivastava, “A Review of Judicial Trends on the Factors of Environmental Pollution in India”, 9(5) *IJARIE* 284 (2023).

JUDICIAL APPROACH

Various States have established legislations and even included provisions protecting the environment and the rights of nature in their constitutions. The case studies that are relevant and have made an impact are discussed below:

- The “*Exxon Valdez Oil Spill*”⁵⁸ was one of the largest oil spills in history, releasing millions of gallons of crude oil into Alaska’s Prince William Sound. The case highlighted the environmental and economic impacts of corporate negligence on natural ecosystems and local communities.
- The “*Bhopal Gas Leak*”⁵⁹ disaster involved a toxic gas leak from a Union Carbide pesticide plant in India. This case highlighted issues of corporate accountability, environmental justice, and the impacts of multinational corporations on local communities.
- In the “*Tarun Bharat Singh Alwar*”⁶⁰ case which focused on illegal mining within protected area, the SC halted mining inside the Sariska Tiger Sanctuary and directed the enforcement of “*Section 3 of EPA*”⁶¹ and ruled the mining violated “*Section 2 of FCA*”⁶².
- The “*Love Canal*”⁶³ case involved the discovery of hazardous chemical waste buried in a residential area, leading to health problems and property damage. It brought attention to issues of toxic waste disposal, environmental health risks, and the role of government agencies in regulating pollution.
- The “*Deepwater Horizon Oil Spill*”⁶⁴ resulted from a well blowout in the Gulf of Mexico, causing extensive environmental damage. This case highlighted the challenges of regulating offshore drilling, corporate responsibility, and the ecological consequences of industrial accidents.
- The “*Volkswagen Emissions Scandal*”⁶⁵ involved the deliberate manipulation of emissions data in their diesel vehicles. This case raised questions about greenwashing,

⁵⁸ United States v. Exxon Corp., 646 F. Supp. 3 (D. Alaska 1991).

⁵⁹ Union Carbide Corp. v. Union of India, AIR 1992 SC 248.

⁶⁰ State of Bihar v. Murad Ali Khan 1988 (4) SCC 655.

⁶¹ Power of Central Government to take measures to protect and improve environment.

⁶² Restriction on the dereservation of forests or use of forest land for non-forest purpose.

⁶³ Love Canal Homeowners Association v. Niagara Falls School District, 35 ERC 1892 (W.D.N.Y. 1982).

⁶⁴ In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010, 910 F. Supp. 2d 891 (E.D. La. 2012).

⁶⁵ In re: Volkswagen “Clean Diesel” Marketing, Sales Practices, and Products Liability Litigation, 280 F. Supp. 3d 1350 (N.D. Cal. 2017).

corporate fraud, and the role of regulators in ensuring accurate environmental information.

- The Supreme Court of India addressed the issue of cruelty to animals, particularly in the context of the traditional practice of “jallikattu” (bull-taming) and bullock-cart races. The case revolved around the constitutionality of the “Prevention of Cruelty to Animals Act, 1960”, and its applicability to these cultural practices. The court ruled that these activities caused unnecessary harm and suffering to the animals involved and violated the provisions of the Act. The judgment banned the use of bulls in performances like jallikattu and bullock-cart races.⁶⁶
- A case involving the skinning of a tiger has emerged in Andhra Pradesh zoo. The Hon’ble Court was shocked to learn of this and noted that tigers are entitled to protection and safeguard as outlined in the constitution. The Apex Court ordered the chairman of the zoo authority to appear before the court and take necessary measures to protect and preserve the tiger species in zoos and reserved forests. The Hon’ble Court subsequently passed an order to ensure the protection of tigers.⁶⁷
- The “*Sterlite Copper Plant*”⁶⁸ in Thoothukudi, Tamil Nadu, faced allegations of causing air and water pollution and violating environmental regulations for years. Protests by local residents against the pollution led to a violent confrontation with the police, resulting in several deaths. This case highlights the connection between environmental crimes and human rights violations, shedding light on the role of corporate interests, government collusion, and the suppression of dissent in perpetuating environmental harm.
- The “*Vizhinjam International Seaport*”⁶⁹ project in Kerala involved dredging and reclamation activities that caused extensive damage to the nearby coral reefs, mangroves, and marine ecosystems. The project was initiated without proper environmental impact assessment and mitigation measures, leading to irreversible ecological harm. Analyzing this case from a green criminology perspective underscores the need to examine how economic interests can lead to the degradation of ecologically valuable areas and the role of government agencies in permitting such projects.

CONCLUSION AND SUGGESTIONS

⁶⁶ Animal Welfare Board v. A. Nagaraja & Ors (2014) 7 SCC 547.

⁶⁷ Naveen Raheja v. Union of India (2001) 9 SCC 762.

⁶⁸ Sterlite Industries (India) Ltd. & Ors. v. Union of India & Ors. (2013) 6 SCR 573.

⁶⁹ Wilfred J. Anr. v. Moef Ors. M.A. NO. 277 OF 2014.

Green criminology and environmental justice are critical areas of study and action in today's world. They intersect at the nexus of environmental harm and social justice, highlighting the injustices that often result from environmental degradation and the pursuit of profit at the expense of the planet and vulnerable communities.

Green criminology has shown that environmental harm is not a victimless crime. It disproportionately affects marginalized communities, exacerbating existing inequalities. Environmental justice is about recognizing and rectifying these injustices by ensuring that all individuals, regardless of their socio-economic status or background, have the right to a clean and healthy environment. Green criminology sheds light on the role of corporations in environmental harm.

There should be greater efforts to hold corporations accountable for their actions. This can be achieved through stricter regulations, transparent reporting, and penalties that truly deter harmful practices. The international community needs to work together to address global environmental crimes, such as illegal wildlife trafficking, deforestation, and ocean pollution. Collaborative efforts are essential to combat these transnational issues effectively.

Environmental justice involves giving communities a voice in decisions that affect their environment. Grassroots movements and community involvement in environmental decision-making processes should be encouraged. Community-based initiatives that promote sustainable practices and protect their rights must be supported.

Both green criminology and environmental justice benefit from raising awareness and educating the public. Laws must evolve to address emerging environmental challenges. Legal reforms should prioritize stricter penalties for environmental crimes, incentives for sustainable practices, and the protection of environmental defenders.

Green criminology and environmental justice are integral to creating a more equitable and sustainable world. By recognizing the connections between environmental harm and social injustice and taking concrete actions at local, national, and global levels, one can work towards a future where both people and the planet thrive.