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The evolution of sovereignty in the context of global governance and international law

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Abstract

This research investigates various environmental crimes which include unlawful deforestation besides industrial pollution and newly accepted "ecocide" posing a substantial threat to global ecosystems as well as human populations throughout the world. Environmental crimes hurt two or more countries together with ecosystems but go undetected because international criminal law has inadequate attention to these transnational problems. The International Criminal Court under the Rome Statute assumes responsibility for prosecuting international crimes that include genocide alongside war crimes and crimes against humanity and the offense of aggression. Download the full text for sources on participating states and challenges faced by the Court. This research investigates how the International Criminal Court manages environmental offences while scrutinizing its authority constraints and possible future modifications. This study investigates how expanding the ICC's jurisdiction should include environmental crimes by designating ecocide as a core prosecutable offense. The study uses both legal research techniques and case studies to examine how existing ICC regulations fail to handle environmental crime charges and discover three major problems including corporate legal obligations, national sovereignty authority and proof collection difficulties. The study demonstrates the need to expand ICC jurisdiction to advance environmental crime prosecution by supporting more robust global environmental legal systems that promote accountability. The research continues to push forward international environmental justice debates while urging legal changes to establish more extensive environmental protection measures in international criminal law.

Keywords: Environmental Crimes; International Criminal Court; Ecocide; Rome Statute; Legal Reforms; Global Accountability

1 Introduction

Environmental degradation has become one of the most pressing global crises of the 21st century. From deforestation and illegal mining to widespread pollution and climate change, the Earth's ecosystems face unprecedented threats. These activities not only undermine biodiversity and disrupt ecological balance but also endanger the livelihoods and well-being of millions of people globally. For instance, illegal deforestation in the Amazon contributes to habitat destruction and exacerbates global warming (Li et al., 2017), while illegal mining in regions such as sub-Saharan Africa fuels environmental destruction and social conflicts (Skeete et al., 2020).

As environmental challenges intensify, they increasingly intersect with legal and policy concerns, particularly the categorization of certain acts as environmental crimes. Defined as unlawful acts that harm the environment, these crimes encompass activities such as large-scale pollution, unregulated waste disposal, and the destruction of protected ecosystems. They are distinguished by their transboundary nature, impacting multiple countries and requiring international cooperation to address effectively (Broadbent et al., 2018). Environmental crimes also pose significant

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threats to vulnerable communities, often exacerbating poverty, displacing populations, and infringing upon basic human rights (Brown et al., 2019).

The International Criminal Court (ICC), established under the Rome Statute in 2002, plays a pivotal role in addressing crimes of grave concern to the international community. Its mandate includes prosecuting genocide, war crimes, crimes against humanity, and the crime of aggression. However, the ICC's jurisdiction has historically excluded environmental crimes, limiting its ability to address large-scale environmental degradation. Although environmental harm is sometimes considered under the lens of existing atrocity crimes for example, when environmental destruction constitutes a war crime the lack of explicit provisions for environmental crimes has been a significant gap in international criminal law (Conzade et al., 2022).

Recent years have seen growing advocacy for the ICC to expand its jurisdiction to include environmental crimes, particularly under the proposed concept of "ecocide." Proponents argue that large-scale environmental destruction should be recognized as a crime against humanity, given its profound and lasting impacts on people and the planet (Ferrigno et al., 2024). This has spurred debates on the ICC's potential role in addressing environmental harm, highlighting the need for legal and institutional reforms to bridge this gap.

1.1 Research Problem and Rationale

The absence of explicit provisions for environmental crimes within the ICC's jurisdiction represents a significant shortfall in international criminal law. As environmental crimes escalate in frequency and scale, there is an urgent need to address these acts through robust legal mechanisms. The Rome Statute, which governs the ICC, was crafted with a focus on atrocity crimes and does not explicitly account for large-scale environmental destruction. This has created challenges in aligning environmental crimes with the ICC's existing framework (Contestabile & Alajaji, 2018).

The concept of "ecocide," defined as the extensive destruction of ecosystems to the detriment of human life, has gained traction as a potential addition to the ICC's mandate. Advocacy groups, legal scholars, and policymakers argue that recognizing ecocide as an international crime would enhance accountability and deterrence, ensuring that perpetrators of environmental harm face justice (Chen & Perez, 2018). However, there are significant obstacles to achieving this, including resistance from states, the need for consensus among ICC member states, and the complexities of defining and proving environmental crimes under international law (Forsythe et al., 2023).

This research seeks to explore the ICC's role in prosecuting environmental crimes and the potential reforms needed to enhance its effectiveness in this domain. By examining case studies and legal frameworks, the study aims to provide insights into the challenges and opportunities of integrating environmental crimes into the ICC's jurisdiction.

This study examines the International Criminal Court's (ICC) role in addressing environmental crimes, highlighting limitations within the Rome Statute and the absence of explicit recognition for such offenses. Through legal analysis and case studies, the research explores the challenges of prosecuting environmental harm and evaluates proposed reforms, including the inclusion of ecocide as a core crime. Findings underscore the necessity of expanding the ICC's jurisdiction, strengthening legal frameworks, and enhancing cooperation with environmental organizations. By advocating for international accountability, this study contributes to the discourse on environmental justice and the imperative for stronger global legal mechanisms.

1.2 Research Questions

1.2.1 This study is guided by the following research questions:

- Can environmental crimes be effectively prosecuted under the current ICC framework?
- What legal and policy reforms would strengthen the ICC's role in addressing environmental crimes?
- How can case studies illuminate the challenges of prosecuting environmental crimes?

These questions aim to address both the theoretical and practical aspects of prosecuting environmental crimes, providing a comprehensive understanding of the ICC's potential in this area.

1.3 Research Objectives

• To examine the ICC's current jurisdiction and limitations concerning environmental crimes: This includes analyzing the Rome Statute's provisions and the ICC's historical approach to cases involving environmental harm.

- To propose legal and policy reforms for integrating environmental crimes into the ICC's mandate: By evaluating proposals such as the inclusion of ecocide, this objective seeks to identify pathways for expanding the ICC's jurisdiction.
- To analyze case studies highlighting challenges in prosecuting environmental crimes: Through detailed examination of relevant cases, this objective aims to uncover the legal, procedural, and evidentiary obstacles to addressing environmental harm under international law.
- By achieving these objectives, this study seeks to contribute to the growing discourse on the role of international criminal law in combating environmental degradation and to propose actionable solutions for strengthening global accountability mechanisms.

2 Literature Review

2.1 Defining Environmental Crimes

Environmental crimes encompass a range of unlawful activities that significantly harm the natural environment and ecosystems. Key examples include illegal deforestation, which contributes to biodiversity loss and climate change; pollution, such as industrial waste discharge into water bodies; wildlife trafficking, which threatens species survival; and the emerging concept of ecocide, defined as the extensive destruction of ecosystems. These acts not only degrade the environment but also disrupt livelihoods, exacerbate poverty, and undermine social stability (Li et al., 2017). For instance, pollution from industrial activities can result in water scarcity, food insecurity, and health crises, disproportionately affecting marginalized communities (Broadbent et al., 2018).

The link between environmental harm and human rights violations is increasingly evident. Large-scale environmental destruction often leads to displacement, loss of cultural heritage, and violations of the right to a healthy environment. In conflict zones, environmental harm can constitute an atrocity crime when used as a weapon of war, such as the deliberate destruction of agricultural resources to starve civilian populations (Forsythe et al., 2023). Thus, addressing environmental crimes requires a framework that integrates ecological and human rights perspectives.

2.2 The International Criminal Court (ICC)

The International Criminal Court (ICC) was established under the Rome Statute in 2002 to prosecute individuals responsible for the most serious crimes of international concern. Its current jurisdiction encompasses four core crimes: genocide, crimes against humanity, war crimes, and the crime of aggression. These categories aim to address grave violations of human rights and international law (Conzade et al., 2022).

However, the Rome Statute lacks explicit provisions for environmental crimes. While some instances of environmental harm may fall under existing categories such as war crimes involving the destruction of natural resources these cases are rare and often challenging to prove. The absence of specific language addressing large-scale environmental destruction limits the ICC's capacity to hold perpetrators accountable and to deter future offenses. Scholars have highlighted this gap as a missed opportunity to align international criminal law with contemporary environmental challenges (Contestabile & Alajaji, 2018).

2.3 The Concept of Ecocide

The term "ecocide" has evolved as a potential legal framework for addressing severe environmental harm. Coined in the 1970s, ecocide refers to actions causing widespread, long-term, and severe damage to ecosystems, rendering them uninhabitable or significantly impaired. In recent years, advocacy groups and legal experts have proposed recognizing ecocide as the ICC's fifth core crime, alongside genocide, crimes against humanity, war crimes, and aggression (Ferrigno et al., 2024).

Proposals for including ecocide in the Rome Statute emphasize its potential to deter environmental destruction and promote accountability. For example, the Stop Ecocide Foundation has drafted a legal definition of ecocide, framing it as unlawful or wanton acts committed with knowledge of substantial environmental harm (Chen & Perez, 2018). However, incorporating ecocide into the ICC's jurisdiction faces several challenges. Balancing state sovereignty with the need for international enforcement mechanisms remains a contentious issue. Critics argue that defining ecocide too broadly could infringe on states' rights to economic development, while others contend that strict enforcement may disproportionately affect developing nations (Forsythe et al., 2023).

2.4 Challenges

The integration of environmental crimes into the ICC's framework has received limited scholarly attention, leaving several critical gaps in the literature. First, there is insufficient analysis of how environmental crimes align with the Rome Statute's existing provisions. While some studies explore the intersection of environmental harm and atrocity crimes, they often lack comprehensive legal analysis (Conzade et al., 2022).

Second, enforcement mechanisms for prosecuting environmental crimes remain underexplored. The ICC's ability to address corporate accountability is particularly weak, given the complexities of attributing criminal liability to multinational corporations involved in environmental harm. Furthermore, the transboundary nature of environmental crimes poses jurisdictional challenges, requiring greater international cooperation and harmonization of legal standards (Broadbent et al., 2018).

Finally, the practical challenges of prosecuting environmental crimes under international law have not been adequately addressed. Issues such as evidence collection, the establishment of intent, and the coordination of state and non-state actors are critical obstacles that require further research. Addressing these gaps is essential for advancing the ICC's role in combating environmental crimes and promoting global environmental justice.

2.5 Corporate Accountability in Environmental Crimes

The role of corporations in environmental degradation has been widely documented, yet international law has struggled to establish clear mechanisms for corporate accountability. Many multinational corporations operate in jurisdictions with weak environmental regulations, allowing them to exploit natural resources with minimal consequences. While some national courts have held corporations liable for environmental harm, these cases often face legal and jurisdictional challenges, particularly when corporations operate across multiple countries (Gauci, 2019). Expanding the ICC's jurisdiction to include corporate liability could provide a more effective mechanism for addressing environmental crimes at a global level.

2.6 The Role of Non-Governmental Organizations (NGOs) in Environmental Justice

NGOs play a crucial role in documenting environmental crimes, advocating for stronger legal frameworks, and supporting affected communities. Organizations such as Greenpeace and Amnesty International have been instrumental in bringing attention to cases of large-scale environmental destruction and pressing for legal reforms (Montgomery & White, 2021). Their efforts include gathering evidence, providing legal assistance, and lobbying international bodies to strengthen environmental protections. Despite their contributions, NGOs often face resistance from powerful corporate and political entities, highlighting the need for greater international support and legal recognition of their role in environmental justice.

2.7 Climate Change and International Criminal Law

Climate change is increasingly being recognized as a legal and human rights issue, raising questions about its potential classification as an international crime. Some scholars argue that the deliberate and systematic destruction of ecosystems contributing to climate change should be prosecutable under international law (Sands, 2020). However, attributing direct responsibility for climate change-related harms remains complex, as multiple actors contribute to emissions and environmental degradation over extended periods. Strengthening international legal frameworks to address climate-related crimes could serve as a deterrent for major polluters and reinforce commitments to global sustainability goals.

By expanding the literature review to include corporate accountability, the role of NGOs, and the intersection of climate change and international law, this research provides a more comprehensive foundation for analyzing the ICC's role in addressing environmental crimes.

Environmental crimes encompass a broad spectrum of unlawful activities that significantly harm natural ecosystems, biodiversity, and human communities. These crimes include illegal deforestation, which accelerates climate change and biodiversity loss; industrial pollution, which contaminates air, water, and soil; wildlife trafficking, which threatens species survival; and the emerging concept of ecocide, defined as the widespread destruction of ecosystems (Li et al., 2017). Environmental degradation disrupts livelihoods, exacerbates poverty, and weakens social stability, particularly in vulnerable communities. For instance, industrial pollution can result in severe health crises, water scarcity, and food insecurity, disproportionately affecting marginalized populations (Broadbent et al., 2018).

The intersection of environmental harm and human rights violations is becoming increasingly apparent. Large-scale environmental destruction can lead to displacement, cultural loss, and violations of the fundamental right to a healthy environment. In conflict zones, environmental harm can constitute an atrocity crime when used as a weapon of war. The deliberate destruction of agricultural resources, for example, has been used to starve civilian populations and manipulate resources during conflicts (Forsythe et al., 2023). As such, addressing environmental crimes requires a legal framework that integrates ecological protection with human rights perspectives.

2.8 The International Criminal Court (ICC)

The International Criminal Court (ICC), established under the Rome Statute in 2002, is mandated to prosecute individuals responsible for the most serious international crimes, including genocide, crimes against humanity, war crimes, and the crime of aggression. These categories primarily focus on grave violations of human rights and international law (Conzade et al., 2022). However, the Rome Statute lacks explicit provisions addressing environmental crimes, limiting the ICC's ability to prosecute offenders responsible for large-scale ecological destruction.

While some instances of environmental harm may be prosecuted under existing categories such as war crimes involving the destruction of natural resources such cases are rare and often difficult to substantiate. The absence of specific legal language addressing environmental crimes restricts the ICC's capacity to hold perpetrators accountable and deter future offenses. Scholars argue that this gap represents a missed opportunity to align international criminal law with contemporary environmental challenges (Contestabile & Alajaji, 2018). Without explicit recognition of environmental crimes, the ICC struggles to address the complexities of ecological destruction and its far-reaching consequences.

The concept of "ecocide" has emerged as a potential legal framework to address severe environmental harm. First introduced in the 1970s, ecocide refers to actions causing extensive, long-term, and severe damage to ecosystems, rendering them uninhabitable or significantly impaired. In recent years, legal experts and advocacy groups have pushed for the recognition of ecocide as the ICC's fifth core crime, alongside genocide, crimes against humanity, war crimes, and aggression (Ferrigno et al., 2024). This movement aims to establish international accountability for those responsible for large-scale environmental destruction.

Proposals to include ecocide in the Rome Statute emphasize its potential to deter environmental harm and promote accountability. For example, the Stop Ecocide Foundation has proposed a legal definition of ecocide, framing it as unlawful or wanton acts committed with knowledge of their substantial environmental impact (Chen & Perez, 2018). However, integrating ecocide into the ICC's jurisdiction presents several challenges. One of the primary concerns is balancing state sovereignty with the need for international enforcement mechanisms. Critics argue that a broad definition of ecocide could infringe on states' rights to economic development, particularly in resource-dependent economies. Others contend that strict enforcement may disproportionately affect developing nations, which often face economic pressures to exploit natural resources (Forsythe et al., 2023).

Another challenge lies in securing widespread international support for ecocide's inclusion in the Rome Statute. Amending the Statute requires consensus among member states, many of which may be reluctant to adopt legally binding environmental obligations. Additionally, the enforcement of ecocide laws would necessitate robust mechanisms for evidence collection, judicial cooperation, and coordination between international and domestic courts. Despite these obstacles, recognizing ecocide as an international crime represents a crucial step toward strengthening global accountability mechanisms for environmental protection.

2.9 Literature Gaps

The integration of environmental crimes into the ICC's legal framework remains an underexplored area in scholarly discourse, leaving several critical gaps in the literature. First, there is limited analysis of how environmental crimes align with existing provisions of the Rome Statute. While some studies examine the intersection of environmental harm and atrocity crimes, they often lack comprehensive legal analysis (Conzade et al., 2022). This gap highlights the need for further research on how international criminal law can effectively address environmental destruction.

Second, enforcement mechanisms for prosecuting environmental crimes remain inadequately developed. The ICC's ability to address corporate accountability is particularly weak, given the complexities of attributing criminal liability to multinational corporations engaged in environmentally harmful activities. Environmental crimes often involve transnational networks of actors, including corporations, governments, and criminal organizations, making prosecution efforts challenging. The transboundary nature of these crimes also raises jurisdictional issues, necessitating stronger international cooperation and the harmonization of legal standards (Broadbent et al., 2018).

Finally, practical challenges related to prosecuting environmental crimes under international law require further examination. Key issues include the collection of evidence, the establishment of criminal intent, and the coordination of legal actions between state and non-state actors. Unlike traditional crimes under the ICC's jurisdiction, environmental crimes often involve complex scientific and technical evidence, requiring specialized expertise. Moreover, political and economic considerations can hinder efforts to hold perpetrators accountable, particularly when powerful states or corporations are implicated. Addressing these challenges is essential for strengthening the ICC's role in combating environmental crimes and advancing global environmental justice.

In conclusion, incorporating environmental crimes into international criminal law is essential for addressing the growing threat of ecological destruction. While the ICC provides a potential platform for prosecuting severe environmental harm, significant legal and institutional gaps remain. Recognizing ecocide as a core international crime, developing robust enforcement mechanisms, and enhancing international cooperation are crucial steps toward strengthening global accountability for environmental crimes. Further research and policy development in this area are necessary to bridge existing gaps and ensure the effective prosecution of environmental offenses in the international legal system.

3 Methodology

This study adopts a qualitative research design that integrates legal analysis and case study methodology to explore the International Criminal Court's (ICC) potential role in addressing environmental crimes. Legal analysis examines the existing provisions of the Rome Statute and the broader international legal framework concerning environmental harm. Case studies provide in-depth insights into specific instances of environmental destruction, offering empirical evidence of the challenges and opportunities in prosecuting such crimes under international law. This combined approach allows for a comprehensive examination of the theoretical and practical dimensions of the research problem.

To ensure a robust analysis, this research relies on diverse data sources categorized into primary and secondary materials. Primary sources include the Rome Statute, which serves as the foundational legal document of the ICC, along with ICC reports such as annual reports and case-specific documents. Additionally, international environmental agreements, including the Paris Agreement and the Convention on Biological Diversity, outline global commitments to environmental protection. Secondary sources include academic literature, peer-reviewed articles, and books that provide theoretical and critical perspectives on the intersection of international law and environmental crimes. Legal opinions and commentaries from experts in international criminal law and environmental law offer further insights. Reports from non-governmental organizations (NGOs) such as Amnesty International and Greenpeace document cases of environmental harm and advocate for justice. Collectively, these sources ensure a comprehensive understanding of the legal, policy, and practical dimensions of environmental crimes and the ICC's jurisdiction.

The case study approach focuses on two emblematic instances of environmental harm that highlight the complexities of prosecuting such crimes under the ICC framework. The first case examines Shell's role in oil pollution and environmental destruction in Nigeria. The Niger Delta region has experienced decades of environmental degradation due to oil extraction activities by multinational corporations, particularly Shell. Oil spills have devastated local ecosystems, polluted water sources, and undermined the livelihoods of indigenous communities. Legal and policy questions surrounding corporate accountability and state complicity make this case a compelling subject for analysis. Examining this case sheds light on the ICC's potential role in addressing corporate-driven environmental crimes and the evidentiary challenges involved (Broadbent et al., 2018).

The second case focuses on Amazon deforestation and the dual responsibility of corporations and states in perpetuating environmental harm. The Amazon rainforest faces unprecedented rates of deforestation driven by illegal logging, mining, and agricultural expansion. This case explores the transboundary nature of environmental crimes, which complicates jurisdictional matters under international law. It underscores the need for robust legal frameworks to hold both state and non-state actors accountable (Li et al., 2017). Through these case studies, the research aims to identify common patterns, legal gaps, and potential reforms to strengthen the ICC's role in combating environmental crimes.

Ethical considerations are integral to this research to ensure the credibility and integrity of the findings. Objectivity is maintained by ensuring impartiality in the analysis of legal frameworks and case studies, critically evaluating evidence and arguments without bias toward specific actors or outcomes. Transparency is ensured by clearly documenting the sources of data and methodologies used in the research. Respect for stakeholders involves acknowledging the perspectives and rights of affected communities and ensuring that their experiences and voices are accurately represented in the analysis. By adhering to these ethical standards, the research aims to contribute meaningful insights to the discourse on environmental crimes and international justice.

4 Data Analysis, Presentation and Interpretation

The prosecution of environmental crimes under the International Criminal Court (ICC) framework presents significant legal and practical challenges. The Rome Statute, which governs the ICC's jurisdiction, currently recognizes four core crimes: genocide, crimes against humanity, war crimes, and the crime of aggression. While environmental harm can, in some cases, fall within these categories such as when destruction of natural resources is used as a weapon of war it is not explicitly recognized as a standalone offense. This omission raises questions about the ICC's ability to address large-scale environmental destruction and the need for legal and policy reforms to strengthen its role in environmental justice.

The absence of a dedicated legal framework for environmental crimes within the ICC creates several limitations. First, environmental harm must be linked to existing core crimes, which often require proving intent, systematic targeting, or direct harm to civilian populations. This evidentiary burden makes it difficult to prosecute cases where environmental destruction is not directly associated with armed conflict or mass atrocities. Additionally, corporate accountability remains a significant challenge since the ICC primarily prosecutes individuals, not corporations. Given the significant role that multinational companies play in environmental degradation, this gap in jurisdiction limits the ICC's effectiveness in addressing corporate-driven environmental harm.

Despite these limitations, there have been attempts to incorporate environmental concerns into the ICC's prosecutorial framework. The ICC Prosecutor's Policy Paper on Case Selection and Prioritization, issued in 2016, acknowledged environmental harm, land grabbing, and the illegal exploitation of natural resources as factors that could be considered in case selection. However, this recognition does not equate to formal legal provisions within the Rome Statute, meaning that environmental crimes remain prosecutable only when they intersect with existing core crimes. This has led scholars and advocates to push for explicit legal reforms that would allow the ICC to address severe environmental harm directly.

One of the most widely discussed legal reforms is the inclusion of ecocide as a fifth core crime under the Rome Statute. Ecocide refers to acts that cause extensive, long-term, and severe damage to ecosystems, making them uninhabitable or significantly impaired. Recognizing ecocide as a core crime would provide a clear legal basis for prosecuting large-scale environmental destruction, ensuring that those responsible—whether individuals or state actors—are held accountable. Such an inclusion would also serve as a deterrent, signaling a global commitment to protecting the environment through international law. However, political resistance remains a major obstacle. Many states, particularly those with economies reliant on resource extraction, fear that ecocide provisions could infringe on their sovereignty and economic interests. Moreover, enforcement mechanisms for ecocide would need to be carefully designed to prevent potential misuse or political bias.

An alternative approach to strengthening environmental accountability within the ICC is expanding the interpretation of existing crimes. Some legal scholars argue that severe environmental destruction could be prosecuted under crimes against humanity, particularly if it results in widespread harm to civilian populations. For instance, environmental destruction that leads to forced displacement, famine, or health crises could be classified as inhumane acts. Similarly, during armed conflicts, deliberate environmental destruction—such as the targeting of water supplies or the destruction of agricultural lands—could be prosecuted as a war crime. While these approaches do not require formal amendments to the Rome Statute, they rely on judicial interpretation and prosecutorial discretion, which may limit their effectiveness in establishing a consistent legal precedent for environmental crimes.

Beyond legal reforms, improving collaboration between the ICC and other international organizations could enhance the prosecution of environmental crimes. The ICC could strengthen partnerships with bodies such as the United Nations Environment Programme (UNEP) and Interpol to improve evidence collection, expert testimony, and tracking of transnational environmental crime networks. These organizations possess specialized knowledge and resources that could support ICC investigations, particularly in cases involving multinational corporations and cross-border environmental harm. Establishing joint investigative teams and information-sharing mechanisms would help bridge the current gaps in enforcement.

The challenges of prosecuting environmental crimes under the ICC framework can be better understood through case studies of significant environmental harm. One such case is Shell's role in environmental destruction in Nigeria. For decades, the Niger Delta has suffered from extensive pollution due to oil spills and gas flaring by multinational corporations, particularly Shell. These activities have led to the destruction of local ecosystems, contamination of water sources, and severe health impacts on local communities. Despite widespread evidence of corporate negligence and complicity in human rights abuses, Shell has not been prosecuted by the ICC. The primary reason is that corporate

entities cannot be held criminally liable under the Rome Statute, which focuses on individual responsibility. Furthermore, while the environmental harm caused by Shell is severe, it does not neatly fit within the existing core crimes, highlighting the limitations of the ICC's jurisdiction. This case underscores the need for reforms that would allow for corporate accountability and a more direct legal framework for prosecuting environmental crimes.

Another critical case is the ongoing deforestation of the Amazon rainforest. Driven by illegal logging, agricultural expansion, and mining, deforestation in the Amazon has resulted in significant biodiversity loss, climate change acceleration, and the displacement of indigenous populations. Many of these activities involve both corporate and state actors, creating complex jurisdictional challenges. While some legal experts argue that the systematic destruction of the Amazon could constitute a crime against humanity especially when indigenous communities are forcibly displaced there is no clear legal mechanism to prosecute environmental destruction on this scale under the ICC's current framework. This case illustrates the necessity of legal reforms to address transboundary environmental crimes and the need for stronger international cooperation in environmental enforcement.

Emerging trends indicate a growing movement to criminalize ecocide within international law. Advocacy efforts by organizations such as the Stop Ecocide Foundation and legal scholars have gained traction, with some states expressing support for ecocide's inclusion in international criminal law. This momentum reflects a broader recognition of the urgent need to hold perpetrators of environmental harm accountable. However, significant tensions remain between environmental protection and state sovereignty. Many governments resist the idea of expanding international jurisdiction over environmental matters, fearing constraints on their economic policies and resource management. The challenge lies in balancing these concerns with the need for accountability, ensuring that environmental destruction does not go unpunished.

Enforcement remains another major challenge in prosecuting environmental crimes. The ICC faces resource constraints, limiting its ability to investigate and prosecute complex environmental cases. Additionally, political will plays a crucial role—many states are reluctant to cooperate in cases involving powerful corporations or state-linked actors. The transnational nature of environmental crimes further complicates evidence collection, requiring extensive collaboration across jurisdictions. Addressing these challenges will require not only legal reforms but also enhanced international cooperation, funding, and investigative capacity.

By addressing these issues, the ICC and broader international legal frameworks can play a pivotal role in combating environmental crimes and promoting global environmental justice. Whether through the inclusion of ecocide, the reinterpretation of existing laws, or strengthened institutional collaboration, progress in this area is essential for ensuring accountability for environmental destruction and protecting ecosystems for future generations.

5 Conclusion

5.1 Summary of Key Findings

This research highlights the International Criminal Court's (ICC) critical yet underdeveloped role in addressing environmental crimes. While the Rome Statute provides a legal foundation for prosecuting grave international crimes, environmental harm remains a peripheral issue within its framework. The lack of explicit recognition of environmental crimes as core offenses significantly limits the ICC's capacity to prosecute severe environmental destruction unless it is linked to existing crimes such as genocide, crimes against humanity, or war crimes. This gap in legal recognition has resulted in difficulties in bringing perpetrators to justice, particularly in cases where large-scale environmental harm occurs outside the context of armed conflict or systematic attacks against civilian populations.

The study also underscores the limitations in prosecuting corporate actors responsible for significant environmental damage. Current international legal mechanisms focus primarily on individual accountability, leaving multinational corporations largely unaccountable for their role in environmental destruction. This limitation is evident in the case studies examined, including Shell's long-standing environmental impact in Nigeria and the widespread deforestation in the Amazon. In both cases, the harm caused has had severe ecological and social consequences, yet legal avenues for holding the responsible actors accountable remain constrained.

The research further explores the potential for legal and policy reforms aimed at strengthening the ICC's role in environmental justice. The proposal to include ecocide as a fifth core crime under the Rome Statute has gained traction among legal scholars and environmental advocates. Additionally, the reinterpretation of existing crimes against humanity and war crimes to explicitly include severe environmental destruction presents another viable pathway for expanding the ICC's jurisdiction. The study emphasizes that meaningful progress requires not only legal reforms but

also enhanced international cooperation and enforcement mechanisms to address transnational environmental crimes effectively.

5.2 Contribution to Knowledge

This dissertation contributes to the growing field of international criminal law and environmental justice by shedding light on the inadequacies of current legal frameworks in addressing environmental crimes. While previous research has primarily focused on the theoretical basis for prosecuting environmental harm, this study integrates legal analysis with empirical case studies to provide a more nuanced understanding of the ICC's role in addressing such crimes.

By emphasizing the intersection between human rights and environmental protection, the research advocates for a paradigm shift in international law. Environmental destruction is not merely an issue of conservation; it has profound social, economic, and humanitarian implications. Communities affected by deforestation, pollution, and resource exploitation often suffer from displacement, health crises, and economic instability. Recognizing environmental crimes within the ICC's jurisdiction would reinforce the notion that large-scale environmental harm constitutes a grave violation of human rights and global justice.

The study also highlights the necessity for legal and institutional reforms that bridge existing gaps in international law. While several scholars have explored the theoretical foundations of ecocide, this research goes further by analyzing the practical challenges and political obstacles associated with its implementation. Additionally, by examining corporate accountability in environmental crimes, the study underscores the urgent need for legal frameworks that address the role of multinational corporations in environmental destruction.

5.3 Recommendations

To strengthen the ICC's role in addressing environmental crimes, several key recommendations are proposed. The most pressing recommendation is the inclusion of ecocide as a core crime under the Rome Statute. Defining ecocide with clear legal thresholds would provide a concrete basis for prosecution, ensuring that large-scale and systematic environmental destruction is treated as a serious international crime. However, this requires significant diplomatic and legal efforts to mobilize state support and overcome political resistance. Advocacy at the international level, including engagement with state parties to the Rome Statute, is crucial to advancing this legal reform. Additionally, increased collaboration between legal scholars, environmental organizations, and policymakers can help build a stronger case for ecocide's inclusion in international law.

Another key recommendation is the strengthening of legal provisions for existing crimes to explicitly incorporate environmental harm. Amending the definitions of crimes against humanity and war crimes to include severe ecological damage would provide the ICC with a broader legal basis to prosecute environmental crimes. Establishing guidelines for assessing the threshold of environmental harm and linking it to human suffering would further clarify the applicability of existing legal provisions. This approach offers a more immediate pathway for addressing environmental crimes without requiring an amendment to the Rome Statute.

Enhancing cooperation between the ICC and international environmental agencies is also essential. Organizations such as the United Nations Environment Programme (UNEP) and Interpol possess expertise in environmental monitoring, forensic analysis, and tracking transnational environmental crimes. Strengthening collaboration between these entities and the ICC would improve evidence collection, facilitate cross-border investigations, and enhance enforcement mechanisms. Establishing joint task forces dedicated to investigating environmental crimes could help bridge gaps in resources and expertise, making prosecutions more feasible.

Furthermore, addressing corporate accountability in environmental crimes requires the development of specific legal frameworks. Current international law primarily focuses on individual criminal responsibility, leaving corporations largely immune from prosecution. Establishing legal mechanisms for holding corporations accountable, including provisions for piercing the corporate veil, would ensure that businesses complicit in environmental destruction can be prosecuted. Encouraging states to adopt universal jurisdiction principles for environmental crimes would further strengthen accountability by allowing national courts to prosecute corporate actors involved in transnational environmental offenses.

5.4 Future Research Directions

The findings of this research open avenues for further exploration in several key areas. One significant area of future research is the role of regional courts in addressing environmental crimes. While the ICC remains the primary institution

for prosecuting international crimes, regional judicial bodies such as the African Court on Human and Peoples' Rights and the European Court of Human Rights have increasingly addressed environmental justice issues. Investigating the potential for these courts to complement the ICC's efforts could provide alternative legal pathways for addressing environmental harm.

Another promising area of research is the feasibility of establishing a special tribunal dedicated to prosecuting environmental crimes. Similar to the International Criminal Tribunal for the Former Yugoslavia (ICTY), a specialized environmental tribunal could focus exclusively on large-scale environmental destruction and hold perpetrators accountable. However, the legal, financial, and political challenges associated with creating such a tribunal require further investigation. Examining the viability of this approach, including potential jurisdictional frameworks and enforcement mechanisms, would contribute valuable insights to ongoing discussions on environmental justice.

Additionally, future research could explore the integration of environmental justice into broader international human rights frameworks. Given the growing recognition of the right to a healthy environment as a fundamental human right, analyzing how this principle can be effectively enforced through international legal mechanisms would be a valuable contribution to the field.

5.5 Final Reflections

The recognition of environmental crimes as a matter of global justice and accountability is no longer optional but imperative. The devastating impact of environmental destruction extends beyond ecological concerns, affecting communities, economies, and international stability. As climate change, deforestation, and pollution continue to escalate, the international community must adopt stronger legal mechanisms to address these pressing challenges.

This dissertation underscores the need for the ICC to evolve into a key player in global environmental governance. Expanding its jurisdiction to explicitly include environmental crimes, enhancing collaboration with international environmental agencies, and strengthening legal provisions for prosecuting corporate actors are all necessary steps toward achieving meaningful environmental justice. While political resistance and legal challenges remain significant obstacles, sustained advocacy and diplomatic efforts can facilitate the gradual incorporation of environmental crimes into international criminal law.

Ultimately, safeguarding the planet for future generations requires a collective commitment to accountability, enforcement, and legal reform. By recognizing environmental crimes as fundamental violations of human rights, the ICC and other international legal institutions can play a pivotal role in promoting a more just and environmentally conscious global legal framework. This research serves as a call to action for policymakers, legal scholars, and environmental advocates to work toward a future where environmental destruction is no longer met with impunity but with justice and accountability.

Compliance with ethical standards

Statement of ethical approval

Ethical approval was obtained.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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