Criminal Justice in a Time of Ecological Crisis: Can the Serious Accidents Punishment Act in Korea Be Enforced to Punish 'Ecocide'?

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Abstract

At the global level, voices are growing to criminalise severe environmental destruction as ecocide so that the International Criminal Court can punish. This social phenomenon suggests that international criminal law has been ineffective in protecting the environment and humanity at the time of planetary crisis. In parallel, however, only a small body of literature exists looking at how criminal justice is effective in preventing environmental damage at the domestic level. To address this research gap, this study first builds a green criminological perspective, which emphasises crimes of the powerful, and explains different types of ecocide. Then, it examines Korean environmental criminal law and demonstrates that high-level personnel in corporations have not been adequately held accountable for serious environmental destruction. As a viable option to strengthen criminal justice in the environment sector in Korea, it is argued that the Serious Accidents Punishment Act (SAPA) can be amended to hold business owners and other responsible persons accountable and liable for serious environmental crime caused by corporate activities.

Keywords:

ecocide, environmental criminal law, ecological sustainability, Serious Accidents Punishment Act, South Korea

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INTRODUCTION

In 1972, the then Swedish Prime Minister Olof Palme condemned the American military's use of chemicals, known as the 'Agent Orange', in Vietnamese forests. This act was called 'ecocide', which meant indiscriminative and destructive warfare against the environment (Anderson, 2022). Although several decades have passed since the Vietnam War, the legacies of chemical contamination, such as deforestation, unexploded munitions, and health impacts are still agonising local people and causing hazardous effects to local ecosystems (Le and Nguyen, 2020). The Vietnam War and the rise of environmental movements during the 1970s nurtured global discussion on the introduction of a law of ecocide. For instance, 'freedom from ecocide' was proposed as a constitutional right in the US (Pettigrew, 1971). During this time, ecocide mainly meant environmental warfare or military-induced environmental destruction. However, the term ecocide that requires stronger environmental regulations was quickly forgotten in the global policy agenda, followed by the neoliberal economic paradigm that emphasises environmental deregulation (Ruggiero, 2013).

The political landscape has dramatically changed, as the global society is facing severe environmental costs of neoliberal development. Climate change has been declared an international emergency for its role as a driver of biodiversity loss, food insecurity, natural disasters, poverty and conflicts, and so on (Gills and Morgan, 2020). Accordingly, the term 'ecocide' has been revived in the global policy arena, conceiving a wider meaning than the past. Polly Higgins, a British attorney, called for the international community to legislate a law of ecocide in the Rome Statue of the International Criminal Court (ICC). Defining ecocide as 'extensive loss, damage or destruction of ecosystems', she proposed ecocide as the fifth crime against peace, for which governments and large corporations should be held accountable and liable (Higgins, 2010). This green approach to criminal justice has evolved from the awakening that international environmental regimes have failed to address the acceleration and worsening of environmental challenges.

Growing voices for a law of ecocide are making a wave of new environmental campaigns. Small island countries, such as Vanuatu, have already urged the ICC to prosecute multinational corporations which should be held responsible for environmental destruction and degradation. Belgium and the European Parliament also endorsed the addition of ecocide to the Rome Statue. In parallel, some countries have passed

legislation to punish ecocide within their jurisdiction. Some former Soviet countries like Russia, Georgia, and Ukraine codified ecocide as a crime a long time ago. Recently, Ecuador acknowledged the rights of nature and criminalised the violation of the rights of nature in 2014 and France introduced a law of ecocide in 2021. There are ongoing discussions to include ecocide as a crime that the European Union should address in its Environmental Crime Directive.

That the International Criminal Court can only address limited cases of severe environmental destruction at the global level raises a question on how domestic environmental law can contribute to protecting citizens' environmental rights and ecosystems from ecocide.[1] This article is written to facilitate debates and discussions on the effectiveness of Korean environmental law in preventing and punishing severe environmental destruction that can be framed as ecocide. To do so, through a lens of green criminology, it conceptualises four types of ecocide committed by powerful actors in the society—namely, states and corporations. Then, it analyses the effectiveness of Korean environmental criminal law in fulfilling its purpose. Finally, *the Serious Accidents Punishment Act* is given attention as a viable option to strengthen the role of criminal justice in protecting the environment in the jurisdiction of Korea.

CRIMES OF THE POWERFUL AND A TYPOLOGY OF ECOCIDE

Crimes of the Powerful

Green criminologists conceptualise environmental crime as acts that cause ecological disorganisation, if defined as scientifically identifiable harms that cause the disorganisation of ecosystems by the production of environmental pollution and the consumption of natural resources beyond the planet's resilience capacity. Lynch, Long, Barrett and Stretesky (2013) distinguish two major mechanisms of environmental crime. First, ecological additions are the acts that generate pollution and contamination to the

[1] Moreover, the jurisdiction of the ICC may be limited only in member states that ratified the Rome Statue of the ICC. This means that the ICC cannot investigate or prosecute countries that are not signatories of the Rome Statue, including the U.S., even if 'ecocide' is codified in the Rome Statue and those countries shall be held liable for it.

environment. The production of waste, excessive carbon emissions, the use of pesticides are examples of this. Second, ecological withdrawals include the extraction of natural resources, such as minerals, woods, oil, and gas. Consequences of ecological disorganisation are often widespread, long-term, accumulative, and severe to not only nature but also human health.

In many countries, criminal law has evolved to strengthen mechanisms to protect the environment by directly criminalising acts of ecological disorganisation. For instance, European countries like Germany changed its law to recognise environmentally destructive activities as autonomous criminal offences 'in order to express the importance of environmental crime' (Faure, 2017, p. 17). However, it appears that certain actors, especially the powerful of the society, are not held accountable by environmental criminal law. 'Crimes of the powerful' are to explain certain acts that are committed by state and/or corporations but not criminalised or less punished for their contribution to ecological disorganisation. <Table I> shows the major characteristics of crimes of the powerful.

Table I. Crimes of the Powerful (Hwang, 2022, p. 80)

Type of Crime	Perpetrators	Motives	Mechanisms
State Crime	States/Governments	To fulfil its self-interest or maintain the status quo	Direct or Indirect Failures in environmental protection
Corporate Crime	(Transnational) Corporations	Maximisation of Profits	Continuous expansion of corporate activities that exploit human and nature
State-Corporate Crime	State and Corporations	To collectively pursue a common goal between states and corporations	States to adopt policies to support corporate activities or accelerate deregulation

According to Rothe and Medley (2016, p. 102), state crime refers to not only the violations of the existing law by the state but also failures to act 'that results in violations of domestic and international law… done in the name of the state regardless of the state's self-motivation or interests at play'. From this insight, governmental development policies that may cause severe environmental damages or the military's deployment of weapons that destroy the environment may be accepted as legal but should be

criminalised, in proportionate to their impacts on the environment and human health. Governmental subsidies for environmentally destructive industries, such as coal mining, and state failures to protect land defenders from extrajudicial killing are also examples of state crime against the environment. The major problem of state crime is that these acts are rarely enforced by domestic environmental criminal law, because the state itself is less likely to pursue justice for its own failures (Wolf, 2011). At the international level, the ICC is capable of prosecuting individuals for their war crimes that involve severe environmental destruction, but even so, international criminal law cannot be enforced against states or groups (International Criminal Court, 2020, p. 14).

In the capitalist system, ecological additions and withdrawals by corporations are normally accepted as legitimate for economic growth. A dilemma of environmental criminal law in the capitalist system emerges when environmental values are compromised with ecological disorganisation caused by legitimate profitmaking activities by businesses. Businesses may be held culpable for significant environmental accidents, such as oil spills and deforestation, but the accumulation of environmental burdens by legal corporate activities is less likely to be recognised as criminal. In capitalist societies, criminal justice is pursued to prevent only limited forms of environmental crime by corporations, such as failures of compliance or illegal commercial activities. Green criminologists argue that the accumulation of environmental pollution generated by routinized corporate activities is equally detrimental to the planet and should be put to a social inquiry. In particular, corporations may seek the maximisation of profits by colluding with illegal businesses like organised criminal groups. For example, Italian mafia groups have generated their income from cooperation with legal waste processors who seek a downscaling of their landfill tax (Walters, 2013). However, corporate criminal liability is often reduced or inadequately enforced because environmental criminal law appears to be weak and impotent (Ruggiero and South, 2010).

In the real world, state crime and corporate crime against the environment may converge. Lynch, Long, Stretesky and Barrett (2017, p. 248) note that ‘profit-seeking firms require expanded production, and expanded production requires an increase in the consumption of raw materials and an increase in pollution, which promotes the consumption and destruction of nature in unsustainable ways’. When the government and its institutions fail to enforce environmental law or protect the environment and humanity from the consequences of ecological disorganisation, the convergence may occur. Kramer, Michalowski and Kauzlarich (2002, p. 263), define state-corporate crime as ‘criminal acts that occur when one or more institutions of political governance

pursue a goal in direct cooperation with one or more institutions of economic production and distribution'. Numerous scientific studies have suggested that corporations are most responsible for anthropogenic environmental problems, such as climate change and biodiversity loss (White, 2010). Yet, businesses have legally avoided liability or culpability, and their exploitative activities are assisted or encouraged by governmental policies that turn a blind eye to corporate malfeasance. As Ruggiero argues, ecological disorganisation is mainly caused by both legal and illegal environmental activities.

> The notion that there is continuity between legality and illegality is crucial for an understanding of corporate, state, white-collar crime and crimes of the powerful in general… Harms to the environment is caused by a serious of interlaced conducts that are bad in themselves (mala in se) and conducts that are bad because they are prohibited by law (mala prohibita) (Ruggiero, 2013, p. 421).

Thus, states create a socio-political environment where corporations can pursue 'legal' profiteering activities at the costs of ecological sustainability, although such actions shall not be accepted as socially legitimate. For instance, climate change is known to be the most serious threat to human civilisations but criminalising corporate activities most responsible for it has not taken place at both international and domestic levels. Rather, market-oriented mechanisms such as carbon taxation and compliance measures were introduced through international climate agreements. This is in stark contrast to the fact that climate change functions as a multiplier of environmental degradation (Agnew, 2012). To this end, from the viewpoint of academia and environmental activism, voices calling to make a law of 'ecocide' are growing (White and Kramer, 2015).

A Law of Ecocide

Campaigns to make a law of ecocide are centred around the revision of the Rome Statue of the International Criminal Court (ICC). The group Stop Ecocide International appear to be a forerunner of such actions. In 2021, it convened an independent panel to agree a definition for ecocide, which was proposed as below:

> 'unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts' (Stop Ecocide Foundation, 2021, p. 5)

There are legal issues that make legislating a law of ecocide difficult. Thresholds to determine a particular action as an act of ecocide that warrant international interventions may be contested. Also, proving one's intent of actions that may bring about ecocidal consequences may be complex and difficult. In spite of some drawbacks, a law of ecocide is an innovative response to ecological disorganisation, breaking path-dependency in the international criminal justice system. The reinforcement of criminal law is a message to society, raising public awareness of particular acts that should be prohibited. Thus, a law of ecocide can improve morality and social responsibility for environmental protection. Robinson (2022, p. 318) notes that:

> The crime of ecocide would provide stronger penal sanctions, stigmatization, jurisdictional reach, and commitments to prosecute in relation to the worst environmental crimes. But perhaps an even greater value of the crime is… reframing massive environmental wrongdoing not as a mere regulatory infraction, but rather as one of the gravest crimes warranting international concern.

For this reason, advocates of a law of ecocide have expanded the use of the term ecocide to condemn military-induced environmental destruction, corporate crime, and state-corporate crime against the environment (Chandy, 2021). Based on the literature and policy papers in the field, four categories of ecocide can be conceptualised by types of perpetrators and intent. The typology of ecocide presented in <Table 2> below is not exhaustive, because ecological disorganisation may be caused by destructive activities such as organised environmental crime and terrorism (Edwards and Gill, 2002; Rose, 2022). Still, for analytical purpose, it is useful to capture the sophisticated nature of ecocidal activities by the powerful actors in environmental criminal law and enforcement.

Table 2. Typology of Ecocide

		Perpetrator	
		State/Government	**Corporations**
Purpose	Deliberate/Intentional (Absolute Liability)	Environmental warfare (Group I)	Pollution Crime/Organised Environmental Crime (Group III)
	Unintentional/Negligent (Strict Liability)	Peacetime Military Operations/Development Projects (Group II)	Environmental Accidents (Group IV)

Among state-induced ecocide, deliberate actions to cause severe environmental contamination and destruction can be categorised in Group I. Environmental warfare is an example. Environmental warfare causes serious and long-term environmental destruction, which cause ecocidal impacts. The wide use of Agent Orange during the Vietnam War was committed by American jetfighters to destroy the local forests where Vietnamese guerrillas might subsist within and ambush from. Almost six per cent of Vietnamese territory was destroyed and the legacies of chemical contamination, such as rare diseases and biodiversity loss, are well known to the public (Westing, 1985; Zierler, 2011). In the Gulf War, the Iraqi military troops initiated a so-called 'scorched earth' strategy by burning more than 700 oil wells in Kuwait. Such acts were deliberately committed in order to stop the march of the US-led coalition troops. While two to six million barrels of oil per day were being burnt, these oil fires caused serious damage to the ecosystems and also soldiers and local residents (Roberts, 1996). To prevent such deliberate environmental destruction for military interest, international environmental agreements were signed. For instance, the Environmental Modification Convention (ENMOD)[2], adopted in 1977, bans particular acts that use the environment as a means of warfare, which may involve artificial change or manipulation of the environment. More lately, the UN International Law Commission (ILC) adopted 27 draft principles to protect the environment throughout 'the entire conflict cycle' (Weir and Pantazopoulos, 2020, p. 9). However, they appear to be ineffective in fulfilling their purpose. At the international level, it is under the jurisdiction of the ICC. However, it has never pursued justice against criminals liable for environmental destruction (Cusato, 2017). At the domestic level, military operations that are deemed to cause ecocide are hardly prohibited, as they are accepted as legitimate security activities.

Ecocide may occur because of governmental actions without an intention to destroy the environment. This is mainly due to negligence or ignorance, using the environment for other purposes such as economic development. For now, this type of ecocide is named Group II. There are many examples of this group, but peacetime military operations and large-scale development projects are discussed here. The military causes long-term and widespread environmental contamination even if it is not deployed in battlefields. For instance, the American military is known to be the single largest organisation polluter in terms of its consumption of energy and production of

[2] The full name of the Convention is the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques.

carbon emissions. A study suggested that if the US military were a country, it would be the 47th largest polluter in the world (Belcher, Bigger, Neimark and Kennelly, 2020). Along with other countries' military forces, however, its responsibility for carbon neutralisation is widely exempted from international climate agreements. Given that anthropogenic climate change is the most significant driver of mass extinction, it is problematic that the military is not held accountable for its ecocidal activities. However, like Group I of ecocide, even if there is a likelihood of serious environmental destruction, military actions that may cause ecocide are recognised as legitimate for national security and economic health. Governments' energy and development policies that involve large-scale construction or land reclamation can be condemned for their environmental destruction. In the following section, some cases for this type of ecocide will be discussed in the Korean context.

Business activities that generate serious ecological disorganisation fall into Group III of ecocide, recognised as criminal offences against environmental law. The use of chemicals, especially pesticides, for industrialised farming may cause serious deforestation and biodiversity loss. Global citizens organised the International Monsanto Tribunal, where citizens examined environmental impacts of Monsanto's use of agrochemicals and found the multinational company guilty of ecocide. The jury of the tribunal concluded that Monsanto's involvement in the US-led war on drugs, production of genetically modified crops, and contamination of land and water shall constitute a crime of ecocide (International Monsanto Tribunal, 2017, p. 47). Organised environmental crime is another example of Group III ecocide, which exposes a 'dirty' connection between legal businesses and criminal groups. Corporations may find illicit businesses more attractive when they can maximise profits while minimising environmental costs. According to Europol (2022), many perpetrators of environmental crime started legal businesses and found opportunities for profitmaking by violating the environmental law. Given that environmental protection mechanisms are weak or fragmented, criminal groups can easily infiltrate the legal realm. For example, criminal networks intentionally destroy forests and manipulate local ecosystems to plant more profitable trees or crops such as drugs. While environmental criminal law can punish these environmental crimes, it is too weak and ineffective in preventing and deterring serious environmental destruction—especially that committed by white-collar groups (Lynch, 2020). It is why the number of advocates who demand a law of ecocide is growing.

Finally, Group IV of ecocide includes environmental destruction caused as unintended consequences or negligence by business activities. The Deepwater Horizon incident might be a case to this type of ecocide. In the Gulf of Mexico in 2010, British Petroleum's oil drilling rig exploded. Known as the largest oil spill disaster in world history, the explosion of Deepwater Horizon led to massive scale oil flows for 87 days. The accident caused not only human casualties—11 deaths and 18 injuries—but also public health issues, such as rare diseases and trauma, and the destruction of marine ecosystems including the mass killing of aquatic flora and fauna and birds (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2011). Investigations suggested that one of the most disastrous industrial accidents could have been avoided if safety rules were obeyed and the company was not in haste to develop the oil rig. While environmental clean-up and restoration were necessary for years afterwards, criminal justice was also sought against BP and its partner companies for causing serious ecological disorganisation. In January 2013, a criminal case was settled between BP and the US government, with the former agreeing to pay a $4.5 billion fine. Even so, criminal charges were limited as 'misconduct' by employees and applied to only a few people, which raised doubts over the effectiveness of criminal justice in deterring serious environmental crime (Jarrell and Ozymy, 2021).

Criminal law regulates social behaviours by showing the line on morality that a society must follow. In the social system where environmental destruction is often accepted as a trade-off for economic activity, it is difficult for criminal justice to be pursued to protect the environment. Environmental crime may range from minor pollution to large-scale environmental destruction. To date, criminal law has been challenged by voices which call for much stronger and proactive responses to environmental crime that threatens the survival of the planet. Cases of environmental crime mentioned above could be framed as ecocide for their contribution to serious ecological disorganisation including the mass killing of flora and fauna, the long-term destruction of ecosystems, and risks to public health. However, these voices have revolved around reforms in international criminal justice. In the following section, the focus of discussion is laid on South Korea, interrogating how environmental criminal law can be enforced to punish ecocide at the domestic level.

ENVIRONMENTAL CRIMINAL LAW IN KOREA

Major Developments and Reforms

To examine the capability of Korean criminal law in deterring serious environmental crime, the development of the existing criminal justice system should be analysed first. In the aftermath of colonisation and the Korean War, the Korean Peninsula was divided into two systems. While both Koreas claim state sovereignty over each other, economic development and military competition were top policy priorities for both. Rapid industrialisation caused severe air pollution as well as land and groundwater contamination, but without adequate environmental regulations to protect public health and ecosystems. However, amid the hostile competition with North Korea, environmental values were largely ignored or side-lined in policymaking in South Korea. Although the then President Chung-hee Park introduced the Environmental Conservation Act during the 1970s, environmental problems were widely accepted as inevitable costs for economic development (Chung and Kirkby, 2001). Thus, criminal justice mechanisms and penalties against environmentally destructive activities were distinctly lacking.

The political atmosphere changed from the 1980s. This period was marked by the tide of democratisation in South Korea, which led to the mushrooming of social movements including environmental campaigns. Citizens concerned with serious environmental degradation established numerous environmental non-governmental organisations (ENGOs) to organise social campaigns to strengthen governmental environmental policies and law. In 1985, it was reported that local residents and workers in the Onsan National Industrial Complex in Ulsan, one of the industrialised cities in Korea, had suffered from symptoms similar to *Itai-itai disease*, including skin diseases and neurosis. Environmental campaigners blamed the industrial complex for causing so-called *Onsan illness*. Later, the government admitted that the Onsan illness is a pollution-related disease, which was likely caused by the accumulation of air, land and groundwater contamination by toxic chemicals from the industrial complex.

In response to strengthened public awareness of environmental degradation, the Korean government had to take a proactive response to environmental issues. For the first time in its history, in the 8th amendment of the Korean constitution, environmental rights were recognised as constitutional rights. Also, the government revised its environmental policies to regulate air pollution and water contamination. For instance,

it commanded governmental institutions and state-owned corporations to conduct environmental impact assessments in 1981 and private businesses in 1986. In 1980, the Environment Agency was created to enforce environmental law and monitor non-compliance cases. However, in spite of institutional and legislative developments, enforcement remained ineffective and weak. Many companies could easily avoid criminal charges for environmental pollution because there was a lack of political willingness to tackle environmental crime and an absence of inter-agency cooperation for environmental enforcement (Ku, 1996). Therefore, governmental policies to strengthen environmental regulations were seen as merely political gestures to appease the public outcry for governmental failures in environmental protection.

The Nakdong River Phenol Contamination incident in 1991 created more momentum for an ecological awakening. After 30 tonnes of purely concentrated phenol were spilt into the river, which provided drinking water to more than two million citizens, another 1.3 tonnes of phenol were again leaked by the same company. This huge industrial accident followed just after the *Onsan illness* case, but criminal justice was not thoroughly pursued because environmental law was weak. Two significant pieces of legislation were introduced, signalling a major shift from mere political gesture to comprehensive prevention and punishment mechanisms to protect the environment. First was *the Framework Act on Environmental Policy* in 1990, specifying goals and targets of governmental environmental policies and punishment mechanisms on non-compliance. One year later, *the Act on Special Measures for the Punishment of Environmental Offences* was introduced to enforce criminal law against serious environmental crime. This was a remarkable development in environmental legislation: for the first time, environmental crime was addressed as a criminal offence, warranting stricter punishment.

After the millennium, environmental criminal law continued to be strengthened, with stricter and more complex environmental regulation on the use of chemicals, emission standards, etc. Partly, this change was facilitated by the global consensus on sustainable development. As environmental deregulation during the 1980s and 1990s caused serious damage to the planet, sustainability was adopted as a global policy agenda, calling for more state intervention for environmental protection. This led to a global trend in reinforcing environmental criminal law to promote the rule of law in the environmental sector (Hoffman, 2000). Accordingly, especially after the global financial crisis in 2008, the South Korean government introduced 'green' economic policies—such as green growth and the green new deal—which emphasised the integration of environmental sustainability and economic development. In 2011, *the Act on Special Measures for the Punishment of Environmental*

Offences was amended as *the Act on Control and Aggravated Punishment of Environmental Offences* (ACAPEO), granting strengthened authority and enforcement power. In 2019, the law was amended gain to increase financial penalties for environmental crime in the effective confiscation of profits from serious environmental crime.

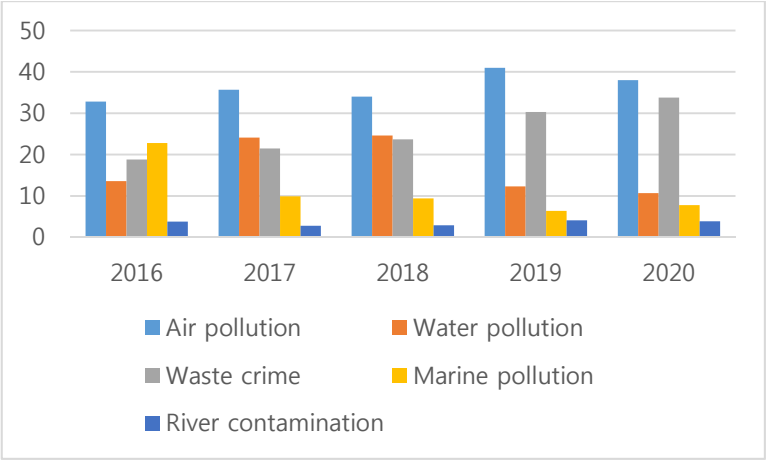
Compared to the past, environmental criminal law in Korea is relatively well established through structural reforms. After serious environmental incidents, the state was pressurised to enhance environmental criminal law. Now it has realigned its policies towards sustainable development. However, it is too hasty to reach the conclusion that Korea is effective in deterring environmental crime. In the following section, an analysis of environmental enforcement and punishment of environmental crime shows that Korea is still struggling with lingering issues that expose the vulnerabilities of its environmental criminal law.

Enforcement and Punishment

According to a governmental survey, in the past 10 years, the enforcement authority has captured more than 90 per cent of environmental criminals (Institute of Justice, 2022, p. 109). This figure suggests that environmental criminals are more likely to be arrested by the authorities than the perpetrators of other crimes such as murder, violence, etc. More specifically, air pollution and waste crime made up the majority of environmental offences. <Table 3> below summarises the recent trends in environmental crime in Korea.

<Table 3> Trends in Environmental Crime in Korea (Adapted from the Institute of Justice, 2022, p. 110)

(Unit: %)



Based on the same survey, a brief analysis could be conducted. In the past five years, except for 2016, air pollution and waste crime constituted most environmental offences. While the former accounts for more than 30 per cent of the total environmental crime, the latter has increased from 18.8 percent in 2016 to 33.8 percent in 2020. Although more detailed scrutiny is required, this rapid increase in waste crime is alarming and may suggest that profiteering opportunities are plentiful in the waste industry in Korea. Considering the impacts of the global pandemic, this increasing tendency of waste crime may continue as the use of plastics and other wastes exploded globally during this time (Dixon, Farrell and Tilley, 2022).

In 2019, CNN reported that the largest waste dump was piled in Uiseong, a small town in the southeast of Korea. At the time of discovery, 170,000 tonnes of garbage were piled and left neglected. Toxic gas emanating from the waste dump caused fires and contaminated air, land, and water so that local residents, who are mostly old and weak, were affected. Although the dump site was owned by a legal waste processor, it was reported that he deposited 'more than 80 times the amount of garbage permitted at the site' (CNN, 2019). After the media report, criminal justice was pursued against the perpetrators of illegal dumping. However, the ineffectiveness of environmental enforcement in Korea could not be concealed when the local authority failed to monitor or intervene to remove the contaminated site, allowing the illegal activity for years until the media report shone a light on the issue. This is just one example that environmental enforcement is weak in South Korea. Given that environmental law mainly hinges upon compliance-based mechanisms only, it is easier for even legal businesses to avoid environmental regulations and pursue profits until they are sanctioned. Moreover, the level of criminal sanctions against environmental crime is low, which creates opportunities for criminals to infiltrate the environmental sector. According to a governmental source, even if the perpetrators of environmental crime are arrested, 30 per cent of them are usually released with no indictment. Also, among prosecuted cases, more than 50 per cent are concluded with a short order of financial penalties (Institute of Justice, 2022, p. 274).

In addition to the deficiency of effective environmental enforcement and punishment, it appears that criminal justice is not rigorously pursued against high-level personnel or large corporations that are responsible for large-scale environmental contamination. Among many, a prime example would be the Samsung-Hebei Spirit Oil Spill incident in December 2007. On 7th December 2007, in the West Sea of Korea, a crane barge (11,828 tonnes) owned by Samsung Heavy Industries crashed with Hebei Sprit, a crude oil tanker (146,848 tonnes). In the aftermath, 12,547 kl of oil polluted

wetlands and the coastlines, posing a great risk to marine ecosystems, public health, and local economies. This incident is known to the public as the largest oil spill accident in Korean history. Given the widespread, long-term, and severe scale of environmental contamination, villagers living in communities affected by the oil spill are still suffering from physical and mental damages (Lee and Kim, 2021). The law enforcement authority was blamed for their inaction in bringing justice to the responsible corporations, especially Samsung. According to an investigation, it was likely that Samsung was aware of the risks of its operation under unexpected weather conditions. Criminal prosecutions, however, were only made against the captains and crews of the collided vessels, who later pleaded guilty. The owners of the corporation, who should be held accountable for avoiding corporate crime against the environment at the structural level, were not prosecuted. Local communities appealed to the Public Prosecutor's Office to indict Samsung under *the Act on Control and Aggravated Punishment of Environmental Offences*, but no action was taken to bring the concerned CEOs of Samsung to court. Citizens and civil society organisations criticised the government for not taking proactive action against the corporation, alleviating corporate responsibility for environmental protection.

AMENDING THE SERIOUS ACCIDENTS PUNISHMENT ACT AS A DOMESTIC RESPONSE TO ECOCIDE IN KOREA

Background and Structure

In parallel to rapid industrialisation, health and safety measures for workers and citizens have been undermined and treated as secondary issues (Eder, 2016). Among OECD countries, Korea has recorded a high incidence of work-related fatalities and injuries (Lee, 2016). However, criminal liability for industrial accidents and work-related casualties is concentrated on low-level safety managers or outsourcing companies, while companies that actually own or run the business avoid criminal investigation. Thus, it is not so surprising that labour unions and social movements have demanded justice to be delivered to higher personnel in corporations, who have avoided criminal charges or only received petty punishments.

In 2011, the government admitted that toxic chemicals like polyhexamethylene guanidine phosphate (PHMG) that are used as humidifier sterilisers were causes of consumers' deaths and diseases. To date, around 6,000 cases of injuries including more than 1,400 deaths related to the use of toxic humidifier sterilisers have been confirmed (Choi and Jeon, 2020). Many of the people injured have been diagnosed with lung damage, and children with growth disorders. Several investigations in this incident revealed that the government's health and safety regulations were colossal failures. Since the 1990s, without proper toxicity tests, humidifier sterilisers that contain toxic chemicals were produced but governmental monitoring was not effective. Even worse, some chemicals used in the problematic products were endorsed as safe by the governmental health agency.

Governmental investigations suggested that the chief management of those chemical producers might be aware of detrimental impacts of toxic chemicals in their products (UN Human Rights Council, 2016). Thus, given the scale of the scandal, the government sought criminal justice by prosecuting some chief executives of companies responsible for the production of toxic humidifier sterilisers. Oxy Reckitt Benckiser was the most culpable company for causing the highest number of casualties—about 80 percent of the total deaths. Even the company was blamed for bribing researchers to manipulate the results of a toxicity test for its humidifier sterilisers.[3] After all, four chief executives were found guilty, but sentencing was glaringly low. Each of them spent only five years in jail for their serious criminal act.

The Serious Accidents Punishment Act (SAPA) was borne out of two streams of long-standing civic activism that demanded stricter health and safety regulations for workers and citizens. It addresses two types of serious accidents caused by corporations in workplaces operated by themselves, or by outsourced institutions, or their failures to comply with environmental regulations. In Article 1 of SAPA, the purpose is defined as

> to prevent serious accidents and protect the lives and physical safety of citizens and workers by prescribing the punishment, etc. of business owners, responsible managing officers, public officials, and corporations that have caused casualties in violation of their duties to take safety and health measures while operating businesses or places of business, public-use facilities, or public transportation vehicles or handling materials or products harmful to human bodies.

[3] This was bribery on a serious scale. Oxy Reckitt Benckiser is based in the UK, and it was reported that the UK's Serious Fraud Office (SFO) initiated an investigation into the case. However, the SFO neither declined nor confirmed this operation when the author requested.

The purpose shows SAPA's comprehensive approach to criminalising serious accidents. By introducing SAPA, duties for health and safety protection are structurally transferred 'to the subcontracting business owner *without judging* whether the danger is within the scope of their supervision and management' [emphasis added] (Choi *et al*., 2022, p. 1). <Table 4> summarises the core definitions in the legislation.

Table 4. Core Definitions of SAPA

Type of Crime	Definition
Serious Industrial Accident	Industrial accidents that cause: (a) at least one death (b) at least two injuries in the same accident requiring six months of medical treatment (c) the incidence of at least three cases of occupational diseases due to the same hazardous factor within one year
Serious Civic Accident	accidents other than serious industrial accidents, which results from a defect in the design, manufacture, installation, and management of a specific raw material or product, public-use facility, or public transportation vehicle, causing: (a) at least one death (b) at least ten injuries in the same accident requiring two months of medical treatment (c) the incidence of at least ten cases of diseases related to the same cause, which require three months of treatment

To avoid violating SAPA, business owners and managers-in-responsibility should establish or implement health and safety measures to prevent the aforementioned accidents. Those responsible for serious accidents are deemed liable to receive stronger punishment, including more than one year of imprisonment for accident-related death and hefty financial penalties. Since it only came into force in January 2022, it may be too early to assess the actual outcomes in preventing serious accidents. However, SAPA inarguably casts a light on blind spots and loopholes in the criminal justice system by strengthening corporate responsibility for public health and safety. In particular, its consequentialist approach to serious accidents lowers the threshold to impose criminal charges on businesses, which aims to avoid the problem of intention in criminal prosecution.

Adding the environment to SAPA

As the research findings suggest, Korean environmental criminal law should be strengthened to hold corporations accountable for serious, large-scale environmental

crime. Like global campaigns to revise the Rome Statue of the ICC, a revision of SAPA can be considered as a viable option to punish ecocide at the domestic level. Considering its purpose, it can be persuasive to add environmental protection to SAPA. This can be done by adding the definition of "serious environmental accident", along with two other types of serious accidents, to the law. Three advantages for amending or 'greening' SAPA can be suggested. First, it helps raise public awareness of ecological sustainability as a core part of corporate responsibility. Second, it may enhance the quality of environmental criminal law by directly addressing business owners or high-level personnel in corporations who have easily avoided criminal penalties for ecological disorganisation. Finally, it may hold the government more accountable and responsive to environmental issues that affect public health and safety.

Although it is subject to debate, the definition of "serious environmental accident" in SAPA can reflect the idea of ecocide. At the same time, it should be harmonised with other environmental legislations, especially *the Framework Act on Environmental Policy*. Thus, it can be provisionally defined as:

> An accident that pollutes water, the atmosphere, biota, and ocean and poses significant risks and harms to ecosystems, flora and fauna

To determine whether such environmental pollution meets a threshold of "serious environmental accident", similar standards for other types of serious accidents can be applied. That means if at least one person dies from an environmental disaster due to business activities, it can be punished as a "serious environmental accident". Given that "serious civic accident" and "serious environmental accident" both aim to protect civilians, their scope may overlap. However, the difference between them is the former addresses accidents that are caused by a *defect* in the design of products or operations of facilities, the latter may bring criminal penalties to corporations for causing ecological disorganisation, regardless of the defect. In this case, the Samsung-Hebei Spirit Oil Spill incident can be framed as a "serious environmental accident", for its killing of marine ecosystems, animals and plants as well as (allegedly) causing diseases to humans. Additionally, considering that to some extent, Korean environmental law punishes pollution that does not involve human casualties, a "serious environmental accident" can include accidents that cause the death of flora and fauna, especially endangered species and the severe destruction of protected areas.

By 'greening' SAPA, not only corporations, but also the government shall bear more responsibilities for ecological sustainability. Like the law sets safety and health duties for business owners, adding "serious environmental accident" to the law can help enforce environmental values and thus, foster the idea of so-called environmental, social, and corporate governance (ESG). This is opposed to market-oriented mechanisms that emphasise voluntary compliance and acceptance of environmental regulations and values, while the governmental authority has faced challenges to establish a causal relationship between corporate activities and environmental pollution. Thus, advocates of a law of ecocide argue that the intent shall not be a threshold to prosecute perpetrators of ecocide. Given that SAPA adopts a similar approach to liability, ecocide can be punished by SAPA by defining specific forms of ecocide as "serious environmental accident". Recalling the typology of ecocide conceptualised in Table 2[4], a green version of SAPA can pursue stronger criminal justice against high-level perpetrators of Group III ecocide (as intentional pollution) and also some cases of Group IV ecocide (as negligent or accidental environmental destruction). These are the potential advantages of greening SAPA to prevent and punish serious environmental destruction.

However, in spite of the potential usefulness of the SAPA in dealing with severe environmental offences, some doubts can be casted on its validity. They may be particularly derived from the fact that the constitutionality of the SAPA has been continuously contested. On 13th October 2022, a law firm filed a request for a court to review of the constitutionality of the SAPA. The plaintiffs of the litigation claimed that definitions of 'the establishment and implementation of a safety and health management system' and 'business or place of business that the business owner, corporation, or institution actually controls, operates, and manages' provided in Article 4 (1) of the SAPA are so vague that the arbitrary application of the law should be prevented by the constitution. Although the constitutionality of the SAPA is beyond the scope of this paper, it should be noted that the application and interpretation of the SAPA through criminal procedures have been in compliance with other criminal law. For instance, not all owners of corporations which violated the law have been prosecuted, after criminal investigations by the government (Kim, 2022).

One may still question whether it is better and more appropriate to enforce the ACAPEO to protect the environment from serious damages. It is true that the legislation imposes strict punishment, such as minimum 3 years up to 15 years of imprisonment

[4] See page 5.

for water contamination. However, the law is not sensitive to mechanisms of environmental contamination by corporations. As previous discussions on crimes of the powerful suggest, white collars can take advantages of avoiding criminal sanctions as they may not be direct perpetrators of crime or their actions are not criminalised in proportionate to damages that those cause. In the ACAPEO, CEOs, high-level personnel, or owners of corporations may be held culpable for environmental offences, but the level of punishment is seriously low. For instance, the only way of punishing corporations by the ACAPEO is financial penalty (up to 100 million Korean won), which can be easily transferred to external costs of business management (Kim, 2018b). Thus, the environmental responsibility of corporations is significantly limited within the scope of the law. It appears that the SAPA, with stronger financial sanctions up to 500 million Korean won, may address this gap. Moreover, the SAPA emphasises duties for the senior management of corporations to protect the environment, as opposed to the ACAPEO. By doing so, the SAPA aims to prevent crimes committed by the powerful by making those who have the power to control corporations responsible for environmental duties. The latter may fall short of the authority to do the same.

Remaining Issues

However, even if amending the SAPA to punish severe environmental accidents like ecocide, there are some remaining issues for the law to be an effective driver of environmental protection and criminal justice. Three issues are addressed here. First is about difficulties to establish a causal relationship between particular action and environmental damage. Often, environmental crime is characterised as 'victimless', because environmental damages may not be immediately visible and thus (potential) victims of environmental crime cannot take appropriate actions against them (Hamilton, 2021). However, owing to advanced technologies to investigate environmental crime, such as forensic inquiries, and growing voices of environmental campaigns, complexities of environmental offences are being (White, 2012; Ahmed, 2017). Studies have suggested that to pursue criminal justice against environmental crime, specialised, well-trained investigators and laws that can control corporate illegality and redress victims of environmental crime should be in place. Although it may be a long and complicated journey, it would be possible to establish the causality between severe accidents and serious environmental damage, which may fall into the scope of the amended SAPA. The aforementioned cases of serious environmental accidents, like the Samsung-Hebei

Spirit Oil Spill, teach us that criminal justice was not pursued against corporations not because the government failed to establish the causation of the accident. Rather, it was because no effective legislation was in place to hold the government and corporations accountable for environmental protection. Furthermore, victim-centred approach to environmental crime investigation may contribute to identifying mechanisms of victimisation by environmental damages and redressing victims' needs (Jarrell and Ozymy, 2012).

The main purpose of SAPA is to hold corporations accountable and liable for large-scale accidents. Therefore, it is unlikely that it can be applied to state-induced or military-induced ecocide. In other words, state activities that may cause serious ecological disorganisation, which fall into Group I and II of ecocide, will be exempt from environmental responsibility and liability and the status quo will remain. For example, although the Korean military is not engaged in an international war, its peacetime operations have (allegedly) caused serious environmental contamination over several decades. Environmental contamination by military activities in Korea mainly includes land and groundwater contamination, and air and chemical pollution. There are allegations of higher incidences of rare diseases in areas adjacent to military bases and training ranges. For instance, the Kooni firing range nearby a small village in Gyeonggi Province, called Maehayngri, was used by American jetfighters for munitions training for 60 years. Bombing caused chemical and thermal effects in the environment and heavy metals contaminated local ecosystems. Although the base was closed in 2005, local residents living nearby the training area are still suffering from diseases, mental illness, and the loss of the wetlands upon which their livelihoods depend (Kim, 2018a). Local residents have suffered from mental pain as well as financial loss. The military issue is complex when addressing environmental contamination caused by the US military deployed in Korea. According to a special agreement between South Korea and the US, American troops are granted legal immunity from Korean environmental law (Woo, 2006). In this case, new legislation should be introduced rather than amending SAPA to ensure state activities are covered. Similarly, governmental development projects, which may fall into Group II of ecocide, can also be immunised from SAPA. It is because governmental policies are accepted and justified for the common good, and criminal justice is usually not designed to punish state crime against nature (Moloney and Chambliss, 2014). Even if SAPA can be applied to the aforementioned cases, to what extent government officials should be held accountable and liable is a problematic issue.

The last issue is the applicability of SAPA to overseas activities by corporations based in Korea. According to Article 3 of the Criminal Act of Korea, Korean nationals shall be punished by domestic criminal law for their overseas criminal offences. SAPA does not have a specific clause that excludes the application of the nationality principle. In principle, therefore, if "serious environmental accident" is criminalised by SAPA, corporate crime against the environment beyond Korea would deem to be prosecutable by the Korean authorities. However, the Korean government concluded that SAPA should not be extended to overseas corporate crime committed by Korean nationals. According to the Ministry of Employment and Labor, which is the governmental department mainly responsible for industrial accidents, it is not feasible for the Korean authorities to investigate the violation of SAPA abroad beyond the Korean jurisdiction. If this is the case, amending SAPA to include "serious environmental accident" may not be effective in preventing environmentally destructive activities by Korean corporations overseas. For instance, the SK Engineering & Construction (SK E&C), a Korean construction company, built a 74-metres dam (the Senam Noi Dam) in Laos, which could store one billion tonnes of water. This dam collapsed in July 2018 after it failed to endure the heavy rainfall and adjacent villages were submerged. Not to mention the complete destruction of local ecosystems, the disaster caused at least 70 deaths and the displacement of thousands of affected villagers. It was claimed that this colossal disaster was attributed to SK E&C's re-designing of the architecture of the dam to reduce the costs of construction (Hwang and Park, 2021). However, the corporation avoided criminal charges in exchange for financial compensation and the reconstruction of the destroyed dam. The displaced communities, many of them farmers, are living in poverty and mental pain (Baird, 2021). The progress of environmental restoration is much slower, lowering the possibility of the return of affected communities to their past life. Even if SAPA was in place at the time of that crisis, it is unlikely that criminal justice could be pursued against high-level personnel in SK E&C for their misconduct or negligence of safety regulations. This exposes a structural loophole that domestic environmental criminal law encounters. Considering environmental contamination does not recognise man-made borders, however, and to strengthen corporate responsibility for sustainability, the Korean government should take proactive actions against environmentally destructive corporate crime. Even if SAPA cannot be extended to overseas corporate activities, some other criminal sanctions should be imposed.

CONCLUSION

So far, environmental damage has been regarded as a trade-off for economic development. As political neoliberalism dominates the global policy agenda, the role of the state has been reduced to a guardian of the free market and environmental deregulation has followed. Consequences are costly—climate change is posing a great risk to the survival of the entire human civilisation. In a time of planetary crisis, it is time to reinforce the social control of the economy in line with sustainable development. The state should be a guardian of the planet, not a predatory economy. So far, environmental criminal law has been weak and ineffective in fulfilling its mission. Advocates of a law of ecocide argue that amending the Rome Statue of the ICC to punish corporations for their acts of widespread, long-term, and severe environmental destruction will provide a breakthrough out of the impasse.

South Korea has undergone rapid industrialisation, while marginalising environmental values in governmental policies and social morality. After several man-made environmental disasters, the public awareness of environmental sustainability increased. In particular, citizens' voices demand that owners of corporations are held accountable and responsible for public health and the environment. However, the government has still been lagging in protecting the environment. In parallel, SAPA was introduced to punish serious accidents that involve civilian casualties in workplaces or other spaces. It represented a watershed moment in the history of criminal justice, for its purpose was to impose health and safety protection duties on business owners and high-level personnel in public and private companies.

The analysis contained within this article demonstrates that existing environmental criminal law in Korea has developed in various ways but is being challenged by weak enforcement, especially in cases of serious environmental crime. As a viable alternative to this drawback, amending SAPA to punish ecocide as a "serious environmental accident" was suggested. This way may be seen as a revisionist and self-limited approach to a law of ecocide, given that it can only address some cases of severe environmental destruction. This might discourage advocates of the law of ecocide who may adopt a rather radical perspective on environmental criminal law. However, it appears to be the best viable option to reinforce environmental criminal law while avoiding problems in creating a law of ecocide. The Ultima Ration principle emphasises that criminal law should function as the last resort of the state authority. However, given

one of the roles that criminal law performs is the (re)construction of social norms, it is more than timely to consider 'greening' criminal justice to address large-scale environmental destruction.

The introduction of SAPA in 2021 sent the society a message that serious accidents caused by corporations will not be tolerated. Likewise, amending the law to address serious environmental accidents will signal that the state will treat ecocidal acts as serious criminal offences. Criminal justice during the planetary crisis ought to change. It is to draw a socially acceptable boundary of corporate activities that are compatible with environmental sustainability rather than sacrificing economic development per se. This is taking one more step towards sustainable development.

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