

Legal remedies for harm to biodiversity

AN ANALYSIS OF INDONESIA'S
ENVIRONMENTAL LIABILITY
LEGISLATION



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Authors:

Rika Fajrini is a legal researcher and expert in law on natural resources in Indonesia. She is currently doing her PhD at Kyoto University.
rika.fajrini@gmail.com

Dr. Jacob Phelps is Senior Lecturer at the Lancaster Environment Center at Lancaster University, and co-founder of Conservation-Litigation.org.
jacob.phelps@gmail.com

Maribel Rodriguez is founder and legal director of Law and Wildlife, a consultancy that assists conservation organisations with their legal needs and is co-founder of Conservation-Litigation.org.
mrodriguez@lawandwildlife.org

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Comments are welcome and can be sent to jacob.phelps@gmail.com

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KEY TERMS

Environmental legislation varies widely across countries, and related terminology is often easily confused. We use the following key terms to facilitate understanding across jurisdictions.

Biodiversity: The full diversity that makes up the natural environment. It typically refers to the number of species present in a given place, but also considers diversity across scales (i.e., genetic diversity, populations and subpopulations of a species, and ecological communities of multiple species). Importantly, biodiversity includes not only animals, but all terrestrial and marine fauna, plants, fungi, and microorganisms.

Compensation/Damages: A type of remedy, usually understood as referring specifically to financial payments to compensate for the harm caused. It is also known as “damages”, not to be confused with “damage”.

Damage claim: In many countries, the remedies sought by a plaintiff are referred to as a “claim” or “damage claim”.

Defendant: A Party against whom a criminal or civil action is brought.

Environmental liability: The legal responsibility that a Party has for the harm they caused to the environment, including water, air, soil, and biodiversity. It is most frequently used in the context of pollution, but may be used to require responsibility for other drivers of environmental harm such as deforestation, illegal mining or illegal wildlife trade. In the context of this report, it refers to the legal responsibility that a party has for providing remedies in response to the harm they caused to biodiversity.

Harm: The negative impacts that result from the actions undertaken by a Party (e.g., person, company, organisation, etc.). Synonyms in some jurisdictions include “injury” and “damage”. In this report, the term “damage” has been omitted to avoid confusion with the term “damages” that is described below.

Harm to biodiversity: Harm to biodiversity, whether caused by negative impacts on habitat (e.g., from deforestation), or injury to a finite number of individuals of a species (e.g., from illegal wildlife trade). It also includes harm to humans in so far as the impacts on biodiversity have a direct impact on livelihoods, wellbeing, private property, financial burdens on government agencies or civil society organisations, or on the State’s ability to fulfil its environmental obligations.

Liability: The state of being held legally responsible for something. In law, liability may originate from the breach of contractual obligations or obligations described in laws or statutes, but also from harm caused in traffic accidents or due to defective products. It may also arise from harm caused to the environment, including to water, air, soil, climate, and biodiversity. Liability rules are rarely present in a single law, and relevant provisions may be found across civil, administrative, and even criminal laws in some countries. In this report, the term liability refers to legal approaches that request the responsible party to remedy and heal the harm they caused, and does not include punitive sanctions.

Litigation: The process of taking legal actions via the courts. In some countries this implies bringing a civil lawsuit to seek remedies, while in others it also refers to criminal prosecution and administrative processes.

Party: A legal entity that can be represented in court, whether a person, company, government agency, or other organisation.

Plaintiff: The Party bringing legal action seeking remedies. Depending on jurisdiction this can include government agencies, individual citizens, community groups, and non-governmental organisations.

Punitive sanctions: A sentence imposed to punish a party (person, company, etc.) for committing a criminal act, which typically includes a monetary fine or imprisonment. The monetary fine should not be confused with remedies that involve financial compensation, as the reasons for them are distinct. A judge may issue both punitive sanctions and financial compensation in the same case.

Remedies: Actions undertaken by the defendant to help remedy or heal the harms they have caused, with an aim to make the harmed/affected parties “whole” again. Remedies can include a range of remedial action or remedial measures, such as paying financial compensation (also called “damages”), participation in social service, restoration actions such as reforestation and species conservation, public apologies, and investments into educational and cultural events. In some countries, this is called “damage claim”. Remedies are distinct from punitive sanctions.

Strategic litigation: The use of legal action to bring about not only a resolution in an individual case, but to also catalyse broader systemic changes in society.

INTRODUCTION

Conservation Litigation as a response to remedy harm to biodiversity

Biodiversity faces growing threats from activities such as illegal wildlife trade and deforestation. More than one million species now face extinction, with cascading impacts on ecosystems and human wellbeing. There is growing demand for legal responses that meaningfully respond to these drivers of loss.

Although legislation and procedures vary widely across jurisdictions, there are broadly two main, complementary legal responses to environmental harm: responses that punish and deter, and liability provisions that provide remedies and seek to heal nature (Fig. 1).



Figure 1. Two broad, complementary legal responses to harm (Credit: A.Elam)

Many legal responses to environmental harm are focused on punishing violators and deterring future harm, typically focused on criminal and administrative sanctions involving fines and imprisonment. These sanctions often weakly reflect the harm that has occurred and are often considered too small to be a deterrent, prompting efforts to strengthen sanctions and enforcement.^{1,2} Moreover, criminal justice systems often disproportionately target poorer defendants against whom additional enforcement is unlikely to be proportionate, justified or effective.²

Additionally, most countries also have existing legislation that includes liability provisions.^{3,4} These provisions allow government agencies, victims, and sometimes citizens and civil society groups to bring lawsuits against those who harm the environment. They have the power to hold the worst offending companies and individuals legally accountable, meaning that they are liable for making the injured parties “whole” through remedies such as species rehabilitation, public apologies, habitat restoration, and investments into education.³

Related lawsuits have been brought across different contexts, such as marine oil pollution, industrial accidents, and even climate change – but this path remains a novel legal response to biodiversity harm.^{5,6} There are, however, a growing number of recent cases that highlight the emerging potential for liability provisions to help remedy and protect biodiversity (Fig. 2).

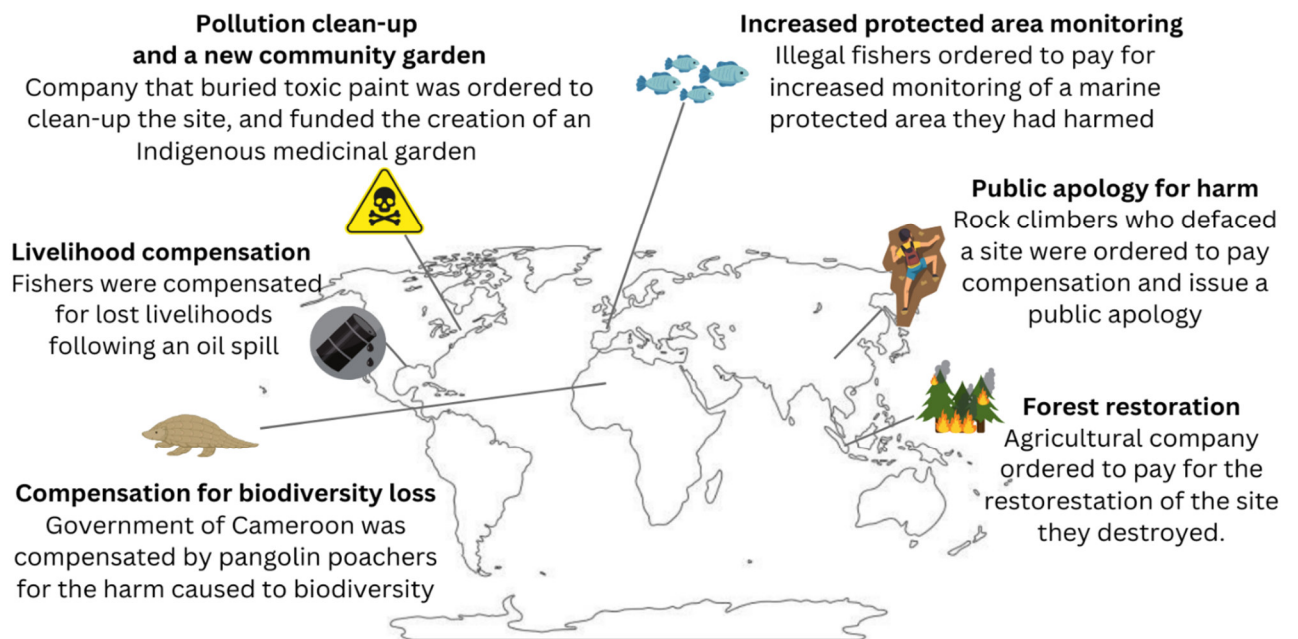


Figure 2. Examples of diverse remedies provided to biodiversity in liability cases

Liability provisions exist in countries around the world, and are found across different types of legislation including within civil codes, specialised environmental legislation, administrative procedures, and even criminal law.⁴ Importantly, the viability of such liability litigation depends heavily on the nuances of domestic legislation.

This report analyses the potential for liability litigation to remedy and protect biodiversity in Indonesia. It answers key questions about whether legal actions to seek remedies for harm to biodiversity are viable in Indonesia, including:

1. What is harm to biodiversity and how is it legally recognised?
2. What triggers liability for parties to remedy harm to biodiversity?
3. What types of parties can be involved in these legal cases?
4. What courts are involved in these types of cases?
5. What types of remedies does the law allow?
6. What are the challenges and opportunities facing these actions in Indonesia?

The report provides general context about each question, and then specifically answers it in the context of Indonesia’s legislation (boxes titled “Indonesia”). The analysis draws on examples of cases of Illegal Wildlife Trade (IWT) harming fauna, though the main elements of the analysis are also applicable for other causes of biodiversity harm such as habitat destruction, pollution, illegal fishing, and illegal mining.

The resource is intended for lawyers and non-lawyers alike, including prosecutors, judges, government agencies, and conservation organisations – to support plaintiffs in securing their legal rights, help guide strategic litigation, and inform legal practitioners.



Bornean orangutan (*Pongo pygmaeus*) in Tanjung Puting National Park

1. WHAT IS HARM TO BIODIVERSITY AND HOW IS IT LEGALLY RECOGNISED?

Identifying appropriate legal responses to environmental harm requires an understanding of the scope of environmental harm that can occur. There are many types of environmental harm that affect nature and humans, including both private and public interests. Although harm is often narrowly conceptualised in terms of impacts on specific individual sites and animals, this can cause a cascade of many types of harm on ecosystems, the State, human wellbeing, livelihoods, and the broader public (Table 1). For example, harm caused to a finite number of individuals of an endangered species can have cascading impacts that are often overlooked in law (Box 1).

Box 1: Liability litigation to address illegal wildlife trade of Great Apes

There are many, often interacting causes of biodiversity loss. Illegal Wildlife Trade (IWT) is a leading driver⁷ that yields a cascade of harms that could become the subject of environmental liability litigation to support conservation goals.

For example, IWT in Indonesia targets a range of highly threatened Great Ape species. This includes 3 Orangutan species (*Pongo abelii*, *Pongo pygmaeus* and *Pongo tapanuliensis*) (MoEF Regulation No. P106 Year 2018). The crimes against the three Orangutans – Bornean (*Pongo pygmaeus*), Sumatran (*Pongo abelii*) and the newly discovered Tapanuli (*Pongo tapanuliensis*)- have not declined overall from 2007 to 2019, in addition to domestic IWT, some of the cases involve international syndicate smuggling the species to Thailand, Malaysia and Kuwait.⁸

Across these examples, IWT harms not only individual animals, but also the survival of populations and entire species. IWT also impacts ecosystem functions and services, and can disrupt livelihoods of communities.^{3,9} IWT can also impact human wellbeing in other ways, such as harming cultural values and people's sense of place.¹⁰ Moreover, IWT can increase costs for government agencies and NGOs that often bear the effects of IWT, including rehabilitation centres responsible for wildlife confiscated from IWT¹¹ and the costs of having to increase enforcement measures in certain areas. These harms, particularly where driven by commercial and organised trade, could become the subject of future liability litigation, to hold responsible parties liable for providing remedies to them.



Rhinoceros hornbill (*Buceros rhinoceros*), a vulnerable species threatened by rainforest destruction and illegal trade
Credit: N.Simhan

Table 1: Key categories of harm to biodiversity

Categories of Harm	Types of Harm	Example of Harm
Harm to Nature	Individual plants and animals	The rescued Sumatran Orangutan (<i>Pongo abelii</i>) needs to be rehabilitated and released into the wild.
	Species	The trade of one female Tapanuli Orangutan (<i>Pongo tapanuliensis</i>) has a serious impact on the whole population of the species
	Ecosystem goods & services	Killing an Orangutan will impact the forest well-being. Orangutans are often regarded as important seed dispersers considering its frugivorous habit and large day ranges.
Harm to Humans	Private livelihoods	Deforestation affects the livelihoods of Indigenous and other local communities because it reduces local availability of wild foods important to household diets and income.
	Private property, personal health	Deforestation negatively affects local communities' plantations in traditionally managed areas.
	Broader human wellbeing (e.g., culture, existence values, intrinsic values)	The disappearance of charismatic species like Sumatran tigers (<i>Panthera tigris sumatrae</i>) have an impact on cultural and community values. Indigenous people in Sumatra have cultural values around the species, many of them called the tiger as "Datuk" which is an honorary title for the highly respected members of the community. The existence of this species is what makes the forest sacred. The legend of <i>Datuk</i> helps indigenous community to preserve the forest through customary rules.
Harm to the State	Income loss (e.g., taxes)	Illegal fishing means that taxes owed to the government was never paid.
	Increased cost of provision	Illegal wildlife trade in Indonesia means that the State must invest more into both legal enforcement and conservation measure for its wildlife. Moreover, IWT has undermined millions of dollars of conservation effort that the government has invested in.
	Reputational harm and reduced public trust	Poaching inside a protected area harms the public reputation of the park and the responsible authorities, reducing public trust in their capability to fulfil their obligations.

Most legal systems around the world recognise and protect against some forms of these environmental harms. However, there is no single definition for environmental harm: the concept is rarely defined in law and, where it exists, is often unclear or incomplete. Its relationship to different types of harm, including harm to biodiversity (Table 1), is often unstated.

Some countries have established specific environmental liability legislation (e.g., Mexico, Angola, Georgia) where environmental harm, liability provisions and remedies are defined, though, this is rare. In many countries, the rights to a clean environment and to remedies for environmental harm are present in the Constitution. Protections from environmental harm may also be included in a country's main environmental laws, with liability principles further developed in Ministerial Decrees or Notifications. Liability provisions can also sometimes be found in a country's general civil code. These different types of legislation carry different legal weight, with some taking precedence over others.

Indonesia

Indonesia has among the world's most advanced cases on liability litigation seeking remedies to environmental harm. This is based on a strong legal framework that recognises multiple types of environmental harm, including harm to biodiversity, across different pieces of legislation:

- **Law No. 32 Year 2009 on Environmental Protection and Management (Environmental Management Law).** This is the main law used to address environmental harm in Indonesia that has been used in all known cases to date (Case Example 1). It defines environmental harm as direct and/or indirect changes to the physical, chemical and/or biological condition of the environment that exceed one of the legally established "standardised criteria" thresholds discussed in Section 2 of this report (Article 1 number 17).

Case Example 1: Liability for harm from illegal agricultural fires

(Supreme Court Decision No. 1 PK/Pdt/2017, MoEF Vs. Kalista Alam Ltd.)

Since 2009 there have been at least 31 lawsuits filed by the Ministry of Environment and Forestry (MoEF) using the Environmental Management Law. Most have involved litigation against agricultural companies that have illegally used fire to clear agricultural land. This has involved both civil and criminal liability to seek remedies for the harm. This includes the precedent-setting civil litigation MoEF Vs. Kalista Alam Ltd., in which the ministry sought remedies from a palm oil company for the harm caused by land clearing using fire. The MoEF argued that the defendant had drained the peatland leading to fire inside the concession area, and had failed to provide prevention tools to avoid fires at the site. The MoEF used the Environmental Management Law and the Civil Code as the legal ground to invoke liability. The MoEF demanded compensation of IDR 114 billion (approx. US\$7.5 million) for ecological loss, and habitat restoration actions estimated to cost IDR 250 billion (approx. US\$16.6 million). These values were calculated based on the damage components and default value stated in legislation (MoEF Regulation No. 13 Year 2011 on Compensation for Environmental Harm). The Court granted all of the MoEF claims.

The law includes provisions for administrative, civil and criminal forms of liability:

- **Administrative liability:** This applies in cases of non-compliance with environmental approvals (prior to 2020 these were known as environmental permits), such as logging permits and agricultural concessions. Where the conditions of these approvals are breached, the responsible authority can impose sanctions, including injunctive relief (“*bestuursdwang*”), and orders to restore the environment (Article 76-83).
- **Criminal liability:** This form of liability principally regulates criminal sanctions such as fines and imprisonment for environmental offences listed in the law. However, it also allows a criminal court to place additional criminal penalties on offenders, including a requirement of “restoration of criminal action’s impact” (Article 119).
- **Civil liability:** This applies in cases where the resulting environmental harm exceeds the legally defined “standard criteria” (see Section 2). It requires offenders to provide remedies for environmental harm, usually monetary compensation and undertaking remedial actions such as habitat restoration (Article 87-88).

Box 2: Harm to threatened species

Like in many other countries, liability provisions in Indonesia were originally designed to target large-scale, near-term and highly visible events, such as forest fires, pollution events and illegal logging. Legislation has paid less attention to possible harms caused to species and wildlife populations that may require specific interventions to remedy them, and harms to individual plants and animals that may require care and rehabilitation. As a result, harm to biodiversity from divers such as illegal fishing and illegal trade has historically been overlooked. However, the Environmental Management Law defines environmental harm as including the “Change in biological condition”, which includes harm to both individuals and species.

- **Law No. 41 Year 1999 on Forestry.** This law specifically regulates the liability that emerges from causing harm to local communities as a result of harming their local forest areas (Articles 71 and 72). The law also recognises the right (standing) of civil society organisations to represent the interests of forest conservation in liability litigation (Article 73). To date, the law has not been used to claim remedies for environmental harm in court.
- **Law No. 27 Year 2007 on Coastal and Small Islands Management.** This law regulates the liability emerging from harm caused to coastal areas, small islands (Articles 66 and 67), and/or to people living at those sites (Articles 64, 65 and 69). To date, the law has not been used to claim remedies for environmental harm in court, but it may have been used as the basis for out-of-court settlements.
- **Civil Code (Article 1365).** In addition to environmental legislation, Indonesia’s Civil Code also extends general liability in cases where harm results from unlawful conduct. It obliges anyone who has caused harm to another party to remediate them for the harm that occurred. Although economic losses and property harm are the most common types of harm in civil liability (and predate the emergence of environmental law), the scope of harm is not limited by the law and so it also applies to environmental contexts – both public good (e.g., protected areas, nationally protected species) and private goods (e.g., community forests). The Civil Code has been used in combination with the Environmental Management Law to successfully litigate several environmental cases, such as the Kalista Alam Ltd case (Case Example 1).

2. WHAT TRIGGERS LIABILITY FOR PARTIES TO REMEDY HARM TO BIODIVERSITY?

If the law provides protections from environmental harm, this is typically accompanied by an obligation that the responsible party provides remedies to correct that harm — a form of legal responsibility that is often referred to as *environmental liability*. Although terminology and procedures vary widely across countries, environmental liability is fundamentally about requiring that those who harm the environment are held legally responsible for providing remedies. This can include remedies to individual parties (e.g., for harm to livelihoods, property, health), as well as to the public for harm to public goods (e.g., a protected area, a protected species).

However, not every act that causes environmental harm necessarily triggers the liability of the responsible party to remedy that harm. There are several key considerations that help determine whether an offender who caused harm can be held legally liable:

- **Causation:** Cases require a clear link between the offender’s actions and the purported harm to the plaintiff. In most jurisdictions, the plaintiff must prove that there was a direct link between the two, though the causal relationships in environmental cases can be complex and uncertain. For example, there may be uncertainty about the various relationships between biodiversity loss and ecosystem function. Many of these types of relationships, even those clearly understood by scientists, have not been widely recognized by courts.
- **Party’s fault:** Legal liability is also often determined by the offending party’s fault, which may be intentional or negligent. In some countries and contexts, liability is triggered irrespective of whether harm was caused intentionally or through negligence (“strict liability”). This is most often the case when harm is caused by actions that are legally identified as “inherently dangerous”, such as handling oil and toxic chemicals. In most other contexts, the law requires that the harm have been committed intentionally or due to negligence (“fault-based liability”). Negligence requires non-deliberate but careless actions that result in the breach of a duty. For negligence to be established, an objective evaluation should be made to ascertain whether a reasonable person would have acted in the same way in the same circumstances, or if reasonable care was taken under the circumstances.
- **Specific environmental triggers:** In addition to these general requirements, many countries have additional, specific triggers that apply in environment cases and determine when offenders can be held liable for providing remedies. In some countries, the trigger is that harm was caused by a specific type of activity listed in legislation, and harm caused by actions that are not listed does not result in liability. Other countries use thresholds to define what triggers liability, such as concentrations of pollutants or percentage of a habitat that is harmed. In other countries, liability is

triggered if the harm is caused to specific species and habitats on protected lists. Despite thresholds present in some environmental liability laws, in several countries (e.g., Spain, Indonesia, Thailand) the general Civil Code has also been successfully used in environmental liability suits, essentially circumventing any specific environmental liability triggers.

Indonesia

There are three general criteria that need to be fulfilled for environmental liability to be triggered in Indonesia.

- **Causation:** Liability cases require that the plaintiffs prove a clear link between the defendants' actions and the purported harm to the plaintiff (Article 1365, Civil Code), which can be challenging in environmental cases where causal links are complex, and relationships may be uncertain. In Indonesia, harms are often conceptualised along a spectrum, from directly to indirectly linked to the defendants' actions, and distinguishing between "material" and "immaterial" types of harm (Box 3). In practice, these distinctions have not always been clear, but have been treated as very important, with a strong preference for very direct causal relationships and material harm. However, lawyers' and judges' understandings of these relationships have expanded over time. For instance, legislation acknowledges that environmental harm can have a cascade of indirect effects on ecosystems (e.g., on hydrological services, nutrient cycling, genetic diversity; Ministry of Environment Regulation No. 7 Year 2014 on Environmental Damage). The causal connection between an action and harm is important, but it is well acknowledged that harm can have a variety of diverse, frequently long-lasting effects that merit legal remedies (Box 3).

Box 3: Addressing distinctions between "material/immaterial" and "direct/indirect" harms

Despite considerable legal recognition of environmental harm, there are still a number of challenges to demonstrating causation. This is particularly true given that the Indonesian legal community has historically distinguished between "material" and "immaterial" types of harm. Although this distinction is not codified, "material harm" is typically understood 'as a direct tangible harm caused by the defendant's action, which is easily quantified in terms of monetary compensation', such as harm to property or income. "Immaterial harm" refers to harms that are comparatively indirect or abstract, and can be more challenging to quantify using conventional economic metrics – including harm to culture, harm to wellbeing, fear, and longer-term impacts such as future losses and cascading impacts. This is the source of ongoing legal debate in Indonesia, and court decisions to date suggests that Indonesian judges are cautious, although there are signs of progress: Historically, environmental harm, especially future harms that might result over time as a result of the defendant's action, was perceived as immaterial harm because of uncertainties in how to quantify these impacts. However, courts have increasingly acknowledged that scientific advances have improved our ability to conceptualise and measure different types of harm, and Indonesian courts have recognised a wide range of harms.

- **Party's Fault:** Indonesia's Civil Code (Article 1365) requires that the harm must have been caused by the defendant's intentional or negligent unlawful act (i.e., they are at fault, described above). In very specific cases involving "abnormally dangerous" activities identified in law, such as using hazardous and poisonous substances, liability is triggered irrespective of whether harm was caused intentionally or through negligence, known as strict liability (Case Example 2, Article 88, Environmental Management Law). To evoke this liability plaintiffs only need to prove that the defendant's actions were categorised as abnormally dangerous activities and resulted in harm.

Case Example 2: Expanding scope of strict liability to include fires

(Court Decision No. 234/Pdt.G-LH/2016/PN Plg)

Strict liability has traditionally applied in fairly narrow circumstances, based on a delimited list of legally defined "abnormally dangerous activities". However, the scope of dangerous activities in Indonesia covered by strict liability is evolving. Notably, in the ruling on the MoEF vs Waimusi Agroindah Ltd., the court categorised land clearing by draining and burning the peatland as abnormally dangerous activities. This is because Indonesia has a history of peatland drainage for agriculture, which makes the sites highly vulnerable to uncontrolled fires that have had severe environmental, social and economic impacts.

- **Specific Environmental Triggers:** Although civil liability for harm is generally triggered by the very existence of harm caused by the defendant, Indonesian legislation sets additional, specific conditions to trigger liability in environmental cases. Liability is only triggered if the harm exceeds one of the "standard criteria" defined in the legislation (Article 1 number 17 and Article 87, Environmental Management Law). Different criteria have been established for different contexts of environmental harm (Box 4). This additional environmental trigger only applies in cases where plaintiffs seek remedies for the environment, typically when the State or an environmental civil society organisation is the plaintiff. In civil litigation brought by individuals for personal injury or economic loss, plaintiffs do not need to refer to the standard criteria, as they can also use the Civil Code (Article 1365).

Box 4: List of "standard criteria" thresholds that trigger liability

"Standard criteria" have been legally enacted for several different categories of environmental harm, and are listed in sector-specific legislation:

- **Government Regulation No. 4 Year 2001 on Standard Criteria Environmental Harm Caused by Forest and Land Fire.** In cases of harm caused by human-induced fires, liability is triggered when it harms flora and fauna at the affected sites in ways that result in changes to species diversity and/or population parameters (e.g., changes in density, changes in behaviour). However, no quantitative thresholds are set for evaluating what constitutes a significant change.
- **Government Regulation No. 150 Year 2000 on Soil Damage Control for Biomass Production.** In cases of harm to soils, liability is triggered when the harm exceeds quantitative thresholds for key physical, chemical and biological parameters, established for dry and wet soils. These include parameters for solum thickness and soil fraction composition, pH level, soil conductivity, and minimum levels of microbial life present in the soil.

- **Ministry of Environment Decree No. 201 Year 2004 on Standard Criteria of Harm to Mangrove Ecosystem.** In cases of harm to mangrove habitats, liability is triggered when the vegetation is reduced to less than 50% of its previous coverage, or the density is less than 1000 trees/hectare.
- **Ministry of Environment Decree No. 200 Year 2004 on Standard Criteria for Harm to Seagrass Ecosystem.** In cases of harm to seagrass habitats, liability is triggered when the harm results in a reduction of vegetation coverage, defined as less than 50% coverage.
- **Ministry of Environment Decree No. 4 Year 2001 on Standard Criteria for Harm to Coral Reef Ecosystem.** In cases of harm to coral reefs, liability is triggered when harm reduces living coral reef coverage to less than 50% of its pre-harm coverage.

Beyond the existing “standard criteria”, legislation allows for the development of new thresholds based on the latest science (Article 21 Paragraph 3, Environmental Management Law). Courts have further ruled that, in the absence of legally enacted “standard criteria”, judges can refer to expert opinions based on field evaluations of the harm (Supreme Court Decree No. 36 Year 2013 on the Supreme Court Guideline for Handling Environmental Cases). Importantly, legal views of environmental harm, and thus of the “standard criteria” that define it, are evolving: Legislation focuses on “material” harm that is tangible and quantifiable, but there is also growing recognition of harm to “immaterial” values, such relational values. Although these are not well reflected in the existing “standard criteria”, that does not exclude them for legal recognition (Box 3).

Exceptions when environmental liability does not apply: There are several exceptions for when environmental harm does not trigger liability:

- **Force majeure:** This general exception applies in any civil liability context. However, a stricter standard is applied when harm occurs in a strict liability context (Case Example 2).
- **Permit defence:** When the action has been done legally within the limits of a permit for research, science or rescue of the protected species, even if harm occurs, liability will not apply (Article 22, Law No. 5 Year 1990 on Conservation of Biodiversity and Its Habitat).
- **Self-defence:** Liability does not apply if harm resulted in a case of imminent threat or danger to human life (Article 22, Law No. 5 Year 1990 on Conservation of Biodiversity and Its Habitat).

3. WHAT TYPES OF PARTIES CAN BE INVOLVED IN THESE LEGAL CASES?

Liability litigation cases are brought to court by plaintiffs who make a claim that they have been harmed by a defendant and are entitled to remedies from them. There are often legal restrictions on who can serve as plaintiffs or defendants.

Who has the right to act as plaintiffs to claim remedies?

The right to bring forward a liability case, also known as legal standing, differs across countries. In some countries, only government agencies have the right to bring forward liability suits in the public interest. In others, individuals, communities and civil society groups can represent not only their own private rights (e.g., lost income), but also take legal action on behalf of the public interest (e.g., for the environment, for communities).

- **States as plaintiffs:** States' sovereignty over natural resources and their duty to protect the environment for present and future generations are established international principles acknowledged across UN Resolutions and now embedded in the Convention on Biological Diversity. These provide a basis for their legal standing to claim remedies when the resources and environment over which they have rights are harmed. Their rights to litigate in response to environment harm are also often reflected in national legislation.
- **Individual as plaintiffs:** The principles of access to environmental justice and right to judicial remedies, including redress and remedy to harm, are reflected in the 1992 Rio Declaration, 2016 Sustainable Development Goals, and Framework Principles of Human Right and the Environment. Consistent with this principle, the 2012 ASEAN Human Rights Declaration provides that "every person has the right to an effective and enforceable remedy, to be determined by a court or other competent authorities, for acts violating the rights granted to that person by the constitution or law." This right to remedies is also included in most national legislation, usually focused on individual and organisations' private rights, such as when livelihoods, private property, personal health, wellbeing and reputation are harmed.
- **Plaintiffs in Public Interest Litigation (PIL):** Third parties can sometimes act as plaintiffs working on behalf of a broader public interest, such as on behalf of an affected group that cannot access a legal system or afford to litigate, the public, or the environment itself. In some countries, only designated government agencies can act as plaintiffs in PIL cases. In others, citizens, communities and civil society groups have standing for PIL, although they may have to demonstrate a specific interest in the case or expertise on the topic.

Indonesia

The State, environmental civil society organisations, communities and individuals can claim remedies via liability litigation, although there are limits on the types of claims that each can make.

- **State as plaintiff:** The State is responsible for environmental management in Indonesia, defined as state obligation to protect and prevent environmental harm (Article 2, Environmental Management Law). The further application of this principle is the State duty to enforce the law including bringing legal action to those who harm the environment (Article 63, Environmental Management Law). Both central and local governments can bring civil litigation to claim remedies for environmental harm (Article 90, Environmental Management Law). The MoEF is the specific agency authorised to represent the State in environmental litigation, with cases handled by its Law Enforcement Directorate (*Ditjen Gakkum*). They have undertaken at least 31 cases since 2009, almost all involving forest and land fires. They have not yet litigated in cases involving other types of drivers of biodiversity loss, such as harm resulting from illegal wildlife trade, but the MoEF is actively looking for strategic cases. At the local level, the Provincial and Regent Environmental Agencies also have legal standing to litigate but are not yet known to have done so.

Additionally, the Public Prosecutor's Office is entitled to request remedies as part of its criminal prosecutions, acting on cases of criminal offences listed in the Environmental Management Law. Although the Office is primarily responsible for criminal penalties such as fines and imprisonment, restorative remedies are listed as an additional criminal penalty that can be imposed on corporations. To date, the Public Prosecutor's Office has used this legal option in several cases involving forest and land fires, illegal logging and illegal dumping of industrial waste. Wildlife crimes, however, are not listed as criminal offences in the Environmental Management Law and are regulated by Law No. 5 Year 1990 on Conservation of Biodiversity and Its Habitat (Conservation Law), which does not yet provide this kind of additional penalty.

- **Individuals as plaintiffs:** Individuals can bring claims for remedies in cases where they suffered personal harm, such as economic loss, property loss and personal injury. The individual can litigate individually, or collectively through class action (Article 91, Environmental Management Law in conjunction with Supreme Court Regulation No. 1 Year 2002 on Class Action). They can also litigate over environmental harm itself, requesting remedies that involve restorative actions, though they cannot make financial claims for harm to a public good (Case Example 3).

Indigenous Communities can also claim for harm related to their collective cultural loss, or other common goods resulting from environmental harm. This kind of legal standing has not been tried in environmental litigation seeking remedies but has been accepted in other contexts; in 2012, the Constitutional Court accepted a request for judicial review of forestry law, filed by a group of Indigenous People acting on behalf of the collective interests of Indigenous communities across the country.

Case Example 3: Class action against a state-owned forestry company

(Supreme Court Decision No. 1794 K/Pdt/2004, Mandalawangi Case)

In 2003, residents of Mandalasari Village in Garut, West Java filed a class action lawsuit against a state-owned forestry company. They stated that large-scale illegal logging by the company resulted in a landslide: 376 households, affecting 1,769 people, needed to be evacuated. The plaintiffs sought IDR 50 billion (approx. US\$3.4 million) in financial compensation for material damages, including loss of deceased family members, hospital bills, damage to their houses, agriculture, livestock, public facilities and potential income, as well as immaterial harm. The Supreme Court granted IDR 10 billion (approx. US\$675,500) in direct compensation to the plaintiffs, and further ordered that the defendant conduct restoration of the site. The court ordered that the restoration could be conducted by the defendants, or by the plaintiffs in line with the MoEF's Community Forest Guideline. The restoration cost that needed to be allocated by the defendants should not be less than IDR 20 billion (approx. US\$1.3 million). The money was managed by a restoration and execution team formed by the West Java Governor, though it is not known whether/how this was operationalised. The details of their claim are described in Case Example 11.

- **Public Interest Litigation (PIL):** Indonesian courts are receptive to PIL, granting standing to a range of plaintiffs to act on behalf of the public interest. This includes environmental civil society organisations, who can represent the environment in court and make claims for remedies to environmental harm (Case Example 4, Case Example 5), as well as citizens (citizen suits). Remedies are limited to injunctions and judicial reviews (discussed in Section 5), restorative actions, and monetary compensation to cover real existing expenses for dealing with the said environmental case only (e.g., cost to extinguish the fire as an immediate countermeasure) (Article 92, Environmental Management Law). In order to pursue this legal standing, the organisation should fulfil the following requirements:
 - Incorporated legal entity;
 - Organisational statute should clearly state that the aim of organisation is to protect the interest of the environment; and
 - Have been conducting its activities in accordance with its organisational statute for at least 2 years.

Case Example 4: Public Interest Litigation for illegal wildlife trade

(Padang Sidempuan Court Decision No. 9/Pdt.G/LH/2021/PN Psp, Walhi Vs Nuansa Alam Nusantara Ltd. case)

The first liability litigation in an illegal wildlife trade case was filed in 2021 by the environmental civil society organisation, Walhi (Friends of the Earth Indonesia), against Nuansa Alam Nusantara, Ltd., a corporation that ran a zoo in North Sumatra. Walhi argued that the zoo illegally kept a number of protected species, including the Critically Endangered Sumatran orangutan (*Pongo abelii*) and Komodo dragon (*Varanus komodoensis*). Walhi demanded that the company pay for the rehabilitation and release of the orangutan. They also requested that they finance additional patrols and scientific monitoring, as the restorative action to help restore the species population. Finally, they asked them to finance a symbolic conservation education event that described the harm caused to human wellbeing (e.g., intrinsic value, cultural value, etc). The claim is further described in Case Example 10. The claim was rejected at first instance and appeal court and is currently pending a Supreme Court decision. Even though the claim was rejected, the court accepted Walhi's legal standing in its filing of a civil lawsuit.

Case Example 5: Public Interest Litigation seeking to revoke a permit

(Supreme Court Decision No. 545 K/ TUN/LH/2019, Walhi Vs Governor of North Sumatra, Batang Toru Case)

In 2019, the civil society organisation Walhi (Friends of the Earth Indonesia) filed a PIL suit against the Governor of North Sumatra, requesting a revocation of the environmental permit that had allowed the development of a hydropower plant project in Batang Toru. Walhi argued that the development would destroy much of the ecosystem, home to the newly discovered, endemic Tapanuli orangutan (*Pongo tapanuliensis*). The lawsuit was rejected by the court on the grounds that the project proponent had sufficiently prepared the project design and mitigation plan to minimise its environmental impact. Even though the case was rejected, the court accepted Walhi's legal standing in its filing of an administrative lawsuit to seek an injunction.

Indonesian citizens have the right to file Citizen Lawsuits (CLS) in the public interest, although these can only be brought against the government for its action or inaction that has caused or could potentially cause environmental harm. Individuals can bring a CLS even if they do not necessarily suffer from direct personal damage (Supreme Court Guideline for Handling Environmental Cases).

A CLS can be filed if:

- The ground for the lawsuit is public interest and the neglect of a statutory obligation by the government;
- The defendant is the Government, state agency, or a private party carrying out government affairs;
- Prior notification of the case is sent to the defendants, with a copy sent to the Head of District Court, such to allow the defendant time to fulfil their statutory obligation; and
- The plaintiff is seeking a court order requiring that the government comply with statutory obligations, without seeking any monetary compensation.

Who can be a defendant and held legally liable for harming biodiversity?

In liability suits, the defendant is the person(s) considered responsible for causing the harm and from whom remedies are requested. Defendants are often individuals, but in some countries other entities with legal personality, such as companies or government agencies, may be held responsible ("corporate liability"). Organised criminal groups may also be liable in some countries, irrespective of their legal status, provided harm has been established and a criminal offence has been committed.

National legislation often articulates that, in cases where there are several defendants, liability may be distributed among the responsible parties:

- **Joint and several liability:** The plaintiff may seek the enforcement of the entire judgement against any one of the defendants responsible for the harm. After that, the liable defendant may seek contributions from the rest of defendants.
- **Several liability:** Each defendant is responsible for their contribution to the harm and nothing else. The plaintiff would have to seek enforcement against each defendant.

Indonesia

“Anybody” can be held liable for causing environmental harm, including a natural person and legal persons (i.e. corporations), whether in the form of a legal or non-legal entity (Article 1 number 32, Environmental Management Law). This can include organised criminal groups, which are categorised as non-legal entity corporations (General Attorney Regulation No. 28 Year 2014; The Supreme Court Regulation No. 13 Year 2016 Guideline on Handling Corporate Crime). To date, all MoEF liability cases have been against legal corporations. Organised criminal groups have only been addressed through criminal law procedure and not yet held liable for remedying harm.

Government agencies can also be defendants (Law 30 Year 2014 on State Administration), especially when there are government policies or conduct that cause harm. Traditionally, when the government is the defendant, remedies are in the form of a court order instructing them to do, not to do, or to stop doing something. However, this was recently expanded to include remedies in the form of monetary compensation for material harm (e.g., property, income) (Supreme Court Regulation No. 2 Year 2019 on Guideline for Handling Government Unlawful Acts Case).



Lady slipper orchid (*Paphiopedilum agusti*), a newly-described, likely Endangered orchid species from Central Java
Credit: D.Metusala

4. WHAT COURTS ARE INVOLVED IN THESE TYPES OF CASES?

Remedies for biodiversity harm may be sought in different types of courts, known as fora, with many countries having separate courts to deal with criminal, civil and administrative issues. The forum usually varies depending on legal systems (civil versus common law legal systems, or even mixed law systems), and is usually determined by domestic legislation and the type of harm that occurred. Several types of fora may also be used in the same country.

In many countries, civil courts have most commonly been used as the forum to request remedies. In some countries, administrative laws determine that government authorities oversee remedies for environmental harm, either requesting that defendants undertake specific remedial actions themselves or compensate the government for having taken remedial actions on their behalf. Some countries also allow criminal courts to add remedial actions to the criminal sentences.



Agricultural-forest fire in Palangkaraya, Central Kalimantan
Credit: R.Sulaiman/Norwegian Embassy

Indonesia

The court system consists of four courts that operate under the Supreme Court: General, Administrative, Religious, and Military Courts. Environmental cases are adjudicated by the General or Administrative Court, depending on the nature of the claim. Hierarchically, both the General Court and Administrative Court consist of the First Instance Courts at the district level, and the Appeal Court at the provincial level. At the highest level, the Supreme Court acts both as a court-of-cassation, serving to evaluate the application of the law without examining the facts in that specific case, and exceptionally as a court-of-review when new evidence emerges and the case merits re-evaluation. There are no specialised environmental courts in Indonesia, but environmental cases should be adjudicated by a panel of certified environmental judges, trained by the Supreme Court (or at least 1 certified judge as the head of the panel) (Supreme Court Decree No. 134 Year 2011 on Environmental Judges Certification System).

The Administrative Court is the competent forum for cases challenging the actions, inactions and decisions of government authorities. For cases involving requests for remedies to harm, the General Court is the competent forum. This forum can accept a range of types of cases: civil lawsuits seeking remedies, criminal prosecutions seeking to impose sanctions (fines, imprisonment), and civil cases that are filed alongside a criminal prosecution to be adjudicated together (Article 98, Criminal Procedure Code). This combined civil-criminal legal pathway can be more efficient and reduce burdens on the prosecutor and MoEF. However, via this pathway judges will only accept concrete and direct harm, reimbursing plaintiffs for costs they have incurred as a result of the harm (Article 99, Criminal Procedure Code). This is narrow compared to filing separate civil litigation. The criminal case setting is more rigid than civil law and has higher standards of proof.

Judicial procedures are ruled by an inquisitorial system: The plaintiff has a duty to provide evidence, but judges can also conduct their own investigation, and have competence to request or take any action to get additional evidence. During trial, judges may request that experts and relevant agencies give their opinions on the scope of harm and related costs, and may also summon additional experts. Judges' adjudication of environmental cases (criminal, civil, administrative) is governed by the Supreme Court Decree No. 36 Year 2013 on Supreme Court Guideline for Handling Environmental Cases. The guideline is currently being revised to reflect the recent issues judges face in adjudicating environmental cases.

The Endangered Komodo dragon (*Varanus komodoensis*) is the largest existing lizard species
Credit: S.Bugno



5. WHAT TYPES OF REMEDIES DOES THE LAW ALLOW?

There are three broad types of court orders that grant remedies to environmental harm and are often included in national legislation. Although plaintiffs may wish to claim many different types of remedies, the law usually places some restrictions on this. Notably, different types of plaintiffs can often claim different types of remedies; some are reserved for private individuals and civil society groups, while others may only be allowable in cases made by the government acting in the public interest.

Orders of injunction to stop ongoing harm

Plaintiffs may litigate to seek an injunction to require a party to undertake or to refrain from doing a specific act, and may be granted by a court or administrative body. Injunctions are normally issued as interim measures to avoid further environmental harm while the core subject of the matter is being resolved. These instruments are more commonly used in cases that involve development activities that may cause irreparable harm.

Indonesia

Orders seeking injunctions can be requested through litigation in civil courts (Case Example 6) or administrative courts (Case Example 7). This depends on the focus of the dispute: cases involving unlawful acts of private parties (e.g., companies, individuals) are tried in civil court while the cases challenging government's decisions or actions are tried in administrative court.

In civil cases, judges issue provisional decisions that respond to plaintiffs' injunction requests – prior to examining the main case (*putusan provisionil*, Article 180, Civil Procedural Code (HIR)). However, this kind of decision can only be executed after the head of the First Instance Court obtains a permit from the head of the Appeal Court. To date, most injunction requests in civil environmental cases have been rejected by the courts due to reluctance to provide injunctive relief prior to the defendant being found liable for harm (Case Example 6).

Case Example 6: Challenge to a civil case seeking injunctions (Supreme Court Decision No. 690 PK/Pdt/2018, MoEF Vs Surya Panen Subur Ltd.)

The Ministry filed a civil lawsuit against a palm oil plantation for the fire inside their concession area. The lawsuit requested two injunctions: First, they asked the court to order that the defendant refrain from agricultural activities on burned peatland, to avoid further harm while the case was being litigated. The court rejected this request on the grounds that the defendant's responsibility should first be established prior to issuing an injunction. The Ministry also requested that the defendant be prohibited from undertaking any actions to sell or transfer their assets (listed in the claim) while the case was being litigated. This injunction was rejected because the judges did not consider it urgent; since the case was widely publicised, the judges considered that it would be difficult for the defendant to sell or transfer their assets, as purchasing such assets would expose the buyers to legal risk.

Injunctions sought via the administrative courts have been more successful (Case Example 7). These are usually sought to postpone the implementation of a disputed administrative decision, such as the granting of a forest concession or a development project (*putusan penundaan*, Article 67, Administrative Court Law). They can also be used to challenge administrative agencies' day-to-day responsibilities (factual conduct), such as inaction to repair roads, failure to publish public information, or cutting trees as part of a city's maintenance (Law No. 30 Year 2014 on State Administration; Supreme Court Regulation No. 2 Year 2019 on Guideline for Handling Government Unlawful Act Cases). In these types of cases, injunctive relief does not typically involve the postponement of an administrative decision, but rather a correction of how the agency operationalises its responsibilities, such as temporarily redirecting a traffic route until a road is repaired.

Case Example 7: Administrative court litigation to stop water discharge pollution

(Supreme Court Decision No. 2/PK/TUN/LH/2018, Walhi et al. Vs Sumedang Regent et al.)

Walhi sued Sumedang Regent in administrative court, challenging their issuance of wastewater discharge permits for four textile companies. Walhi demanded that the permits be revoked and, while the case was being evaluated by the court, requested an injunction in the form of postponement of permit implementation. The first instance court granted this request, which was upheld in the appeal court. Walhi won the case in a final, binding decision.

Orders to correct, update or enforce a policy and continuing mandamus

Judicial orders (or mandamus in common law countries) are sometimes employed as a means of directing government agencies to comply with statutory obligations. For example, judicial reviews can order government agencies to review and update or revise a policy to ensure it complies with statutory requirements. PIL suits can also seek to order the State to implement a law that they failed to operationalise, or to meet a legal commitment that the State was failing to meet. Continuing mandamus are used by courts in common law countries to ensure compliance and enforcement of its directions within a stipulated period of time while the matter remains pending until complete execution.

Indonesia

Orders to correct, update or enforce a policy or government obligation are typically sought via PIL brought by civil society organisations, or by citizens using a Citizen Lawsuit (Case Example 8). Typical orders sought are:

- Orders for the government to issue a subsidiary regulation, as mandated by higher laws, such as a provincial zoning regulation that a national law mandates provinces to develop;
- Orders to issue a policy about a particular subject, such as a standard operating procedure for how to respond to oil spills, a restoration roadmap for a site, or a decree on designation of water catchment area);

- Orders to conduct law enforcement against an environmental offender. This can also include an order to review and/or revoke the permits of companies that allegedly harmed the environment, and to conduct supervision of certain company's actions; and
- Orders to conduct certain actions, such as repair public facilities, provide free health-care to forest fire victims, and announce whether a company has been compliant with environmental standards.

The administrative courts have recently assumed jurisdiction over cases of this nature (Supreme Court Regulation No. 2 Year 2019 on Guideline for Handling Government Unlawful Act Cases). Execution of their orders relies heavily on the good intent of the government to obey court decisions. If the public officials disobey the order, the court will submit a complaint to the higher rank officials (e.g., if a Minister disobeys the court order, a complaint will be submitted to the President). The law does not provide a report-back mechanism or time limit for public officials to implement the court order. There is also no mechanism on the consequences if the court order is neglected even after submitting a further complaint.

Case Example 8: Citizen lawsuit to order government action

(Balikpapan Court Decision No. 99/Pdt.G/2019/PN Bpp, Citizen Lawsuit Pradarma Rupang et al/ Vs Governor of East Kalimantan)

In 2019, a group of citizens sued the Governor of East Kalimantan and several ministries for not having developed sufficient policies and actions to deal with the Pertamina Refinery Ltd oil spill incident that had harmed the Balikpapan coastal area. The plaintiffs argued that the State's inaction was careless and led to avoidable casualties, and that the laws mandated the government to design and issue implementing regulations and policies that would have dealt with this type of incident. The court granted some of the plaintiffs' demands, ordering the defendants to draft and issue new legislation, including the West Kalimantan Regulation on Coastal and Small Islands Spatial Planning, an Environmental Information System that included an early warning system, and a Standard Operating Procedure on Countermeasures for Oil Spill Emergencies at Sea.

Orders to remedy the harm that has already occurred

Once harm has already occurred, legal orders for injunctions or mandamus are often inadequate. There is also a need for those who have caused harm to be held liable for providing remedies. The types of remedies that are allowable vary by country, but can involve a range of financial and non-financial remedies. In some countries, appropriate remedies are described and fixed by law, though it is more common that remedies are decided by courts according to the nature of the offence and the plaintiff's argument.

Remedies are often thought of in terms of financial compensation to individuals, to help correct the injuries experienced because of the environmental harm caused by another party. Indeed, remedies often involve monetary transfers to parties who have suffered an

economic loss, such as having their property destroyed or livelihoods affected. In many countries, much of the environment is a public good entrusted to the State, and when it is harmed, the State can claim financial compensation for harm such as lost tax revenue and the lost market value of valuable resources. Remedies can also involve compensation for interim loss, a calculation of the lost monetary value of ecosystem goods and services incurred from the time the harm happened until the time that the harm was remedied.

Courts may also request that liable defendants undertake actions to restore the harm they caused, or to pay for a competent authority to undertake this restoration on their behalf. This may involve actions such as clean-up of pollutants, care for injured flora and fauna, habitat restoration, and actions to protect harmed species. Such remedial actions are often prioritised in legislation: in many countries (e.g., Indonesia, Cambodia, Philippines, Mexico, Brazil, Mozambique, Georgia, European Union) the law states that defendants should first be ordered to restore the harmed environment, and only when restoration is not possible should monetary compensation be claimed.

However, both monetary compensation and restoration actions are often insufficient to make the victim “whole”. This is particularly true when harm affects relational values such as sense of place, culture, and wellbeing. These values are not easily remedied using monetary payments, and so this category of remedies covers a wide range of non-financial remedies such as apologies, support for educational measures, and orders for defendants to participate in social work in the community.

Because legislation often does not precisely state how remedies should be determined, this leaves both a lot of discretion, and potentially confusion about how to best approach remedies. There are several different approaches that can potentially be used: Some legal remedies focus on the monetary value of natural resources, whereas others focus more on remedial actions to heal the harm, such as restoration orders and non-financial remedies like public apologies (Fig. 3).

	Approach	Example remedies
Monetary value of the harmed wildlife	Market value	• \$100-\$2,000 for a pet animal on the black market
	Price lists	• \$300 per affected animal
	Natural capital value	• \$100(?) for seed dispersal services • \$11,000(?) for reduced genetic stock • \$8,000(?) for harm to cultural services
Focus on the actions needed to heal the harm caused	Remedial actions	• Rescue, care, rehabilitation and reintroduction of the harmed animal (cost: \$13,000) • Public apology and explanation of the harm caused by wildlife trade • \$5,000 compensation to local community for reduced ecotourism

Figure 3. Overview of four approaches to determining remedies, with an example of wildlife that has been illegally traded.³

- **Market value:** This approach equates market sale prices, usually on the black market, to remedies – assuming that the value of biodiversity is only what it can bring in the market. Although familiar, this outdated approach is narrow, incomplete, and does little to remedy harm.
- **Price lists:** Some countries have developed price lists, with a monetary value for each species to be paid by the party who harms it. Although these approaches are simple and familiar, they mistakenly conflate monetary fines with remedies. Paying a fixed amount does not help to remedy harm and may not meaningfully represent values for biodiversity.
- **Natural capital value:** This approach, known as natural capital accounting and total economic valuation, quantifies the amounts and monetary value of the ecosystem goods and services that are harmed in a case (e.g., pollination services, carbon storage). The approach can be thorough and may be possible in some contexts, but there is not enough relevant data available for most species, and the process is very demanding on plaintiffs, defendants, and courts.
- **Remedial actions:** The other main approach involves identifying the actions needed to remedy the harm that occurred in a case. This approach focuses on identifying meaningful remedial actions that respond to each type of harm, and then detailing the processes and budgets needed to undertake those actions. For example, deforestation of 5km² of protected forest is likely to harm many ecosystem goods and services such as carbon stock, biodiversity, timber stock, ecotourism, and human wellbeing. However, it is not necessary to quantify and place a monetary value onto each of those goods and services. Instead, it is important to consider what actions are needed to remedy the loss of 5km² of forest. These might include:
 - Actions to reduce/stop ongoing harm (e.g., injunctions);
 - Actions to remedy harm to nature (e.g., reforestation, animal rehabilitation, clean-up);
 - Actions to remedy harm to human wellbeing (e.g., educational programme, apology); and
 - Actions to compensate for financial harm (e.g., to income, property, tax).

Identifying which remedial actions are appropriate depends on the scale and types of harm, the identity of the plaintiffs, and local legislation. Scientific experts, who have technical knowledge of the affected site and species, can help to identify appropriate remedies.

Indonesia

Indonesia has seen a growing number of recent civil lawsuits claiming remedies for harm that already occurred. These cases are bound by the general requirements that remedies be reasonable, adequate, and clearly redress the harm proved in the case (Articles 1371 and 1372, Civil Code; *Supreme Court Decision No. 582 K/Sip/1973*). There are also specific legal rules about the remedies in cases brought by the State, and those brought by civil society groups, communities and individuals.

Rules when the State is the plaintiff

When civil liability cases are litigated by the State, with the MoEF acting as plaintiff, they are required to follow a ministerial regulation when forming their court claims for remedies, also known as damage claims (MoEF Regulation No. 7 Year 2014 on Environmental Damage; Case Example 9). The regulation consists of ten legally binding provisions about the scope of environmental claims, the authority to conduct calculation of environmental harm and claims, the mechanisms for paying compensation, and the use of in-court and out-of-court settlement. The regulation also provides a template designating court experts (Annex I), a guideline on calculation of environmental claims that includes default values, formulas and case examples (Annex II), and a template for establishing an out-of-court settlement (Annex III).

The regulation states that there are four elements to developing claims for remedies (damage claims):

- **Monetary compensation for non-performance of waste or emission management.** In pollution cases, liability for remedies can involve monetary compensation to the State for the defendant's non-performance. These calculations are based on one of the following:
 - A default monetary amount per unit of pollution, stated in the regulation for different types of pollutants, and then multiplied by the number of pollution units identified during a field inspection;
 - The operational costs of treating the waste. These may be based on the costs of the same or similar waste treatment from the same or similar industries; or
 - The full amount that the defendant should have spent, if they had conducted a proper waste or emission treatment or management.
- **Monetary compensation for the cost for environmental litigation.** Compensation for the costs that the government spent in filing and completing environmental litigation for the case (e.g., lab analysis, hiring scientific experts, monitoring implementation of the remedies), though not for legal fees. The values for these costs should be based on actual expenses (i.e., receipts), or established standard costs to conduct specific government activities, many of which are stated in the Ministry Annual Standard Cost.
- **Reimbursement for costs of undertaking countermeasure and restoration actions.** The state can claim reimbursement for the countermeasures that government agencies took in immediate response to the environmental harm, and should be reimbursed based on actual spending (i.e., receipts). For restoration costs, government agencies can claim not only reimbursement for past activities, but also monetary payments needed to allow them to conduct future remedial activities. Importantly, the regulation does not limit the types of remedial actions that can be undertaken, or predetermine how the cost of undertaking them should be calculated.
- **Monetary compensation for ecological loss.** The government can also request monetary compensation for ecological loss that occurred (i.e., environmental loss that cannot be

remedied), based on the scale and duration of harm. The regulation includes conflicting guidance on how to calculate this: One possible approach uses a total economic valuation, identifying all of the ecosystem goods and services harmed by the defendant and identifying their economic value, and the other uses the cost of undertaken restoration (e.g., Chapter II vs. Chapter III, Annex II). Meanwhile, MoEF cases have relied on the default values to calculate their claims; for example, the default value for loss of biodiversity is IDR 2,700,000 (approx. US\$183) per hectare of affected area. It is not clear from where these default values were developed.

Although the regulation provides a framework for developing remedies, its Annexes also provide some conflicting information. For example, the methods and proposed formulas for calculating harm (Chapter III of Annex II) are not the same methods employed in the example calculations also provided later in the regulation (Chapter IV of Annex II)

Case Example 9: Forming a claim for remedies in a forest/land fire case

(Supreme Court Decision No. 1095/Pdt/2018, MoEF Vs Jatim Jaya Perkasa Ltd.)

The government successfully litigated against a palm oil company that had caused environmental harm by using fire in their agricultural concession area. The MoEF developed a claim base that included monetary compensation for:

- **Ecological loss:** The loss of 1,000 hectares of peatland degraded the ecosystem services it provided, such as water reservoir function. The MoEF calculated the amount of compensation due for this loss by determining how much water the peatland had held, and the cost of building a water reservoir with the same capacity, and the cost to maintain the reservoir for 15 years. The Ministry used the default value stated in the guideline of IDR 100,000 (approx. US\$6.8) per metre square of construction. The MoEF also calculated the loss of services such as erosion control, nutrient recycling, carbon sink and waste decomposer based on formulas provided in the regulation. Compensation for losses to biodiversity, genetic resources and carbon stocks were calculated based on default values per hectare of area affected.
- **Economic loss:** Compensation for economic loss to the State resulting from reduced land productivity. This was calculated by determining the reduction in the number of agriculturally productive years of the land as a result of the fire, and the foregone profits. This category of harm is not listed in the legislation, and could be categorised as a form of ecological loss.
- **Environmental Restoration:** The cost of restoring the harmed site, including activities such as cost for buying, transporting and spreading the compost to restore the burned peatland. There was also a compensation claim for the costs of restoring ecological functions such as nutrient recycling, waste decomposer, biodiversity, genetic resource and carbon stocks. It was unclear in the case what actions would be conducted to enable this restoration, and costs were determined not based on a restoration plan, but rather from default values stated in the MoEF Regulation.

Rules when non-State actors are plaintiffs

There are no comparable rules for developing remedy claims when the plaintiff is a civil society organisation, community or individual. Plaintiffs can develop a wide range of claims for remedies using different approaches, subject to their ability to argue their case in court. However, for civil society organisations (Article 92, Environmental Management Law) remedies are limited to ordering that the defendant undertake or fund restorative actions (e.g., clean-up, reforestation), and/or pay monetary compensation that covers the organisations' existing out-of-pocket expenses (e.g., cost to rescue animals), while individual(s) (Article 87, Environmental Management Law; Article 1365, Civil Code) can only seek remedies for economic losses (e.g., impacts on livelihoods). Unlike the MoEF, these plaintiffs cannot seek monetary compensation for harm to public goods (Article 92 Paragraph 2, Environmental Management Law). Over the past 20 years, civil society plaintiffs' claims for remedies have become increasingly substantial, exploring a broader range of remedies, including public apologies, habitat restoration, species conservation actions, and animal rehabilitation (Case Example 10).

Case Example 10: Forming a claim for remedies in an illegal wildlife trade case (First Instance Court Decision No. 9/Pdt.G/ LH/2021/PN Psp, Walhi Vs Nuansa Alam Nusantara Ltd.)

This was the first liability lawsuit litigated in Indonesia in response to illegal wildlife trade. The environmental civil society group Walhi (Friends of the Earth Indonesia) demanded that Nuansa Alam Nusantara Ltd, the operator of an illegal zoo, provide remedies for the environmental harm it caused by illegally possessing protected species. Although the case involved harm to multiple species, the claim focused principally on the harm to one Sumatran orangutan (*Pongo abelii*). The Walhi claim for remedies covered three main types of environmental harm:

- **Harm to individual animals.** This was calculated based on the average costs, documented in the academic literature, of undertaking care and reintroduction of one Sumatran orangutan into the wild in Indonesia.
- **Harm to species survival and other ecosystem services.** This was calculated based on the estimated costs of increasing the wild population of Sumatran orangutans by one individual, to replace the individual that had been removed by the zoo. This was based on the government-reported costs of undertaking habitat enforcement patrolling and scientific monitoring of orangutan habitat in Indonesia. The defendant was asked to contribute 10% toward this cost to support increased patrolling and monitoring to help the population to recover over a 5-year period (the age of the harmed orangutan).
- **Harm to broader human wellbeing related to value on the protected species.** The defendant was asked to provide financial resources to support an educational exhibit about the types of harm caused in this case. The cost was based on the market procurement cost of undertaking the proposed actions. Additionally, the defendant was asked to provide a public apology in a local and national newspaper, explaining the harm they had caused.

Since environmental civil society organisations cannot claim monetary payment in a liability suit, Walhi emphasised that remedies should come in the form of action by the defendant, or that the cost should be provided to the relevant government agency to undertake the remedial actions. The lawsuit was rejected at first instance and appeal level, but is currently pending review by the Supreme Court.

In cases of individuals as plaintiffs, the harm is usually about private economic interests, and is calculated in the form of monetary payment. The way to calculate this harm is by using market price, forgone income, and other economic valuation methods (Case Example 11).

Case Example 11: Forming a claim for remedies in class action case

(Supreme Court Decision No. 1794 K/Pdt/2004, Mandalawangi Case)

The plaintiffs, a group of community members from Mandalawangi, requested monetary compensation for the material and immaterial harm caused by a landslide that resulted from illegal logging. The claim for remedies included:

▪ **Material Harm**

- Loss and hospitalisation of family members: These were calculated by using an estimated value of IDR 100 million (approx. US\$6,800) for each lost family member, but there was no explanation of how this figure was reached.
- Harm to the house: This was calculated using estimated value of each house based on the level of the harm.
- Harm to local livestock production: Calculated based on the market price for sheep and the number of animals owned by each household.
- Harm to public facilities: This was calculated on the estimated value to build the facilities with the total amount of IDR 1.7 billion (approx. US\$115,000)
- Loss of potential income: This was calculated by the number of people not able to work due to the incident and the standard daily wage. Loss of educational attainment was based on a default value per student, set at different amounts for elementary, junior high and senior high students.

- **Immaterial Harm:** Calculated using an approximate value of IDR 20 billion (approx. US\$1.4 million) without any given reason.

Rafflesia arnoldii flower



Judicial discretion

There is no particular guidance on identifying remedies and developing claims for judges in Indonesia, as MoEF Regulation No. 7 Year 2014 on Environmental Harm is only legally binding on the MoEF. Judges have absolute discretion to determine the remedies within the limits of what the parties have requested. Decisions about plaintiffs' claims for remedies to harm in General Court are decided by a panel of three judges, which should be headed by an environmentally certified judge. A growing body of cases (Case Example 11) and research (Box 5) in Indonesia is providing insights into some judges' views on allowable remedies. These suggest, for example, that judges are cautious about immaterial harm, which has sometimes been perceived as too abstract or subjective. However, courts have also recognised that environmental harm has many dimensions, and have provided a wide range of remedies.

Box 5: Interviews with Indonesian judges about remedies¹²

Understanding on judges' views about remedies to environmental harm typically comes from their verdicts. Additionally, a 2021 study interviewed 32 judges from across Indonesia to understand their views about different types of remedies. They were presented with a hypothetical case about the illegal trade of two tigers (*Panthera tigris*): one animal killed for its skin, and one young live animal that was rescued. Judges were asked whether the defendant in that case could be held liable for providing remedies. They all agreed remedies were appropriate. The study then asked the judges about whether judges in their jurisdiction would be likely to accept the following remedies. All of these remedies are legally allowed in Indonesian law, but are not all commonly used.

Table 2: Indonesian judges' perceptions of eleven different possible remedies

Proposed remedial action	Percent of judges that would allow this remedy
Cost of rehabilitation and release for the rescued live tiger	96.9%
Cost of long-term captive care of the rescued live tiger	68.8%
Cost for the plaintiff to prepare the legal case (e.g., field visits, experts)	53.1%
Cost of transporting and/or destroying the tiger skin	75.0%
Cost of taking actions to increase the wild tiger population (to replace the tigers removed by the illegal trader)	62.5%
Cost of increasing tiger habitat monitoring	43.8%
Cost of conducting necessary conservation research	46.9%
Ordering defendant to apologise for the harm they caused	87.5%
Ordering defendant to undertake social work	78.1%
Compensation for economic losses to wildlife ecotourism	62.5%
Cost of undertaking cultural activities (linked to wildlife conservation)	62.5%

Execution of remedies

Once a court issues a verdict in a case, it may then play a role in helping to ensure that the remedies it ordered are fully and effectively executed. A court may appoint a commission or special observer to periodically report back to the court on progress. In some jurisdictions, though, oversight may have to be exercised in more innovative ways. Some common law countries refer to this oversight authority as a “writ of continuing mandamus”. Civil law countries generally have similar judicial power to ensure court orders are carried out. Other countries consider such authority to be inherent in the judicial power to issue remedial orders. However, in some countries courts lack the authority to monitor implementation of their orders and, if a remedy is not implemented, a new proceeding may have to be commenced.

In some countries, ensuring meaningful execution of remedies often involves the use of a specific environmental fund. This is a fund where compensation may be disbursed, especially in cases where the State was the plaintiff. Money can then be directed towards the ordered remedial actions or, at least, to conservation measures within the same jurisdiction. In countries where these types of funds do not exist, money is usually disbursed in the general budget and there is a risk that the remedies will not be executed.

Indonesia

The execution of civil case verdicts is the responsibility of the head of the First District Court, and follows the standard guideline of execution in ordinary civil cases. There are two types of remedial orders the court can execute:

- Order to pay a certain amount of money (Article 196, *Herzien Inlandsch Reglement*; Article 208, *Rechtreglement voor de Buitengewesten*, both found within the Civil Procedural Law).
- Order to undertake a specific remedial action (e.g., to clear a plot of land, undertake habitat restoration) (Article 10033, *Reglement op de Rechtsvordering*; Article 200(1), *Herzien Inlandsch Reglement*; Article 218(2), *Rechtreglement voor de Buitengewesten*, both found within the Civil Procedural Law). If the defendant does not, or does not have the capability to undertake the action voluntarily, this can be changed into an order to pay some amount of money equivalent to the cost of undertaking said action (Article 200, *Herzien Inlandsch Reglement*; Article 215, *Rechtreglement voor de Buitengewesten*, both found within the Civil Procedural Law).

Execution procedure

In principle, parties shall obey court orders voluntarily, or the court can use necessary force to enforce the decision. This is the authority of the Head of District Court, with the assistance of the court's bailiff and registrar. The court can also request assistance from the police to conduct the forced-execution (Guideline on Execution at District Court issued by Supreme Court Directorate General of General Court in 2019), which involves several steps: The court will summon the party to the court and send a warning (*aanmaning*) to the losing party ordering them to obey the court decision. If the warning is ignored, the court can confiscate the losing party's assets and put them on auction, with monies used to pay compensation due and undertake any actions listed in the court order.

Distribution of monies awarded

In the case of litigation where the MoEF is the plaintiff, compensation from environmental litigation is categorised as non-tax state revenue that should be transferred to the State Treasury (Government Regulation No. 44 Year 2014 on Types and Tariff for Non-Tax State Revenue Applicable to The Ministry of Environment). This then grants the Ministry of Finance (MoF) the authority to allocate the money. The MoEF must send a request to the MoF to access the funds for use in undertaking remedial actions. There are several obstacles, however, such as the limit of allocated budget for the MoEF in each fiscal year, and a 1-year time horizon during which all funds must be spent or forfeited. There is ongoing discussion about how to design a law and policy that will allow compensation monies to go into the Indonesia Environmental Fund (IEF/BPDLH) so that it is more easily accessible for restoration.

In the case of litigation by an environmental civil society organisation, the plaintiffs can only receive monetary compensation to cover their out-of-pocket expenses. If a civil society plaintiff requested remedies in the form of remedial actions, there is currently no clear regulation on how to ensure remedies are undertaken. Therefore, claims from civil society plaintiffs have used several measures to help ensure execution of court orders. For example, claims have included clauses about how the remedial actions should be undertaken; the obligation to engage competent institutions and involve the public in carrying out the remedial actions, and the need for recovered monies to go to the authorised agency to enable specific remedial actions (Case Example 9).

The Supreme Court is currently revising its guideline on the execution of environmental court orders (Supreme Court Guideline on Environmental Cases Handling), which will be issued as a Supreme Court Regulation with greater weight and detail.

Non-execution of court orders

In the instance of a court order that cannot be executed, such as when the losing party does not have any assets left to meet its obligations, the court can declare its own order as non-executable, ending the case. However, the plaintiff can challenge this in the Supreme Court. Importantly, the rules heavily restrict the conditions under which cases can be ruled non-executable (Guideline on Execution at District Court issued by Supreme Court Directorate General of General Court). The Supreme Court will soon be tasked to monitor and supervise the execution of environmental court decisions that encounter impediments through a special appointed team (revised Supreme Court Guideline for Handling Environmental Cases).

Coral reef



6. WHAT ARE THE CHALLENGES AND OPPORTUNITIES IN INDONESIA?

Indonesia has comparatively advanced cases on liability litigation for environmental harm, with positive verdicts ordering remedial actions. This reflects not only a strong legal framework, but also indicates engagement from government, judges and civil society. The MoEF has a demonstrated interest in liability and restoration-oriented approaches, having used them in forest fire, illegal logging and pollution cases, and the MoEF has now expressed interest in using the approach in other contexts, such as to address illegal wildlife trade. There is clear scope to strengthen legislation and practice and for lesson-learning from the existing experience. This section identifies key challenges and opportunities to better operationalise environmental liabilities in Indonesia.

Challenges

Challenges of collecting compensation from defendants

Liability suits typically involve orders that defendants pay money to compensate the plaintiffs or to fund environmental remedies. However, even in cases of positive court verdicts, courts have struggled to ensure these payments are made. Indeed, most of the successful civil liability cases led by the MoEF have not yet been executed. Notably, defendants do not have resources, or claim not to have enough money to meet their obligations.

Collection of compensation could be strengthened through the establishment of time-bound payment schemes within case claims and court verdicts, and improvements in court monitoring. Moreover, MoEF plaintiffs could work with the government's Financial Transaction Report and Analysis Center to track defendants' assets to evaluate their actual ability to pay. Where needed, courts should employ collateral confiscation to ensure defendants meet their obligations. In cases of non-compliance the confiscated assets could be sold to pay the compensation.

Challenge of executing on-the-ground remedies

Even where compensation funds are collected from liable defendants, courts have struggled to execute on-the-ground remedies, such as restoration of harmed habitats. Cases have often been too general or unclear about the types of remedies they request, which makes them difficult to execute and monitor. Ambiguity presents particular challenges for Courts that are unfamiliar with environmental issues and executing orders that involve complex, long-term interventions such as reforestation. Moreover, even where funds are collected, it can be challenging to direct these to on-the-ground actions. Notably, in cases litigated by the MoEF, funds are directed to the State Treasury, and the MoEF must then undertake a time-consuming process to access the funds.

Execution could be improved if both plaintiff requests and court verdicts were to provide specific, time-bound action plans, to help ensure that remedies can be monitored and evaluated. The publication of the court orders, including full remedial action plans, could also increase transparency and accountability. Additionally, funds collected on behalf of the MoEF could be directly paid into the Indonesia Environment Fund (IEF), instead of to the general State Treasury. The IEF is a new MoEF agency charged with managing all environmental related funds, and the MoF is currently preparing the policy and regulation that will allow it to accept monies in liability cases, so that funds can be more effectively assessed for on-the-ground remedial actions.

Opportunities

Opportunity for strategic litigation to address drivers of biodiversity loss

Plaintiffs have limited resources to litigate, and so need to prioritise the most strategic cases that address key drivers of biodiversity and can catalyse systemic changes. Future priority cases may involve:

- **Corporate biodiversity liabilities:** Cases that involve harm driven by commodity chains and investments where the links among actors have been historically overlooked. There is rapidly growing interest in investor disclosure and biodiversity-related liabilities, which litigation can help to reveal (CBD 2022), driving broader changes in corporate behaviour and investments.
- **Large-scale harm:** Cases that cause large-scale harm, such as to large areas of important habitat and illegal wildlife trade cases involving large numbers of multiple protected species.
- **Threatened species:** Cases involving species that plaintiffs consider particularly important, such as those listed on protected species lists, identified as threatened by the IUCN Red List, or that are considered economically important (e.g., important to livelihoods).
- **“High-level” defendants:** Cases involving corporate entities, organised crime syndicates and/or government collusion. We can see this already in the MoEF litigation strategy around land forests, where they have targeted corporations causing large-scale harm. Where small-scale actors are implicated in litigation, this is likely to be as part of a broader action against organised crime, where the defendants are held in joint and several liability based on their contribution to the harm. This has yet to be attempted.
- **Sensitive species:** Cases where harm has affected particularly sensitive species that require targeted specific interventions to help ensure their conservation.

Opportunity to establish “standard criteria” thresholds for biodiversity

In most cases, defendants can only be held legally liable if the harm they caused exceeded one of the “standard criteria” threshold. These are already established for some types of harm (e.g., pollution, fires, harm to coral reefs, harm to mangrove forests). There is now an opportunity to establish new “standard criteria” that will better address harm to biodiversity – notably harm to threatened species (Box 6). The law already allows for the

development of new thresholds based on the latest science and expert opinion (Article 21 Paragraph (3) Environmental Management Law, revised Supreme Court Guideline for Handling Environmental Cases), although this is yet to be fully tested in court.

Box 6: Possible “standard criteria” for harm to threatened species

There are already several established standards that could be used to establish “standard criteria” for evaluating when harm to a species can be legally considered harmful enough to trigger a defendant’s liability.

- **Conservation status:** A species’ conservation status is a science-based evaluation that determines how likely it is to become extinct in the near future. There are various assessment systems used around the world but these consistently identify those species that are at greatest threat and require particular protection from habitat destruction and human harvest. Cases of harm to species in these categories could be considered a trigger for liability:
 - Indonesia’s protected species status (Government Regulation No. 7 Year 1999; MoEF Regulation No. 20 Year 2018; MoEF Regulation No. 92 Year 2018; MoEF Regulation No. 106 Year 2018).
 - Convention on International Trade of Endangered Species of Fauna and Flora (CITES) Appendix I species, for which all international commercial trade is banned.
 - IUCN Red List Vulnerable, Endangered and Critically Endangered categories, used to designate species that are threatened with extinction.

- **Harvest quotas:** Legal harvest quotas could be used to establish liability thresholds. When someone exceeds the legal quota threshold, they cause harm beyond what the authorities had designated as legal and sustainable. This approach has parallels to emission standards, which in many countries set thresholds on acceptable maximum amounts of pollution.

Opportunity to make greater use of public prosecutors

The Public Prosecutor’s Office is entitled to request remedies within their existing criminal prosecution as an additional criminal sanction. This strategy has been used in several environmental cases, in which prosecutor indicted a corporation not only with a fine, but also with an order to provide restorative remedies (e.g., *Court Decision No. 228/Pid.Sus/2013/PN.Plw*; *Court Decision No. 113/Pid.B/LH/2016/PN. Pwk*; *Court Decision No. 37/Pid.Sus-LH/2018/PN Sak*). In this case, The MoEF does not need to file a separate lawsuit, which saves resources. However, this approach can only be used in cases of criminal offences that are listed in the Environmental Management Law, which excludes wildlife crimes. There is an opportunity to expand Indonesia’s Conservation Law to match the Environmental Management Law, to ensure that the Public Prosecutor's Office can also request remedies in cases of wildlife offences. There is an opportunity for greater collaboration with the Prosecutor’s Office to pursue these types of claims within criminal cases.

Opportunities to revise related law and regulations

Indonesia is currently undergoing two important legal revisions, where environmental liability provisions could be integrated to facilitate future litigation.

Law No. 5 Year 1990 on Conservation of Biodiversity and Its Habitat: The country's key piece of biodiversity legislation is currently undergoing revision in Parliament. The law does not include liability provisions or provide an instrument for remedies, although this could be addressed during the current revision period. Provisions could include:

- Civil liability provision to hold offenders liable for remedies to harm to biodiversity (as exists in the Environmental Management Law).
- Allowance for remedial actions to be included as an additional penalty under criminal law provision.
- Establishment of “standard criteria” thresholds for biodiversity, to clarify when harm to biodiversity triggers offenders’ liability.

MoEF Regulation No. 7 Year 2014 on Environmental Harm. The country’s main environmental liability law is currently being revised, and could be improved by:

- Providing more detailed guidance on how to evaluate environmental harm and identify possible remedies, rather than using default values for all cases;
- Providing greater recognition for the diverse types of values that can be harmed, and providing remedies through liability litigation – to better align with the latest science; and
- Providing greater recognition of harm to biodiversity and related remedies, including harm to specific species and to individual plants and animals.

Opportunity to strengthen cases and verdicts with specific remedy plans

The upcoming, revised Supreme Court Guideline for Handling Environmental Cases creates opportunities to strengthen the quality of environmental liability cases and verdicts. Although Indonesian courts have been progressive in granting different types of remedies, they have rarely articulated the specific remedies expected from the defendant, which makes it difficult to evaluate, operationalise and monitor verdicts. The revised Supreme Court Guideline will be binding and include instructions on executing court orders, including the requirement that government claims and verdicts both include restoration plans. In cases where the defendants undertake remedial actions themselves, they must gain government agency approval for their restoration plans. This creates the opportunity to develop more specific, science-based, step-by-step action plans, including habitat restoration plans, species action plans, animal care/rehabilitation plans and payment schedules that include indicators of progress and timelines.

REFERENCES

1. (UK) UK Government. 2019. Illegal Wildlife Trade Conference: London, UK, 11–12 October 2018. <https://www.gov.uk/government/topical-events/london-conference-on-the-illegal-wildlife-trade2018>
2. Wilson, L., & Boratto, R. 2020. Conservation, wildlife crime, and tough-on-crime policies: Lessons from the criminological literature. *Biological Conservation* 251:108810. <https://doi.org/10.1016/j.biocon.2020.108810>
3. Phelps, J., Fajrini, R., Nagara, G., Saputra, R., Nugraha, T.P. Jones, C.A., et al. 2021. Pioneering civil lawsuits for harm to threatened species: A guide to making claims with examples from Indonesia. *Lancaster Environment Centre, Auriga Nusantara, Indonesian Institute of Sciences*. URL: https://auriga.or.id/report/download/en/report/73/pioneering_civil_lawsuits_for_harm_to_threatened_species_en.pdf
4. Jones, C.A., Pendergrass, J., Broderick, J., Phelps, J. 2015. Tropical conservation and liability for environmental harm. *Environmental Law Review* 45:11032-11050. URL: <https://www.eli.org/sites/default/files/elr/featuredarticles/45%2011032.pdf>
5. Phelps, J., Aravind, S., Cheyne, S., Dabrowski Pedrini, I., Fajrini, R., Jones, C.A., Lees, A.C., Mance, A., Nagara, G., Nugraha, T.P., Pendergrass, J., Purnamasari, U., Rodriguez, M., Saputra, R., Sharp, S.P., Sokolowki, A., Webb, E.L. 2021a. Environmental liability litigation could remedy biodiversity loss. *Conservation Letters* 14:e12821.
6. Phelps, J., Fajrini, R., Nagara, G., Sputra, R., Nugraha, T.P., Jones, C.A. 2021b. Policy Brief: Civil lawsuits - A novel response to illegal wildlife trade. URL: https://auriga.or.id/report/download/en/report/74/civil_lawsuits_a_novel_response_to_illegal_wildlife_trade_en.pdf
7. Young, H. S., McCauley, D. J., Galetti, M., Dirzo, R. 2016. Patterns, causes, and consequences of Anthropocene defaunation. *Annual Review of Ecology, Evolution, Systematics* 47:333-358.
8. Sherman, J., Voight, M., Ancrenaz, M., Wich, S. A., Qomariah, I. N., Lyman, E., Massingham, E., Meijaard E. 2022. Orangutan killing and trade in Indonesia: Wildlife crime, enforcement, and deterrence patterns. *Biological Conservation* 276:109744. URL: <https://www.sciencedirect.com/science/article/pii/S000632072200297X>
9. Ash, N., Notarbartolo di Sciarra, B., Sharma, N., Glaser, S., Kelly M., Cremona, P. 2017. Analysis of the environmental impacts of illegal trade in wildlife. United Nations Environmental Programme UNEP/EA.2/INF/28 URL: <https://www.unenvironment.org/resources/report/unepea2inf28-analysis-environmental-impacts-illegal-trade-wildlife>
10. Alves, R.R.N., Rosa, I.L., Léo Neto, N.A., Voeks R. 2012. Animals for the Gods: Magical and religious faunal use and trade in Brazil. *Human Ecology* 40:751–780.
11. Freischlad, N. 2019. Indonesia confiscated some 200 pet cockatoos. What happened to them? *Mongabay News*, 4 January. URL: <https://news.mongabay.com/2019/01/indonesia-confiscated-some-200-pet-cockatoos-what-happened-to-them/>
12. Fajrini, R., Nichols, R.M. and Phelps, J., 2022. Poacher pays? Judges' liability decisions in a mock trial about environmental harm caused by illegal wildlife trade. *Biological Conservation*, 266, p.109445. URL: <https://www.sciencedirect.com/science/article/abs/pii/S0006320721004973?via%3Dihub>