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Legal remedies for harm to biodiversity

AN ANALYSIS OF THAILAND'S ENVIRONMENTAL LIABILITY LEGISLATION

Conservation-Litigation.org is an international network of lawyers, scientists and conservationists. We support strategic liability litigation as a creative legal response to the biodiversity crisis. We do this by providing novel legal analyses to reduce the technical barriers for action, by supporting novel litigation cases around the world, and by empowering others to litigate for biodiversity.

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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).

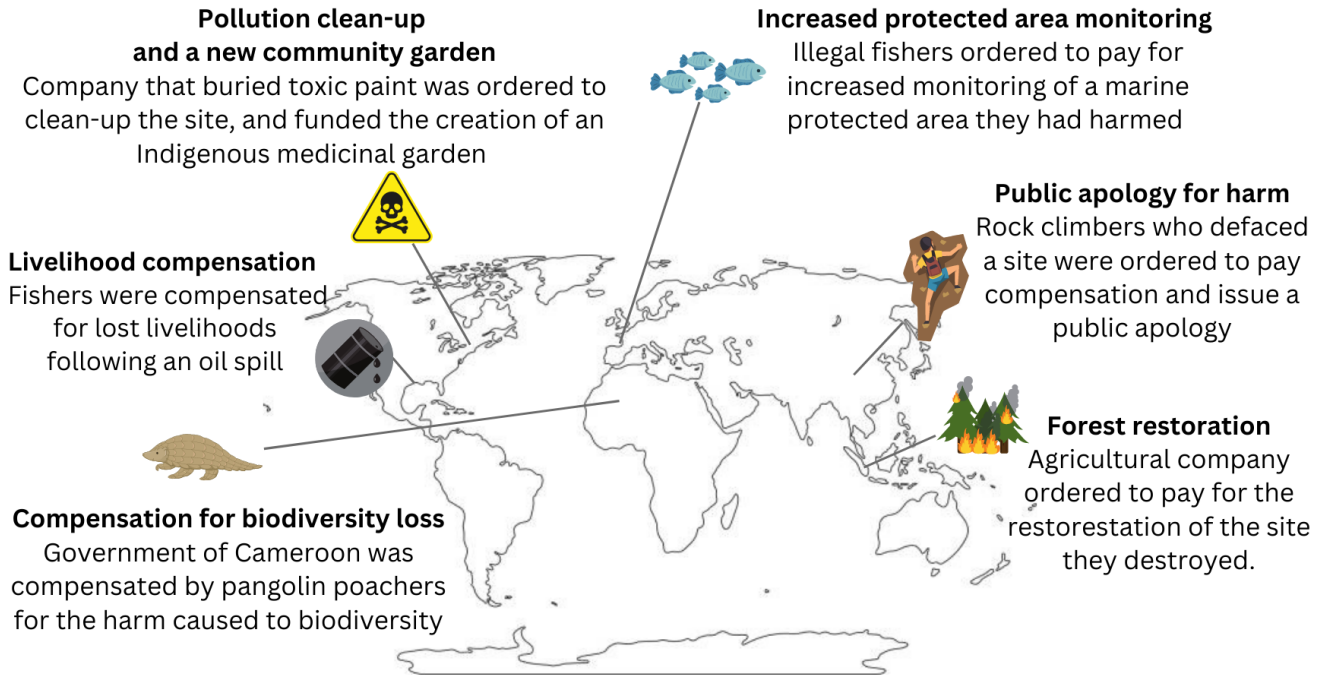
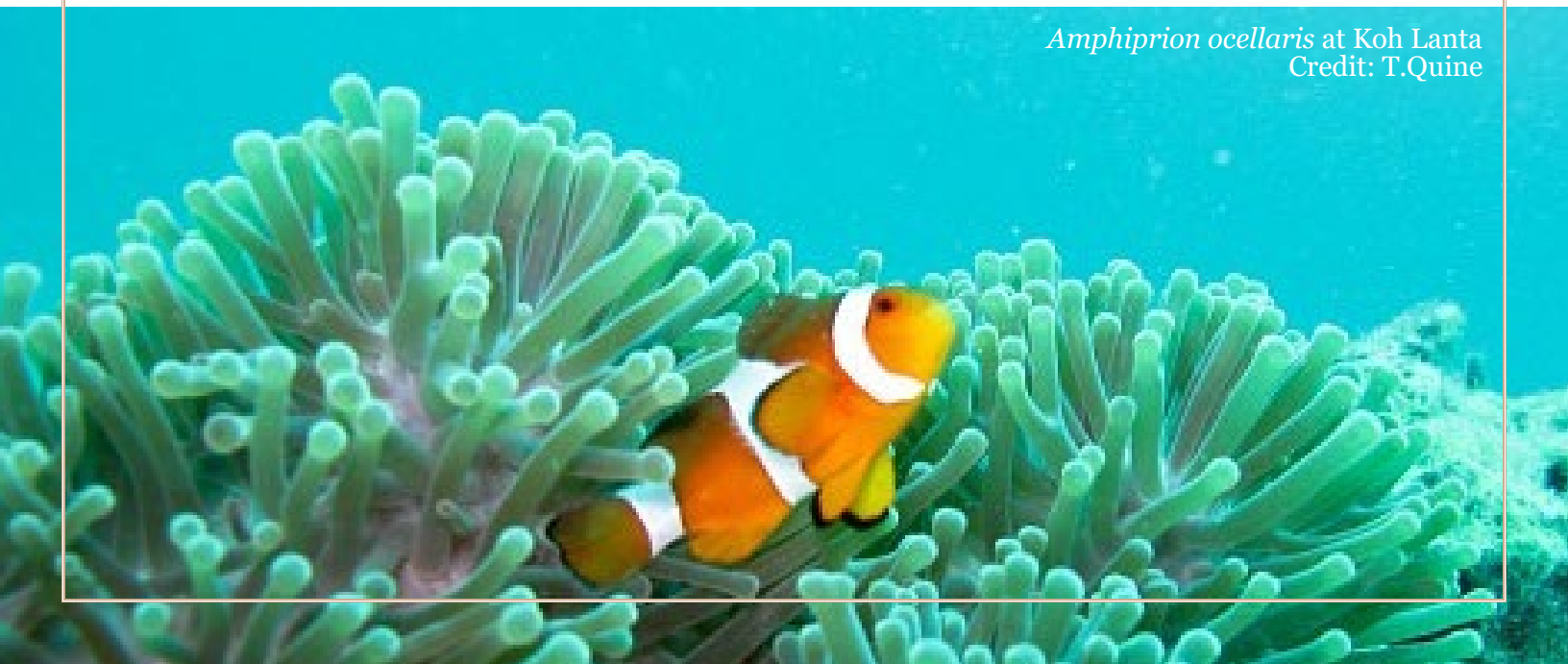


Figure 2. Examples of diverse remedies provided to biodiversity in liability cases

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.



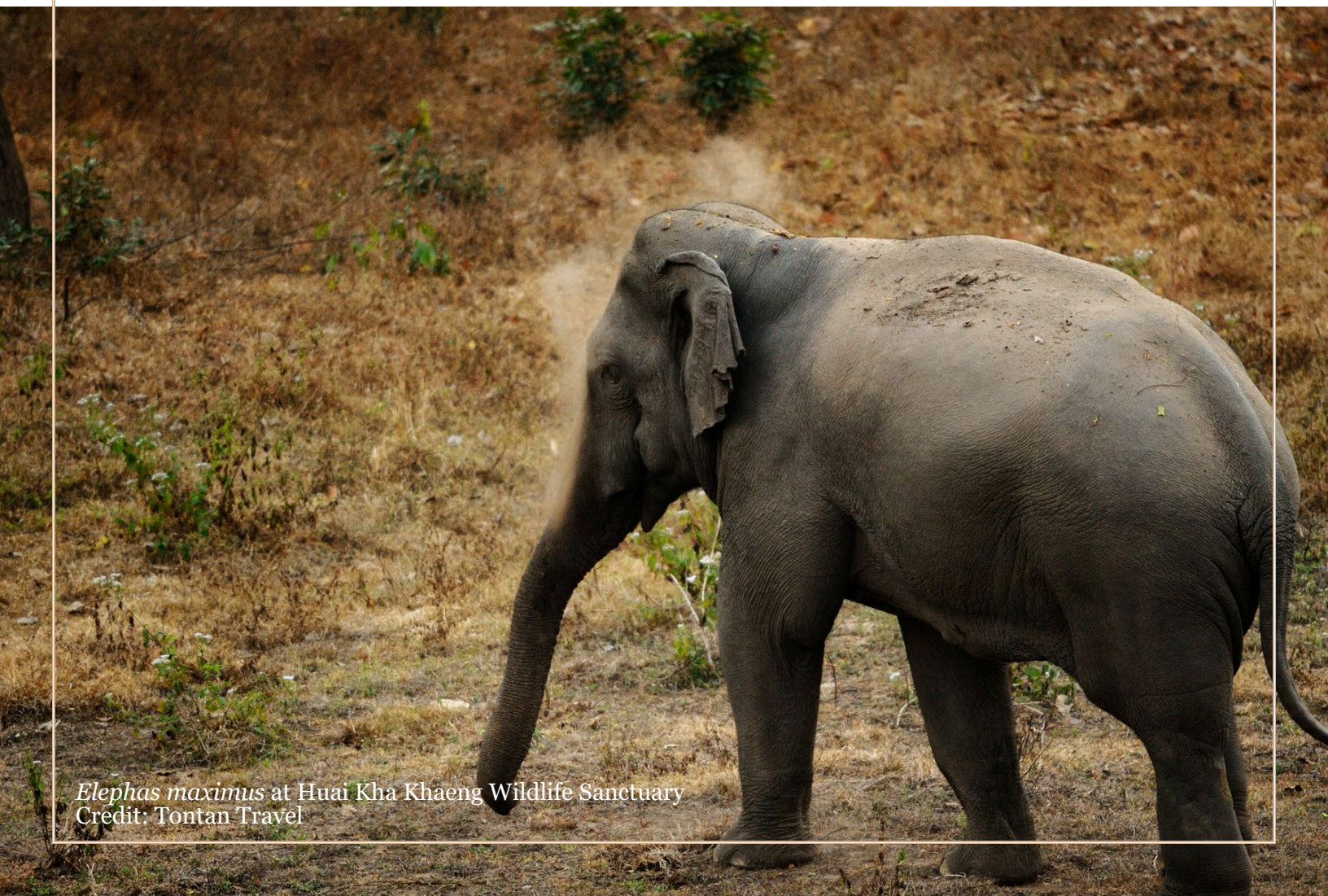
Amphiprion ocellaris at Koh Lanta
Credit: T.Quine

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

The report provides general context about each question, and then specifically answers it in the context of Thailand's legislation (boxes titled "Thailand"). 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.



Elephas maximus at Huai Kha Khaeng Wildlife Sanctuary
Credit: Tontan Travel

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 driver[7] that yields a cascade of harms that could become the subject of environmental liability litigation to support conservation goals.

For example, IWT in Thailand targets a range of highly threatened Great Ape species. This includes four domestic, protected gibbon species (*Hylobates agilis, Hylobates lar, Hylobates pileatus* and *Symphalangus* syndactylus), and many non-native species at zoos across the country, including orangutans, gorillas and chimpanzees illegally sourced from the black market.[8] Thailand is also a transit country for the supply of baby pet orangutans coming from Indonesia and Malaysia.[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 IWT[11] and the costs of having to increase enforcement measures in certain areas. These harms could become the subject of future liability litigation, to hold responsible parties liable for providing remedies to them.

Hylobates lar in Kaeng Krachan National Park
Credit: JJ.Harison

Table 1: Key categories of harm to biodiversity

Categories of Harm	Types of Harm	Example of Harm
Harm to Nature	Individual plants and animals	An endangered primate is rescued from illegal trade, and the individual animal needs long-term care in a wildlife centre.
	Species	The illegal trade of even one individual of a Critically Endangered species has a significant impact on the whole population of the species.
	Ecosystem goods & services	Killing a large, fruit-eating bird is likely to have impacts on seed dispersal, especially of trees with large seeds. Even where this has not been specifically researched, it is recognised ecological pattern observed across contexts.
Harm to Humans	Private livelihoods	Deforestation affects the livelihoods of Indigenous and local communities.
	Private property, personal health	Communities may be harmed when illegal habitat destruction takes place.
	Broader human wellbeing (e.g., culture, existence values, intrinsic values)	The killing of sacred animals or the deforestation of sacred places has an impact on local indigenous communities that have cultural and religious ties to it. The disappearance of charismatic species like hornbills or orangutans have an impact on cultural and community values as people across a given country value the forests and biodiversity and experience harm when it is injured.
Harm to the State	Income loss (e.g., taxes)	Illegal fishing means that taxes owed to regional and state governments were never paid.
	Increased cost of provision	Illegal wildlife trade means that the government must invest more into enforcement, monitoring and conservation measures.
	Reputational harm and reduced public trust	Repeated incidents of illegal trade inside a protected area have an impact on the public image of the park management and authorities, putting at risk 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.

Thailand

There are a number of laws in Thailand that expressly request that environmental harm, including harm to biodiversity, be legally recognised and provided with remedies. Thai legislation presents a two-step approach:

- Pursuant to the constitutional duty to conserve, protect, maintain, restore, manage and use natural resources, the environment and biodiversity, public authorities have an obligation to restore what has been harmed (Section 57.2, Constitution of Thailand).
- Subsequently, Thai environmental laws grant authorities the right to request that offenders compensate them for the total value of remedial measures undertaken.

Thailand does not have a single, specific environmental liability law, but harm to biodiversity is recognised across multiple pieces of legislation. Like many other countries, Thailand's laws do not actually specifically define "harm to biodiversity", but rather mention generally "actions that harm natural resources" and stipulate the legal obligation to remedy that harm. This is recognised in:

- Enhancement and Conservation of The National Environmental Quality Act, B.E.2535 (1992) (NEQA) (Section 97);
- Wildlife Conservation and Protection Act, B.E.2562 (2019) (Wildlife Protection Act) (Section 87), [Note that cases resulting in harm that occurred before 26 Nov. 2019 would need to be assessed under the 1992 Act, which did not include equivalent liability provisions.];
- National Parks Act, B.E.2562 (2019) (Section 40);
- National Reserved Forests Act, B.E.2507 (1964) amendment By National Reserved Forests Act (No.4), B.E.2559 (2016) (Section 26(4));
- Royal Ordinance on Fisheries B.E.2558 (2015), (Section 143);
- Department of National Parks, Wildlife and Plant Conservation Announcement on the Determination of the value of natural resources in national parks, forest parks, botanical gardens and the arboretum, B.E.2564 (2021) (Section 301 N.);

Harm to private property is regulated under the general Civil and Commercial Code (Title V) and NEQA (Section 96). Moral harm is covered by the Civil and Commercial Code.

Remedies for natural resources harm are discussed in the President of the Supreme Court's 2011 Guidelines for Environmental Litigation (Environmental Civil Litigation Guidelines), and the President of the Supreme Administrative Court's 2011 Guidelines for Environmental Administrative Litigation (Environmental Administrative Litigation Guidelines).

Thai legislation lacks a specific definition of “natural resources” but the term undoubtedly includes “biodiversity”:

- All laws establish that remedies should reflect the “total value” of harm. Although older laws like the NEQA and the National Reserved Forests Act are not explicit, the Wildlife Protection Act and the National Parks Act include the rehabilitation of biological diversity as part of this “total value”;
- The Environmental Civil Litigation Guidelines provide further interpretation of the "natural resources” concept, defining them as: “things that occur or exist naturally such as forests, wildlife, wild plants, water, air, soil, minerals and natural energy”. This definition has been applied by the Supreme Court (e.g., *Case No. 1203/2564*), where the authorities claimed compensation for the harm caused to a protected species.

Eria ornata at a wildlife market on the Thailand-Myanmar border
Credit: J.Phelps

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.

Thailand

There are three general criteria that need to be fulfilled for environmental liability to be triggered in Thailand. These criteria are reflected across legislation (see previous section), and apply to biodiversity and different types of harm (e.g., wildlife trade, pollution).

- **Causation:** As in all liability suits globally, Thailand requires a clear link between the defendant's actions and the purported harm. Importantly, however, Thailand's Supreme Court has ruled that the burden on plaintiffs to provide these links in environmental liability cases is considerably lower than in other types of contexts. It considers "high probability" of a link as enough to prove causation, triggering liability (Case Example 1).

Case Example 1: Supreme Court on causation in environmental matters

The Supreme Court established an important view on causation in its 2009 ruling on a chemical water spill allegedly produced by a motorcycle spare parts manufacturer (*Supreme Court No. 3621/2551*). The spill caused harm to the environment, notably to the fish held in the neighbour's fishpond. In assessing the scientific evidence, the Court argued that a "high probability" of it coming from the defendant's factory was enough to fulfil the causation requirement needed to hold the defendant liable for providing remedies.

- **Party's intent:** Thailand's Civil and Commercial Code establishes a general liability rule, in which liability can only apply if harm was caused through either a negligent or intentional act. Although the NEQA does not mention any other specific requirement related to liability, it may be assumed that it follows this general rule. This requirement is also stated in other legislation, such as the Wildlife Protection Act and National Parks Act. To pass the negligence test, one should consider objectively if a reasonable person would have acted the same way in the same circumstances or if they took reasonable care. Equally, if there has not been any unlawful act but there has been a negligent action, environmental liability will be triggered. Intentionality is a stand-alone requirement under Thai laws: If harm is intentional, legal liability will still apply regardless of whether the harmful act was illegal.

- **Specific environmental triggers:** In the context of environmental harm, Thailand also places several specific conditions on whether liability applies:
    - **The harmful action must be illegal**: Only when the action that caused the harm has been identified as unlawful (in either administrative or criminal law) can liability be triggered. The NEQA (Sections 96, 97), Thailand's umbrella environmental protection law, stipulates the general liability rule: "Any person who commits an unlawful act or omission by whatever

means resulting in the destruction, loss or damage to natural resources owned by the State or belonging to the public domain shall be liable…" This requirement applies to all types of environmental harm (to air, soil, water or biodiversity) and is reflected in all the laws that address the obligation to remedy environmental harm. As such, anyone who commits an illegal act that harms natural resources belonging to the State or public domain may be requested to compensate the State. In establishing whether liability applies to harm to biodiversity, there is a need to determine that it was caused by an unlawful activity, the details of which are stated in various pieces of legislation (e.g., National Parks Act; Box 2).

Box 2: Illegal actions related to illegal wildlife trade that trigger liability

The Wildlife Protection Act defines illegal actions specifically associated with illegal wildlife trade, and so its definitions determine when liability applies. The Act defines related offences based on the level of protection granted to the harmed species, which affect whether or not liability is triggered. The act provides five legal categories of species protection: conserved, protected, protected species allowed for captive breeding, controlled and dangerous.

a) Conserved species: These receive the strictest level of protection, and are listed as an Annex to the Act or approved by Royal Decree. The hunt, possession, trade, import and export of species on this list are forbidden, with exceptions discussed below (Sections 4, 17 and 29). Illegal actions affecting these species triggers liability for the offender to compensate the State for the harm, regardless of where the offence was committed.

b) Protected species: Species identified as essential to their ecosystem or species with populations that tend to decrease to extents likely to affect their ecosystem. These species are currently listed in 4 Ministerial Regulations, and their hunt and trade are forbidden, with exceptions (discussed below). Hunting outside of those exceptions triggers liability. Import and export activities are allowed as long as a licence has been granted. As with "conserved" species, the place where the harm takes place is irrelevant to the triggering of liability.

c) Protected species allowed for captive breeding: The Ministry may decide that some protected species can be captive bred due to their potential for economic exploitation, and are listed on a separate Ministerial Notifications. These species may be possessed, traded, imported and exported with a licence. Activities undertaken without a licence would trigger liability.

d) Controlled species: Species protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and listed in a Ministerial Notification that entered into force on the 4th of October 2022. These species may be legally hunted, possessed, captive bred, traded, imported and exported with a licence (Sections 19, 23 and 30). Actions without the appropriate licence may trigger liability for the offender to compensate the State, depending on the place where the offence has taken place.

e) Dangerous species: Species that may cause danger, be poisonous to human beings or other wild animals, or threaten the ecosystem balance, and are listed in a Ministerial Regulation. It is forbidden to abandon or release them. Abandoning or releasing these species may trigger liability if their release then results in harm.

- **Harm should occur within a protected area (for terrestrial biodiversity)**: The three main pieces of legislation that protect terrestrial biodiversity place an additional threshold for triggering liability: harm should have occurred within one of the types of protected area listed in the laws (Wildlife Protection Act, National Parks Act, National Reserved Forests Act). With some exceptions, harm outside of these types of protected areas does not trigger liability.

The important exception is harm to "conserved" and "protected" described by the Wildlife Protection Act, harm to which always triggers liability. A strict interpretation of this requirement would imply that harm to biodiversity outside protected areas would not trigger liability. However, this interpretation would defeat the underlying principles established in Section 57.2 of Thailand's Constitution. Moreover, the NEQA Act (Section 97) and the Civil and Commercial Code may still apply to harm caused outside of protected areas if the Prosecutor decides to pursue liability cases via the general status rather than using specific environmental legislation.

Exceptions when environmental liability does not apply: There are two notable exceptions for when environmental harm does not trigger liability.

- **Permit defence:** When the action has been done legally within the limits of a permit – even if it causes harm - liability will not apply. As such, permitted actions such as harvest within a quota system or a permit that allows change of land use will not result in liability. Equally, many of the offences described in the Wildlife Protection Act are not applicable to zoos and captive breeding centres.
- **Self-defence:** Liability does not apply in cases of self-defence to protect oneself, others or personal property that results in harm to an animal. Regardless of its conservation status or the location, so long as the scale of harm is deemed reasonable, the violator can be exempt from liability. (Section 13, Wildlife Protection Act).

Mangrove forest
Credit: D.A.Friess

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.

Thailand

With regards to remedies, public authorities have an obligation to restore what has been harmed pursuant to the constitutional duty to protect natural resources, the environment, and biodiversity. Equally, Thai environmental laws grant authorities the right to request offenders to compensate them for the total value of remedial measures undertaken.
In this sense, only the State may take remedial measures for biodiversity harm and only the State may claim compensation for the measures taken. Liability for harm to private interests may be claimed by the affected party and their representatives.

- **State's right to remedies:** Thailand's Constitution expresses that the State has permanent sovereignty over its natural resources, but also the duty to conserve, protect, maintain, restore, manage, and use natural resources, the environment and biodiversity in a balanced and sustainable manner (Section 57.2, Constitution of Thailand). In this sense, the State has an obligation to bring forward actions to request compensation for biodiversity harm as specified in the different liability provisions in Thai laws (Section 97, NEQA Act; Section 87, Wildlife Protection Act; Section 40, National Parks Act; and Section 26/4, National Reserved Forests Act, e.g., Box 3). Private harm caused to the State such as material loss can be claimed just like any other type of private harm, using the provisions of the Civil and Commercial Code.

Box 3: State as a plaintiff in illegal wildlife trade cases

Taking the example of harm to protected fauna species, the Department of National Parks, Wildlife and Plant Conservation (DNP) is the competent authority to bring forward a litigation, as they are considered as the "injured person" pursuant to section 87 of the 2019 Wildlife Protection Act.

As the Act is very recent, the DNP has limited experience in the role of the plaintiff. The first case was the State vs Premchai (*Supreme Court No. 1203/2564)*. The Public Prosecutor initiated criminal actions against 5 defendants after they had been arrested in Thungyai Naresuan Wildlife Sanctuary in February 2018 for hunting wildlife, including for the killing of a rare black panther. At that time, the 1992 Wildlife Protection Act was the applicable legislation, which had no mention of the DNP as a plaintiff, so the prosecutor based their claim for compensation on section 97 of the NEQA. In parallel to the criminal procedure, the DNP submitted a civil claim requesting monetary compensation (plus interest) from the defendants for the harm they had caused. The Supreme Court not only condemned the defendants to several years imprisonment, but also granted THB 2 million in compensation.

This landmark case was the origin of Section 87 of the 2019 Wildlife Protection and Conservation Act, which explicitly recognises the DNP as a plaintiff in civil matters. Since then, the DNP has intervened as a civil party in several wildlife trade criminal cases, as Section 107 of the 2019 Wildlife Conservation and Protection Act allows for a civil claim to be submitted simultaneously with the criminal action.

- **Individual rights to remedies:** While the State is the principal caretaker of the environment and biodiversity, individual citizens and communities have the duty to cooperate and support the conservation and protection of the environment, natural resources and biodiversity (Section 50.8, Constitution of Thailand) and the right to manage and use natural resources and the environment within the limits of the law. Individuals can bring forward cases where they have been directly harmed, including not only harm to livelihoods but also their right to a healthy environment. They have a right to obtain both injunctions (against the State, or where the State has failed to act) via the administrative courts, and to request remedies for harm they have suffered via the civil courts.

    - The NEQA Act gives rights to individuals to be remedied or compensated by the State in case of harm originating from pollution for which the State is responsible (Section 6, NEQA Act).
    - Thailand's Environmental Civil Litigation Guidelines refer to the rights of individuals to initiate lawsuits against actions that affect their right to live normally and continuously in an environment that will not cause harm to one's health, sanitation, welfare, or quality of life (Clause 3, Environmental Civil Litigation Guidelines).
    - The NEQA Act gives rights to individual persons to petition or lodge a complaint against an offender in case of being a witness to any act committed in infringement of the conservation of natural resources laws.

These rights are typically understood as being granted to individuals who suffer harm, with each individual taking action on their own (Case Example 2). However, often individuals do not have the means to do this, and the Constitution, and the Environmental Civil and Administrative Litigation Guidelines grant them the rights to act collectively where groups have been victims (i.e., class action lawsuit). The NEQA also grants registered NGOs with legal personality the right to bring lawsuits and request legal remedies on behalf of pollution victims (Section 8 (5), NEQA). Although these rights exist, they have not been tested in Thai courts.

Case Example 2: Community compensation for pollution in Klity Creek

Lower Klity Creek is home to about 400 ethnic Karen people, most of whom are farmers of rice, cassava, and vegetables. Upstream of the creek, a lead-processing factory run by Lead Concentrate (Thailand) Co Ltd. had been discharging toxic water in the stream for over 20 years. Residents, suffering the symptoms of chronic lead poisoning, initiated litigation against the company and 7 of its representatives, as well as against the authorities for having failed to act against the company promptly.

The Supreme Court (*Supreme Court Case No. A.743/2555*) upheld a claim from 151 residents, and ordered the 7 defendants to pay over THB 36 million in compensation to the villagers affected by the pollution. It also ordered the defendants to clean-up and rehabilitate the creek, at their own expenses, until it was clean enough for human use. The Supreme Administrative Court also upheld the claim of 22 villagers against the Pollution Control Department for acting too late, and granted THB 171,159 in compensation to each of the claimants.

- **Public Interest Litigation (PIL):** Thailand places limits on public interest litigation (PIL), in which citizens, communities or NGOs act on behalf of the environment and the public interest (as opposed to private interests in the environment, described above). Only the State can bring civil court litigation against parties who harm the public interest in the environment. However, other actors can bring PIL against State agencies that harm through environment, whether through action or inaction: The Environmental Administrative Litigation Guidelines determine that for environmental administrative cases affecting the public interest, the concept of victim should be considered in a broader sense considering the rights of, among others, communities, non-governmental organisations, associations, legal entities or stakeholder groups in the environment.

  As such, it seems clear by the law that communities and NGOs lack the right to bring forward civil lawsuits on behalf of biodiversity as a victim of harm: this right is reserved to the State in Thailand, but they may request remedies in as long as the harm caused to biodiversity has had an impact on their rights.

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.

Sterculia urnea
Credit: E.L.Webb

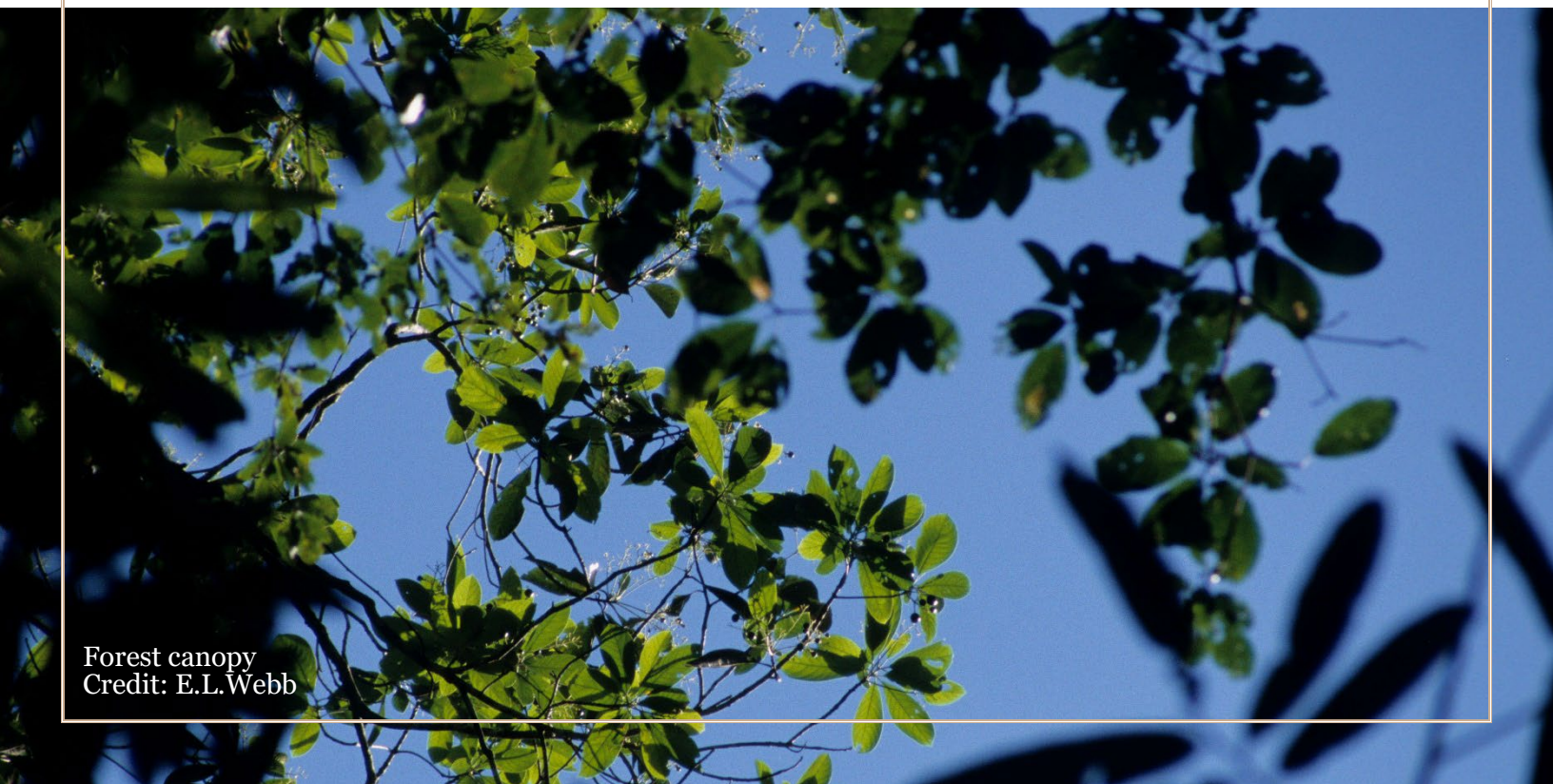
Thailand

Liability provisions mention that the harmful action may be committed by "any person". This implies therefore that possible defendant can include any natural person, a legal entity such as a corporation, or even a group of persons with no legal link among them, such as in the case of an organised criminal group.

According to Act B.E.2556 on the Prevention and Suppression of transnational crime, a criminal organisation is described as a "*structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes in order to obtain, directly or indirectly, financial, property or other material benefit*." Enforcement by Thai authorities on members of criminal organisations involved in causing environmental harm has been done, but the authorities have charged members individually rather than as a group.

Case Example 3: Civil liability against organised criminal groups in the Chaimat Family

The Chaimat Family is connected to the transnational trafficking of Siamese rosewood, investigated in 2014 by Thailand's Financial Intelligence Unit and the Anti-money Laundering Office. According to GITOC12, there have been at least 11 criminal cases of illegal wildlife trade linked to the family, with one member of the family convicted in 2004 (*case 855/2547*) and facing at least two more pending cases. These cases have been filed separately, but could potentially face litigation from the DNP, as an organised criminal group, for the biodiversity harm caused and proved during these criminal cases (civil claims can be brought within ten years after a criminal judgement is rendered). Although these cases occurred before the 2019 Wildlife Protection Act came into force, Supreme Court had previously acknowledged the DNP's legitimate right to act as plaintiff in these cases (*Supreme Court No. 1203/256*).



Forest canopy
Credit: E.L.Webb

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.

Thailand

Thailand's court system is a dual system composed of the Court of Justice and the Administrative Court systems. The Court of Justice has jurisdiction over civil and criminal cases, and is formed of Courts of First Instance, Court of Appeal, and the Supreme Court, which is the highest court. The Administrative Court has jurisdiction over administrative cases and is comprised of two tiers: the Administrative Courts of First instance, and the Supreme Administrative Court.

Since 2005, Thailand's Courts have had a *Green Bench* dedicated to environmental cases, called the Division of Environmental Investigation.[13] Its primary objective is to accelerate justice in environmental cases. Equally, cases under the Division follow an ''inquisitorial'' system, in which the court performs the duties of fact finding and evidence collection that otherwise fall entirely to the plaintiff in the mainstream Court of Justice system.[13] This Division is represented in both Court of Justice and in Administrative Court systems, with judges adjudicating cases across the court hierarchy, from First Instance Courts to the Supreme Court.[14]

Adjudication of environmental cases is governed by two 2011 instructions issued by the Supreme Court: President of the Supreme Court's Guidelines for Environmental Litigation (29th April 2011) and President of the Supreme Administrative Court's Guidelines for Environmental Administrative Litigation (4th July 2011). Under this system, an environmental dispute may be brought in either the Court of Justice or the Administrative Court, depending on the issues involved:

- For matters involving biodiversity harm and the request of remedies, the Court of Justice in its civil format will be competent. The Guidelines define four type of civil cases that may be brought: (1) when a prosecuted offence has caused harm to natural resources, ecosystems, or communities; (2) to request injunctions; (3) to request monetary compensation for remedies already provided; and (4) to request monetary compensation for harm to life, health, and other rights. These lawsuits will normally be brought in parallel to the submission of a criminal procedure by the Public Prosecutor (Section 107, Wildlife Protection Act; Section 54, National Parks Act; & Section 26/5, National Reserved Forests Act) but may be brought after the criminal procedure submission. The plaintiff may file an environmental lawsuit directly to the Environmental Litigation Division of the Civil Court. The Environmental Litigation Department will provide services from the beginning until the end of the case (one stop service).
- For matters related to actions and decisions taken by government authorities, the Administrative Court is the competent forum. The Environmental Administrative Litigation Guidelines considers administrative courts competent to deal with disputes among public authorities or between public authorities and the private sector in matters related to the environment, protection, conservation, or management of natural resources, protection of human health, organisation of the human environment, climate, landscape, art and culture, or related laws and other cases as notified by the President of the Supreme Court. This could apply, for instance, in cases when trading licences or import/export permits granted by the CITES Management Authorities are questioned, or when quotas are challenged.

Judicial procedures in environmental matters in both jurisdictions are ruled by an inquisitorial system. The plaintiff has a duty to provide evidence; however, judges conduct their own investigation, and have competence to request or take any action to get additional evidence. During the trial, judges may request experts and relevant agencies to give their opinion on the scope of harm and related costs, and also summon additional experts.

Supreme Court of Thailand
Credit: Chanwit

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 are may only 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.

Thailand

In general, the Environmental Civil Litigation Guidelines and the Environmental Administrative Litigation Guidelines foresee the possibility for the court to order injunctive measures upon the request of the plaintiff. In addition, in administrative cases affecting the public interest at present or in the future, the Court should, of its own initiative, consider prescribing temporary measures, and has the power to monitor their execution.

Box 4: Injunctions in cases of illegal wildlife trade

Taking the case of illegal wildlife trade offences, Articles 35 and 38 of Thailand's Wildlife Protection Act stipulate explicitly the possibility to request injunctions against private and public zoos that are in breach of their management obligations. In these cases, the Director General of the DNP has the competence to order in writing the rectification or improvement of the situation. Equally, the DNP has the authority to order anyone without a permit to leave wildlife sanctuaries and protected areas.

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.

Thailand

Requests for judicial review in environmental matters have been submitted in Thailand with regards to air pollution (Case Example 4). It remains to be tested whether these types of orders may be sought in relation to biodiversity matters.

Case Example 4: Judicial review request regarding air pollution

In March 2022, seven environmental organisations filed a lawsuit in Thailand's Central Administrative Court alleging that the National Environmental Board, the Ministry of Natural Resources and Environment, and the Ministry of Industry were violating their duties by failing to take stronger actions to address the country's air pollution crisis. Among other things, the plaintiffs requested that the court order the defendants to revise the country's ambient air quality standards and to require the industrial facility to continuously monitor and report their PM2.5 emissions. Although the court has not yet rendered a judgement in the case, it does appear to have had some influence on the government: On April 4, 2022, the Air Quality Standards Subcommittee proposed revised ambient air quality standards for PM2.5 in line with the plaintiffs' requests.

Wildlife products at a market along the Mekong River
Credit: J.Phelps

Orders to remedy the harm that has already occurred

Once harm has already occurred, legal orders for injunctions or continuing 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 5km^2 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 5km^2 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);
- 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.

Thailand

Pursuant to the constitutional duty to conserve, protect, maintain, restore, manage, and use natural resources, the environment, and biodiversity (Section 57.2, Constitution of Thailand), public authorities have an obligation to restore what has been harmed. Subsequently, Thai environmental laws grant authorities the right to request offenders to compensate them for the "total value" of remedial measures undertaken, generally understood as the cost for the rehabilitation of natural resources, the ecosystem and biological diversity (Section 87, Wildlife Protection Act & Section 40, National Parks Act).

The combination of these two legal bases gives the State a very broad scope to define remedies in the manner that they see fit to represent the "total value". Indeed, the lack of further legislation on the subject provides a great deal of freedom to authorities to take any remedial action they consider necessary to reinstate the "total value" of biodiversity. This includes prevention, mitigation (any action related to the rescuing of species), reparation, and additional measures (e.g., cost of calculating the harm, loss of profit or legal fees, future expenses). They could also include the cost of measures to remedy the harm caused to the reputation and role of the State as protector of biodiversity, and the cost of undertaking activities to remedy harms to human wellbeing (e.g., cultural activities). However, the scope for many of these claims has not been tested in court.

- **Rules for forming damage claims:** Where the plaintiff is a citizen, there are no legal limits on the types of remedies they can claim, subject to the type of court they engage (civil or administrative) and their successful augmentation before the court. Civil courts may consider remedies caused by harm to life, body, health, or any other rights, which gives ample scope for judges to consider any remedy. Equally, administrative courts may consider not only physical or psychological harm, but also interim losses and even remedies for social and cultural harm.

Where the State is the plaintiff in civil or administrative court, represented by the Department of National Parks (DNP), the law is more explicit regarding the formation of damage claims for harm to biodiversity. The 2021 DNP Announcement tasks the Department with defining the value of harmed "forest and wildlife resources, marine resources, and biodiversity" in order to calculate compensation amounts (Department of National Parks, Wildlife and Plant Conservation Announcement on the Determination of the Value of Natural Resources in National Parks, Forest Parks, Botanical Gardens, and the Arboretum, 2021).

The Announcement sets out some rules for calculating damage claims for harm to terrestrial forests and planted forests: a detailed price list exists for a range of economically-valuable timber species, and technical formulas for calculating the monetary value of harm caused by losses in soil, water and nutrient ecosystem functions. However, the rules are not explicit about what constitutes "total value", and are strongly focused on monetary compensation rather than remedial actions. There are several areas where the Announcement does not provide direction: For harm to wildlife, the Wildlife Protection Act and the DNP Announcement stipulate that the DNP Director General shall develop rules, which have not yet been released. For harm to marine resources and mangroves rules do not exist but "total value" is to be calculated by DNP's Natural Resources Damage Value Assessment Committee. The Announcement does not mention how to address harm to reputation and mission (sometimes called "moral harm"), or harm that might lead to non-monetary remedies (e.g., apologies), but the Civil and Commercial Code allow for these types of remedies.

The Announcement clarifies that, in public cases, the DNP is both plaintiff and responsible for forming damage claims. Within the DNP different offices are responsible for damage claim calculations, depending on the type of ecosystem and value of harm. Notably, the Director General is responsible for developing guidelines for harm to wildlife, and a Natural Resources Damage Value Assessment Committee is responsible for most calculations.

- **Judicial discretion:** Decisions about plaintiffs' claims for remedies are decided by judges. The Environmental Civil and Administrative Litigation Guidelines describe the process of evaluating claims as inquisitorial, where judges will consider the plaintiff's calculation of total values, but are also entitled to consult other State agencies and experts as needed to come to a final monetary amount for compensation. In evaluating claims:
  - Civil court judges are instructed to evaluate "total value" as referring to monetary compensation to the State for the restoration of the harm (Section 1.4, Environmental Civil Litigation Guidelines). The guidelines do not provide detail about what is included or excluded.
  - Administrative court judges are instructed to evaluate "total value" remedies in a broad way, considering not only claims for the rehabilitation of the harmed resource, but also those for almost any kind of physical harm to individuals, non-commercial value of the ecological loss, and monetary and non-monetary harm (cultural and social values) to communities. These remedies will be calculated by the corresponding plaintiffs, and the validity of claims is decided by the evidence and court progress, including judicial discretion. In these cases, the judge is entitled to request the plaintiff to clarify its claim and look for further information in order to take a discretionary decision (Section 2.2, Environmental Administrative Litigation Guidelines).

Judges have wide discretion to gather evidence supporting the claims. Ultimately, it will be the judge who decides whether to accept the DNP assessment, considering other elements including the future impact to natural resources, environment or ecosystem, public interest, impacts on personal life or health, environmental rights of the next generation, and sustainable development principles (Section 11, Environmental Civil Litigation Guidelines).

Practitioners note that judges are often strict on how damage claims are formed, with some requesting evidence of actual expenditure, rather than projections of costs. Notably, the Supreme Court stated that, in order for assessments of harm to natural resources to be accepted by the court, this should consist of a step-by-step process which evaluates harm first, and then uses specific tools and methods to precisely assess the harm. Rough calculations are not considered as sufficient evidence to support harm claims (*Supreme Court No. 125000/2558*).

Courts in Thailand have already considered the monetary value of wildlife in some cases, using the 2019 Wildlife Protection Act (Table 2). These verdicts involve only monetary compensation granted to plaintiffs, but do not state how these amounts were determined and do not yet capture "total value" or to reflect meaningful remedies. Moreover, the disparities in monetary amounts across cases and species highlights the need for clearer guidance, as requested in the Wildlife Protection Act.

Calotes emma.
Credit: E.L.Webb

Table 2. Recent verdicts in wildlife cases that granted remedies involving financial compensation to the State[15]

Court, Case Number (Year)	**Species Harmed** (*indicates protected species)	**Monetary Values** (Thai Baht)
Provincial Court of Nangrong, *Ao9/2562* (2019)	▪ 1 lesser mouse-deer (*Tragulus kanchil*)	600
	▪ 1 banded linsang (*Prionodon linsang*)	1,400
Provincial Court of Songkhla, *Ao4181/2561* (2018)	▪ 20 red-whiskered bulbuls (*Pycnonotus jocosus*)*	200 for each individual, totaling 4,000
Provincial Court of Phetchaburi, *Ao1383/2562* (2019)	▪ 1 dusky leaf monkey (*Trachypithecus obscurus*)	76,400
Provincial Court of Thongphaphum, *Ao81/2563* (2020)	▪ 1 stump-tailed macaque (*Macaca arctoides*)* ▪ 5 Blyth's river frogs (*Limnonectes blythii*)*	1,100
Provincial Court of Thongphaphum, *Ao440/2563* (2020)	▪ 16.5kg of Harmand's sole fish (*Brachirus harmandi*) ▪ 400 grams of Kuhl's creek frog (*Limnonectes kuhlii*) ▪ 1 Asiatic brush-tailed porcupine (*Atherurus macrourus*)* ▪ 1 banded linsang *(Prionodon linsang*)	2,100, upon the reasoning that the plaintiff failed to prove real damages.
Provincial Court of Thongphaphum, *Ao67/2563* (2020)	▪ 1 Asiatic brush-tailed porcupine (*Atherurus macrourus*)* ▪ 1 softshell turtle (*Trionychidae sp.*) ▪ 1 Asian forest tortoise (*Manouria emys*)* ▪ 2 giant Asian pond turtles (*Heosemys grandis*)*	4,000, since the plaintiff failed to prove real damages
Provincial Court of Thongphaphum, *Ao219/2561* (2018)	▪ 1 black panther (*Panthera pardus*)*	DNP plaintiff calculated that 12,750,000 were due, but State Attorney only requested 3,012,000. Court ordered: 2,000,000.

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.

Thailand

Court orders for civil cases in Thailand can only consider the monetary compensation (e.g., to cover the costs of remedial actions). The Courts are responsible for ensuring that liable defendants make these payments into the plaintiff's account within the proscribed time. The procedure for this is established in the Civil Procedure Code. If necessary, the Public Prosecutor will provide assist the Court by tracking a defendant's assets.

In cases where the State is the plaintiff, compensation is considered as State income and should be transferred to the general budget of the State. This situation implies that the total amount of the harm caused will not necessarily be used by the plaintiff (DNP) to carry out conservation actions within their competence. This creates a disincentive for the DNP to act as plaintiff, as all the time and effort invested in forming a claim may not be compensated, even if the case is successful.

6. WHAT ARE THE CHALLENGES AND OPPORTUNITIES IN THAILAND?

Thailand's environmental liability laws have only recently started to be expanded to address biodiversity conservation, and recent cases (Table 2) are providing the DNP and the public prosecutor with new experience and insights to improve the quality of future cases. Further operationalising liability legislation to protect biodiversity is not only about written law, but national legal norms, governance context, expectations, and expertise.

This section synthesises several practical considerations and possible legal interpretations that could influence the potential of environmental liability litigation for biodiversity in Thailand. It draws on consultation with experts in Thai legislation, experience from other jurisdictions, and interpretation of Thailand's legislation.

Challenges

Challenge of uncertainty over how to form and evaluate damage claims

As in several countries, there is uncertainty among plaintiffs, prosecutors, judges, and defendants over how to understand damage claims and the remedies they contain.

Although the DNP has established some rules for guiding cases involving harm to terrestrial forest, these remain incomplete. Moreover, for most other types of harm to biodiversity, there is a lack of rules and guidance on how to characterise harm and identify the appropriate remedies needed to develop damage claims in court. This is especially challenging where cases involve complex causal chains, technical issues unfamiliar to courts, and where there is little precedent case law. This creates uncertainty among practitioners. For example, plaintiffs and prosecutors are uncertain over the scope of claims they can make or how to prepare solid argumentation. This is evidenced in three recent DNP cases where verdicts stated they had failed to fully prove the harm and justify their claims (Table 2). Indeed, uncertainty over claims can also lead to inconsistency in judicial verdicts (e.g., Table 2).

Overcoming this challenge could involve the development of science-based, meaningful guidelines and rules for remedies and damage claims Although many countries do not have detailed rules on how to form claims, a growing number are developing legislation that defines the scope of remedies and are working on advisory guidelines to help inform the process of forming damage claims.

This challenge can also be overcome through argumentation that strategically applies environmental law principles:

- Thailand's Supreme Court ruled that "high probability" that a defendant's actions caused harm was enough to fulfil the causation requirement in order to hold the defendant liable for providing remedies. In this case, even in the context of uncertainty

over whether the defendant's actions actually caused the purported harm (i.e., neither side could definitively prove their case), the presented evidence suggested a "high probability" that there was a link, which was enough to sway a verdict for the plaintiff.

- The precautionary principle has also been used to fill this gap, with judges interpreting it to reverse the burden of proof. Instead of the plaintiff proving a direct link between the offence and the harm caused, the defendant is required to prove that their actions have not caused the harm. This principle has been applied in cases across several countries, but has yet to be applied in Thailand.

- Additionally, there is scope to argue for these remedies based on the *in dubio pro natura* principle, which has been upheld by Supreme Courts in Argentina, Brazil, Colombia, Costa Rica, Ecuador, and Mexico. As Rabasa et al. (2020) describe: *This principle establishes that in case of doubt, darkness or uncertainty by the administrative or judicial authorities on the scope or the collision of rules, principles or fundamental rights, when it is necessary to recognize a right without explicit rules or at the time of assessing an environmental rule in force, it must be resolved in the manner that most protects or conserves the environment.*[16]

Challenges that limit the scope of remedies

As in many countries, environmental harm, remedies, and damage claims are often narrowly conceptualised in terms of the monetary value of the harm. In Thailand, recent environmental civil litigation has focused on the financial amounts to be paid by defendants (Table 2). Moreover, judges are reportedly often narrow in their interpretation of environmental harm and remedies, requesting evidence of actual expenditure, rather than projections of costs. One Supreme Court verdict stated that cases should consist of a step-by-step process which evaluates harm first, and then uses specific tools and methods to precisely assess the harm, stating they will not accept "rough calculations" as sufficient evidence to support claims (*Supreme Court No. 125000/2558*).

Although monetary compensation is often central to damage claims, a narrow focus on monetary harm potentially overlooks important elements such as harm to biodiversity and human wellbeing. For example, a defendant could be held liable for causing harm to an individual animal, but potentially not harm to the species survival, ecosystem function and to the relational values humans place on nature. This limits the scope for science-based verdicts and justice.

Overcoming this challenge requires that future rules/guidelines be more explicit about the broad scope of what constitutes "total value" of environmental harm. The existing DNP rules for terrestrial forests do not refer to many types of environmental values–including harm to species survival, many ecosystem goods and services, human relational values, and harm to reputation. However, future guidance (e.g., the rules being developed for harm to fauna) need not be limited by this. Indeed, Thailand's general Civil and

Commercial Code grants the court the broad mandate to evaluate harm in accordance with the circumstances and the gravity of the case, and to then grant "damages for any injury caused" and allows the court to "order proper measures" for remedies, including in cases of harm to reputation. This suggests that there is no legal barrier that would strictly limit the scope of future remedies.

Challenge to executing court orders

Civil court judges in Thailand can only make verdicts ordering defendants to pay monetary compensation to the general State Treasury, but cannot state specific remedial actions or allocate budget directly to them. This means that even successful verdicts are challenged to deliver remedies on-the-ground. There is also little incentive for the DNP to act as plaintiff, as a winning case will bring neither remedies nor compensation for their costs in developing a claim. (In contrast, in administrative court cases against the government, courts can order specific remedial actions).

Overcoming this challenge could involve the future development of a separate environmental fund, into which funds can be disbursed, instead of using the general Treasury. This has been used in other countries so that, especially when the State is the plaintiff, funds are specifically directed towards court-ordered remedial actions or, at least, to conservation measures within the same jurisdiction.

In the near-term, there are several possible solutions to enable the execution of court orders. For example, in the context of illegal wildlife trade cases:

- Sections 58 to 60 of the Wildlife Protection Act stipulate that service fees and donations received by the DNP and proceeds from donations are not required to be remitted to the Treasury as State revenue, and that the DNP shall retain them for preserving, rehabilitating and maintaining wild animals and protected areas. One possible approach that authorities could consider is to have the authority responsible for the State's Treasure draft temporary rules establishing that monetary compensation granted by a Court to the State in cases of biodiversity harm would be considered as donations to the DNP. Alternatively, and subject to confirmation that administrative and finance Thai laws allow for it, the authority responsible for the State's Treasury could make targeted donations to the DNP of the same amount as the compensation granted by the court. This potential solution would be supported by Section 60 of the Wildlife Protection Act, which stipulates that the DNP shall use those amounts for, among others, the protection, care, maintenance or rehabilitation of natural resources and the environment, and the protection, care, nurture or assistance of wild animals seized by competent officials.

- In cases where judges grant compensation to cover future harm, the State and the DNP could enter into a trusteeship, subject to the confirmation that Thai laws allow for it. A trusteeship is a contract between two parties: one party transfers rights, goods or properties to another party, who commits to use and manage what has

been transferred for the benefit of a third person. As a grantee of the compensation amounts, the authority responsible for the State's Treasury could sign a contract with the DNP to transfer the amounts allocated to cover future costs with the objective of using those amounts exclusively to pay for the costs associated with repairing the harm caused.

In both cases, the Wild Animal Conservation and Protection Commission could be used as a monitoring body, in charge of reporting to the central State authority. Furthermore, the capacity of judges to monitor the implementation of their decisions is equally important. Although in the case of Thailand most of those decisions will involve the payment of current or future costs, in the latter case, it would be possible to issue a continuing mandamus, where the matter remains pending while the court assumes a supervisory role to ensure compliance and enforcement of its directions within a stipulated period of time. These alternatives could also be considered in cases where biodiversity is harmed due to other drivers such as deforestation, although the respective laws should be first analysed.

Opportunities

Opportunity for more diverse future biodiversity cases

Thailand has multiple pieces of legislation that stipulate the State's obligation to remedy the environment when it is harmed, and that further articulate its right to request financial compensation from the responsible parties. These set the bases upon which to request and apply legal actions to provide remedies for harm to biodiversity – including in cases where harm to biodiversity has not traditionally been litigated, and where harm has been narrowly understood (see Table 1).

There is greater scope for liability legislation in cases where biodiversity is harmed, such as in illegal wildlife trade cases. The DNP has previously requested compensation in these types of cases, although using different approaches and values (see Table 2) and rules for how to develop damage claims have not yet been established. The Wildlife Protection Act grants the DNP rights to request compensation for a wide range of activities undertaken in the implementation of their legal obligations. For instance, the Act authorises the DNP to seize wild animals connected with the commission of an offence (Section 81.4) and impose the obligation to provide them with assistance, care or treatment, distribute or release them to their natural habitat, return them to their origin, transfer or destroy them, retain them for official use, or handle them in any manner (Section 86). These activities may be considered as a basis to form a compensation claim under Section 87. Although this Section only mentions explicitly "*expenses incurred in the rehabilitation of biological diversity*", it acknowledges the possibility for other actions to be considered, for example, actions undertaken to assist and care for seized specimens. There are other notable wildlife trade contexts in Thailand where similar cases could be developed to address wildlife trade, including across the value chain and involving a series of remedies (Box 5).

Similar litigation opportunities also extend to harm caused to biodiversity from other drivers, such as habitat loss, habitat degradation, and pollution. As in the wildlife trade example above, which is covered by the Wildlife Protection Act, other legislation instructs the government to request compensation in response to a range of harms. There is ample scope under that legislation and the Constitution for these remedial actions to be covered under liability suits. These are somewhat limited by approaches listed in the 2021 DNP Announcement, though Thailand's Green Bench environment judges have considerable discretion (discussed below).

Box 5: Potential for remedies in the international repatriation of orangutans

Orangutans are great apes native only to the islands of Sumatra and Borneo (Indonesia, Malaysia, and Brunei Darussalam). Over the years, Thai authorities have arrested a number of orangutan traffickers, and repatriated more than 70 individuals in fulfilment of its obligations to the CITES Convention. In December 2020 for instance, Thailand's Department of National Parks, Wildlife and Plant Conservation (DNP) repatriated four orangutans to Indonesia. These repatriations have certainly had an important budgetary impact for Wildlife Authorities, as they had to face transport and care expenses. Under the 2019 Wildlife Protection Act, the DNP is entitled to request compensation for these expenses but also for the harm caused to the specimens.

Until now all repatriations have been done under the former Wildlife Protection Act, which did not include any provisions on liability. However, State authorities may use the relevant provisions of the Civil and Commercial Code to claim compensation for the care and repatriation costs to wildlife traffickers. Since the entry into force of the Wildlife Protection Act in November 2019 the DNP is also explicitly entitled to request compensation for the harm caused to the specimens. The repatriation expenses still need to be claimed on the basis of the Civil and Commercial Code. In addition, a complete damage claim would include not only the repatriation costs, but also all costs related to the care of specimens from the moment of seizure until their release in the wild. However, there has never been any claim for damages in this respect.

Opportunity to expand and codify meaningful approaches to remedies

Thailand's existing legislation (DNP Announcement) provides some rules for the DNP on how to develop damage claims for physical harm to biodiversity, and who has the authority to do this. But this legislation also still has scope for more clear and meaningful approaches to remedying harm to biodiversity in some important cases. For example, the Wildlife Protection Act determines that the State is entitled to seek financial compensation for the value of the harm to fauna, and for the restoration measures undertaken for that fauna. It also prescribes that rules for the quantification of the value of fauna shall be defined by the Director-General, although these have not yet been enacted. To date, the focus has been on calculating monetary values of wildlife and focus on technical formulas, and DNP, State Prosecutor and judicial approaches to setting values for financial claims remain unclear (Table 2). There is also scope for greater clarity and depth in developing remedies for harm to marine resources and mangroves, for which

rules do not exist and which are the responsibility of the DNP's Natural Resources Damage Value Assessment Committee.

There is now an opportunity to reflect on what would be the most appropriate guidance to issue in Thailand, as there are several possible approaches to developing guidelines for developing damage claims. It creates an opportunity for the DNP to reflect on existing cases and consider what types of science-based remedies are needed in the cases they are processing.

It would be strategic for future legislation to define what elements constitute "total value", such as past harm, current harm, future harm, interim loss, and both financial and non-financial dimensions. Further guidelines could then guide how these elements are calculated, in a way that creates greater certainty but does not limit the rights of plaintiffs or the prospect of strategic litigation.

There is, on one hand, a need to deliver simple, practical, guidance that reduces technical burdens and allows authorities to act promptly. However, in the search for simplified approaches, price lists and technical formulas be avoided as they mistakenly conflate monetary fines and technical formulas for measuring ecosystem services with remedies. Paying a fixed amount does not fully account for all the actions that authorities may have taken to remedy harm, and does not meaningfully represent values for biodiversity. Instead, remedies rely on identifying the actions needed to respond to harm. It may be useful to have a list of remedial actions that authorities normally take in these types of cases. The "total value" of harm to species would then be calculated on a case-by-case basis: not on a fixed amount, but on the final procurement costs resulting from the remedial actions undertaken by the authorities (Box 6).

Panthra tigris
Credit: B. Meyer

Box 6: Illustration of remedies for a damage claim, in response to an illegal wildlife trade case

Legislation suggests that remedies should reflect the "total value" of harm in a case, but does not specify what these include. This example considers the recent arrest of an alleged wildlife trafficker and the seizure of four tiger cubs.[17] A liability suit seeking remedies could include a damage claim that considers multiple types of remedial actions (Table 3).

Table 3. Example remedies in tiger trafficking case

Types of remedial actions	Remedies to include in a damage claim
To restore harm to the (live) specimen(s)	▪ Total cost of rescue and transport of four cubs ▪ Total cost of rehabilitation and maintenance of the four cubs from the moment of seizure until their final destination has been decided (current and future costs of enclosure, food, veterinary care and compliance with all animal welfare regulations)
To restore harm to the species and the ecosystem	▪ Total cost of extra enforcement patrolling and extra scientific monitoring of a specific area with tiger population during a 10 year period, to ensure that the tiger population increases by a few individuals
To restore harm to humans, both financial and relational values (i.e., human wellbeing)	▪ Total costs of an educational programme in the affected community around Khun Tan District to highlight harms to many relational values that humans have for nature that were harmed by the defendant ▪ If the animals are publicly exhibited while they recover: an information board that explains the history of what happened and the remedial actions taken ▪ If the area where the animals came from is known for tourism: Financial compensation to local residents for the lost income from ecotourism (e.g., percentage of previous years' income) ▪ Public apologies
To restore harm to the State	▪ Total costs of the undercover operation ▪ Financial compensation for harm to State's obligation to protect the environment and harm to reputation

Opportunity for Green Benches to facilitate damage claims and possibilities for other plaintiffs

The existence of Green Benches in civil and administrative courts in Thailand, which have their own rules tailored to the needs of environmental matters, provides greater clarity about process and relaxing procedural requirements, and eliminates many procedural barriers to liability litigation that exist in other fora. As such, these courts create unique opportunities to operationalise, test and expand the boundaries of liability litigation and the remedies they can provide – many of which have not yet been explored in litigation.

- **Unique powers:** Green Benches have unique investigative capacity, and may call upon experts, witnesses, and expertise, and visit harmed sites as they see fit to clarify the facts. This means that they can expand investigations into plaintiffs' claims in ways that reduce burdens on plaintiffs, more deeply understand harm, and expand the scope of remedies.

- **Expanded scope of harm and remedies:** Green Benches could also help expand the scope of harm, and thus the types of remedies they award. The Environmental Civil Litigation Guidelines allow courts to consider not only current or past harm, but also future consequences of harm to "natural resources, environment or ecosystem, public interest, impacts on personal life or health, environmental rights of the next generation and sustainable development principles." The Environmental Administrative Litigation Guidelines further open up the list of harms to include harm to natural resources and moral harm. These extend far beyond the approaches to damage claim formulation listed in the 2021 DNP Announcement.

  The Civil and Administrative Guidelines give courts wide discretion to determine compensation to be granted, according to the case facts and potentially beyond what plaintiffs request. For example, the Administrative Guidelines allow courts to order follow-up care for sickness after the judgement, interim loss, future harm, psychological harm or non-monetary harm, natural resource harm, pollution elimination cost, natural resource restoration costs, and damages incurred to community rights and community way of life. In addition, judgements shall include a reservation to determine future damage, and can have retroactive effects.

- **Improved access to justice:** These courts provide explicit standing for a broader range of plaintiffs, beyond the State, potentially allowing them access to remedies that may not be available via traditional/general civil proceedings. For example, the Environmental Administrative Litigation Guidelines provides broad legal standing in matters of Public Interest Litigation considering the rights of the communities, non-governmental organisations, associations, legal entities, or stakeholder groups in the environment. These Guidelines also allow for judges to exempt public interest plaintiffs from paying court fees when certain conditions are met. They can further impose conditions on defendants to ensure they meet their court-ordered obligations, without needing to open new litigation.

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