# Wildlife management and conservation in Vietnam

From policy to practice

Nguyen Thi Van Anh Nguyen Thi Thuy Anh Pham Thu Thuy Tang Thi Kim Hong







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Nguyen Thi Van Anh Vietnam National University

Nguyen Thi Thuy Anh Diplomatic Academy of Vietnam

Pham Thu Thuy Center for International Forestry Research

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## 1 Introduction

Vietnam is one of the countries with the highest biodiversity in the world with more than 11,000 species of higher vascular plants, 1,000 species of moss, 310 species of mammals, 840 species of birds, 296 reptiles, 192 amphibians, over 700 freshwater fish species and approximately 2,000 saltwater fish species (MARD 2008). The Vietnamese share a tradition of using wildlife products for food and medicine (Government of Vietnam 2004; Workman 2004). In addition, because Vietnam's economy is still underdeveloped, around 25 million people depend on forest products and 8 million people make a living from fishing (World Bank 2005), leading to hunting, animal husbandry and wildlife trade on a small scale, making it difficult to control.

Since 1986, Vietnam has started to trade wildlife internationally, and has gradually become one of the consuming markets and an important link in the global wildlife smuggling chain. Vietnam has a long land border and many deep water ports that are convenient for the circulation of international and regional goods (WWF 2016; MARD 2018). With the development of the nation's economy, people's incomes are increasing, leading to increased demand for luxury furniture, fashion, medicines and foods made from animal products, creating a large demand for wildlife trade growth (MARD 2018). Consequently, biodiversity in Vietnam has witnessed a great decline with many flora and fauna species either extinct or in danger of extinction. The number of species on Vietnam's Red List has doubled in under 25 years (1992–2016) (The National Assembly 2019).

Faced with this serious decline in biodiversity, the Government of Vietnam has taken drastic measures, such as promulgating policies and legal documents to prevent poaching and trade in endangered species, and became the 121st member country to sign the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1994. In the last two years, due to the influence of the Covid-19 epidemic, Vietnam has become more determined to halt the wildlife trade, not only to avoid the spread of disease in the country, but also to contribute to the protection of its declining biodiversity. However, the wildlife trafficking situation in Vietnam is becoming increasingly serious and complex, and growing in scale and volume (RILO A/P 2014) involving organized smuggling groups with ever more sophisticated and reckless methods (EIA 2021).

In the face of increasingly complex international, regional, national and local contexts, Vietnam is trying to perfect its legal framework and improve the effectiveness of its wildlife conservation and management policies. In addition to ensuring national policies are harmonized with international and regional regulatory frameworks, it is assessing policy implementation effectiveness and analysing opportunities and challenges for wildlife management and conservation, completing the legal document system and removing barriers to improve policy effectiveness. Based on a review of secondary literature and interviews with experts, this report was made with three main objectives:

- Reviewing current documents relating to wildlife management and conservation in Vietnam;
- Evaluating the effectiveness of these policies;
- Proposing directions for improving the effectiveness of wildlife conservation and management policies and ensuring people's livelihoods.

# 2 The legal system relating to wildlife management and conservation

Together, Figure 1 and Table 1 provide an overview of the legal and regulatory framework for wildlife conservation and management in Vietnam.



Figure 1. Cross-sectoral wildlife policies

### 2.1 Forestry sector policy

The forestry sector has adopted many policies relating to wildlife conservation and management (Table 1). These policies focus on sustainable wildlife farm management and improving law enforcement in the management of violations related to the transport, storage, trade and breeding of wild animals. With a leading role in charge of the forestry sector, the Ministry of Agriculture and Rural Development (MARD) has advised the government to develop and implement sectoral policies at both the guiding and regulatory levels with coordination between state agencies.

Table 1. Some key forestry sector policies on wildlife trade management

Year	Policy name	Content	Responsible authority
Year 2017	Policy name Law on Forestry	Article 9. Prohibited acts  Illegally hunting, shooting, catching, caging, slaughtering, transporting, or trading in forest animals; illegally collecting specimens of forest plant or animal species.  Storing, trading in, transporting, processing, advertising, displaying, exporting, importing, temporarily importing, temporarily exporting, or transiting forest products against regulations of Vietnam law and international agreements to which the Socialist Republic of Vietnam is a signatory.  Article 72. Trading management of forest products and trading in specimens of forest plant and animal species  Issuance of licenses for or certificates of eligible exported/imported forest products suitable for international agreements to which the Socialist Republic of Vietnam is a signatory.  Export, import, temporary import, temporary export, or transit of specimens of forest plant and animal species for commercial purposes shall comply with regulations of Vietnam law and CITES.  Trade in specimens of endangered/rare/wild species of forest plants and animals provided in the CITES Appendices shall ensure origins and management from use, transfer, nurture to processing and	The Minister of Agriculture and Rural Development shall specify procedures and documents on detecting origin and marking specimens of species and take charge and cooperate with relevant ministries and ministerial authorities in proposing conclusion of international agreements on forestry; and act as the focal point and national representative to exercise rights and fulfil obligations applying to members of CITES, the United Nations Convention to Combat Desertification (UNCCD) and other international agreements related to forestry.  Forest rangers are organizations that are responsible for managing and protecting forests and ensuring compliance with regulations of law on forestry; and play a role as forces specialized in fire safety.
		consumption.  Traceability and chain management must be ensured during exploitation, cultivation, farming, processing and consumption.  Must be marked to identify legal origin in accordance with the nature and type of each kind of specimen, ensuring against counterfeiting or erasure.	
2018	Decree 156/2018/ ND-CP on enforcement of a number of articles of the law on forestry	Article 20. Exploitation of forest products in protection forests  In case of exploitation of non-timber forest products in natural protection forests:	The government or Prime Minister will invest, support investment and give investment incentives to forest protection and development programmes, projects and activities, and processing and trading of forest products.

Table 1. Continued

Year	Policy name	Content	Responsible authority
		Exploitation is only permitted if it ensures sustainable development of the forest and that the exploitation output is not greater than the amount of growth of the species and causes no harm to the protection function of the forest.	
		Article 80 and Article 81.	
		Prepare annual financial plans including plans on collection and use of forest environmental service charges and other financial resources and estimates of expenditures for the fund operation, and send them to the Fund Management Board for consideration which then submits them to the Ministry of Agriculture and Rural Development and provincial People's Committees for approval.	
2019	Decree 01/2019/ ND-CP on forest rangers and forest protection forces of forest owners	Detailed regulations on tasks, powers, organization and equipment to ensure operation, and regimes and policies for forest rangers, including duties and powers to ensure the operations of Forest Owners' Task Forces for Forest Protection.  Forest rangers. To advise on state management of forestry: develop legal documents, programmes, plans and schemes on forest management and protection, forest fire prevention and fighting, and ensuring compliance with forestry law. Direct, guide and inspect the work, organize the implementation of measures to manage and protect forests, prevent and fight forest fires and ensure the observance of the law on forestry. This includes organizing to fight, prevent and stop illegal acts of exploiting, using, transporting, trading, storing and processing forest products in accordance with law; rearing and cultivating forest plants and animals; verifying, tracing and certifying the origin of forest products; handling administrative violations and applying measures to prevent administrative violations; and prosecuting and investigating criminal cases of violations of the forestry law in accordance with the law.	Ministry of Agriculture and Rural Development.  Directing uniformly on professional expertise, inspection and examination of forest rangers' activities nationwide.  On the basis of their assigned functions, tasks and powers, relevant ministries and branches shall coordinate with the Ministry of Agriculture and Rural Development.

Table 1. Continued

Year	Policy name	Content	Responsible authority
		Forest protection force. Patrol, inspect and protect forests, prevent acts of deforestation, exploitation of forest products, and other violations of the law on forest management and protection within the assigned area. Report in a timely manner to forest owners and forest rangers on the forest protection situation; abide by the direction and direct management of forest owners, and inspect and guide forest rangers' expertise and professionalism; strictly abide by the provisions of the law while on duty; inspect and prevent violations of the law on forest management, protection and development, and forest product management; make a record of the initial inspection, protect the scene, preserve evidence of violation, and promptly report to the person or agency competent to handle in accordance with the law.	
2019	Decree  06/2019/ ND-CP on the management of endangered, precious, and rare species of forest fauna and flora and observation of convention on international trade in endangered species of wild fauna and flora	This Decree is promulgated with the aim of consolidating regulations on the list of endangered, precious and rare species of forest flora and fauna; the regime of management, protection, order and procedures for exploitation of endangered, precious and rare species of forest flora and fauna; and raising common wild animals and implementing the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Vietnam.  This Decree classifies wild animals into two groups:  • Group IB: Endangered species of forest animals that are strictly prohibited from exploitation and use for commercial purposes and species listed in CITES Appendix I naturally distributed in Vietnam.  • Group IIB: Forest animals that are not yet threatened with extinction but are in danger of being threatened if not strictly managed where limited exploitation and use for commercial purposes is allowed,	CITES Management Authority Represent Vietnam to participate in and ensure the implementation of rights and obligations of CITES member countries at meetings of member countries.  Chair and coordinate with competent authorities in CITES implementation in Vietnam. Issue or revoke CITES permits and certificates.  Guide, grant or cancel the farming establishment code. Organize inspection of activities of export, import, re-export, import and transit of wild animals.

Table 1. Continued

Year	Policy name	Content	Responsible authority
		To trade in wild animals, it is required to have a CITES permit and certificate with full information, stamped with CITES stamp or barcode, and signed and stamped by the CITES Management Authority of Vietnam.  To nurture and conserve wild animals, the following conditions must be met: ensuring a legal breeding source and building stables and farms suitable to the characteristics of the species; ensuring safe conditions for people and livestock, environmental sanitation and disease prevention, the species being raised is a species declared by the Vietnam CITES Scientific Authority to have the ability to reproduce continuously for many generations in the controlled environment; and the Vietnam CITES Scientific Authority has certified in writing that rearing and growing does not affect the existence of farmed species and related species in the wild. In addition, species managed in aquaculture facilities must be registered with the code of the farming establishment by the CITES Management Authority of Vietnam.	Vietnam CITES Scientific Authority  Advise the CITES  Management Authority and related agencies on the status of wildlife populations, endangered, precious and species of forest fauna and flora.  Rescue and care for live specimens, ensure suitable habitats and distribution areas to release wild animals.
2021	Decree 84/2021/ ND-CP amendments to Government Decree No. 06/2019/ND-CP dated 22 January 2019 on the management of endangered, rare, and precious species of forest fauna and flora and observation of CITES	Article 1. Amendments to Government Decree No. 06/2019/ND-CP dated 22 January 2019  Adds or amends the following definitions:  Derivative of an animal or plant means any form of substance extracted from an animal or plant, including blood, fluids, bile and fat of an animal, or resin, essential oil or concentrate of a plant.  For non-commercial purpose means any activity serving foreign affairs, scientific research, preservation breeding, ornamental breeding, salvage, and exchange between zoos, arboreta and museums; exhibitions; circus performances; and exchange and return of specimens between CITES management authorities.  Ranching means the rearing in a controlled environment of animals taken as juveniles, eggs or embryos from the wild.	

Table 1. Continued

#### Year Policy name Content Responsible authority Wild animals and plants means animals and plants that live or grow in natural or artificial habitats or those reared or grown in controlled environments, but not considered domestic animals as defined in the Law on Husbandry, and are one of the following species: a. Endangered, precious and rare species of fauna and flora prioritized for protection; b. Endangered, precious and rare species of forest fauna and flora; c. Endangered species of wild fauna and flora in CITES Appendices; d. Normal species of forest fauna; e. Other terrestrial animals in the class of Aves, Mammalia, Reptilia or Amphibia, except certain species in the lists announced by the Ministry of Agriculture and Rural Development in cooperation with the Ministry of Natural Resources and Environment and relevant agencies. During the process of rearing and planting, it is necessary to make and monitor books on rearing and planting wild animals and plants; periodically report to and submit to inspection and supervision by the CITES Management Authority of Vietnam, and state management agencies in charge of fisheries, forestry and the environment at the provincial level. Adds regulations on automatic farming, and wild plants: Within two working days from the date of receipt of the application for registration of a codebase, the code-granting agency specified in this Decree shall send a written request for certification to the CITES Scientific Authority of Vietnam. Within 15 working days from the date of receipt of the document from the code-issuing agency, the CITES Scientific Authority of Vietnam is responsible for replying in writing to the content that is affected or not affected by the farming reproduction work, rearing to the existence of cultured species and various related species in nature. Change the format to be the current database number.

Table 1. Continued

Year	Policy name	Content	Responsible authority
		Clarification of animal specimens exported from the F2 generation or later that have been bred at a farming establishment that has been granted a code, and exported animal specimens from the F1 generation from a farming establishment that have been granted a code.	
		Replace the list of endangered, precious a rare forest plants and animals promulgate together with Decree No. 06/2019/ND-C with the list of endangered, precious and rare forest plants and animals in Appendit promulgated together with this Decree.	ed P
2014, 2016, 2020	Directive No. 03/CT-TTg on strengthening direction and implementation	Stop importing live or dead wild animals of wild animals (except aquatic species for and feed for livestock)  Ministry of Agriculture and Rural Dev	or production, processing as food
	implementation of measures to control and conserve endangered, precious and rare wildlife species  Directive No. 28/CT-TTg on a number of urgent solutions to prevent and fight against illegal acts of harming wild animals  Directive No. 29/CT-TTg on some urgent solutions for wildlife management in 2020	solutions to manage captive wild animals  Ministry of Public Security: Strengthen and promptly handles violations relating particular on dismantling transnational or illegal trading, stockpiling, transportation for re-export and illegal transit of animal units to inspect and handle illegal advertispecimens on electronic information sites	s prevention, fights, stops, detects to wild animals; focuses in rganized crime channels in the a, export, import, temporary import specimens; coordinates with related sing and trading of wild animal
		<b>Department of Defence</b> : Coordinates wi patrols and enforce strict controls at bord sea; promptly detects, arrests and handles illegal purchase, sale, transportation, expre-export of wild animals; promotes publ of people in border areas not to hunt, cap wild animals illegally.	er gates, border crossings and at s in accordance with law cases of ort, import, temporary import for ic information and raises awareness
		Ministry of Industry and Trade: Accordand authority, strengthens market inspect promptly handles acts of transporting and and rare wild animals as well as products said species.	ions and control; prevents and I trading in endangered, precious
		Ministry of Health: Reviews and manage business establishments, and drug and more establishments that use ingredients from wild animals of legal origin are used in management.	edical product manufacturing wild animals, ensuring that only

Table 1. Continued

#### Year Policy name Content Responsible authority

Ministry of Finance: Provides information and data in accordance with current law and CITES regulations on ivory and rhino horn received, kept and preserved by the ministry; assumes the prime responsibility for, and coordinates with the Ministry of Agriculture and Rural Development and relevant ministries and branches in advising and submitting to the Prime Minister for approval plans on handling and destroying ivory and rhino horn in accordance with the law.

Ministry of Natural Resources and Environment: Carries out state management responsibilities on biodiversity; reviews current legislation; proposes, develops and submits to competent authorities amendments and supplements to regulations on management of endangered, precious and rare species prioritized for protection in accordance with the law on biological form.

Ministry of Information and Communications: Strengthens information on and awareness of laws on and solutions to protecting wild animals; coordinates with relevant agencies in preventing and strictly handling acts involving abuse of telecommunications networks and the Internet for the purpose of advertising, displaying, propagating, buying and selling specimens of wild animals banned under the provisions of law.

#### The Supreme People's Procuracy, the Supreme People's Court:

Coordinates closely with the investigation agencies to direct and accelerate the investigation and prosecution of subjects who violate the law on hunting, catching, buying, illegally selling, transporting, slaughtering and possessing wild animals; improves the quality of settlement and adjudication of cases relating to the protection of wild, endangered, precious and rare animals; strengthens awareness raising and education on wildlife protection; and applies severe punishments to masterminds and leaders who abuse their positions and powers to commit crimes, and offenders from professions that relate to the protection of endangered, precious and rare wildlife.

People's Committees of provinces and centrally-run cities: Implement solutions to protect natural wildlife; strengthen the control of acts of exploitation, hunting, catching, transporting, storing, trading, consuming and using wild animals; organize the complete destruction of illegal wildlife trading channels; strengthen the management and inspection of wildlife farming and trading establishments on compliance with legal origin, veterinary hygiene, and environmental and food safety; arrange for business establishments in their jurisdictions to sign commitments not to buy, sell, use, consume, display or advertise wild animal specimens that have no assurance of legal origin, and strictly handle any violations.

Sources: Government of Vietnam (2014, 2016a, 2017b, 2018a, 2019a, 2019b, 2020a, 2021)

## 2.2 Fisheries industry policy

Table 2 presents the main policies in the management and trade of wildlife covered by fisheries policies in Vietnam.

Table 2. Wildlife conservation management policies related to fisheries

Year	Policy name	Content	Responsible authority
2016	Decision No. 811/QD-BNN-TCTS approving the action plan for sea turtle conservation in Vietnam for the period 2016–2025	Mission of the action plan  Reduce agents that cause sea turtle deaths;  Establish, manage and protect sea turtle breeding areas and habitats;  Formulate and complete documents on state management of sea turtle conservation and protection;  Research and monitor biological and ecological characteristics of sea turtles;  Raise public awareness and professional capacity for officers in charge of sea turtle conservation;  Strengthen regional and international cooperation.	General Headquarters of Fisheries; General Department of Forestry; Department of Science, Technology and Environment; Seafood Research Institute; Department of Planning; Department of Finance; coastal provinces and cities' Departments of Agriculture and Rural Development; national parks/ marine protected areas; fisheries associations and unions; domestic and foreign organizations related to sea turtle conservation: Develop detailed content and cost estimates for priority tasks to be submitted to competent authorities for approval as a basi for determining and allocating funding; propose and implement conservation activities for sea turtles.
2017	Law on Fisheries	Article 7. Prohibited actions in fishery activities  Illegal commercial fishing, failure to report and comply with regulations of law (hereinafter referred to as "illegal commercial fishing"); purchase, sale, transport, storage, preliminary processing and processing of aquatic products originating from illegal commercial fishing, aquatic products with impurities for commercial fraud purposes.  Article 40. Breeding, rearing and artificial propagation of aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species  Organizations and individuals are allowed to breed, rear or carry out artificial propagation of aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species in accordance with regulations of CITES and Vietnam law.	The Ministry of Agriculture and Rural Development: Develop and submit to the government for promulgation the list of endangered, precious and rare aquatic species; criteria for species identification, management and protection regime and order and procedures for exploiting endangered, precious and rare aquatic species organize the investigation, survey, collection, conservation and preservation of original breeds of native aquatic species, endemic aquatic species of economic value, and endangered precious and rare aquatic species organize the investigation, survey, collection, conservation and preservation of original breeds of native aquatic species, endemic aquatic species, endemic aquatic species, endemic aquatic species of economic value, and endangered precious and rare aquatic species of economic value, and endangered precious and rare aquatic species of economic value, and endangered precious and rare aquatic species of economic value, and endangered precious and rare aquatic species of economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value, and endangered precious and rare aquatic species economic value economic value economic value economic value ec

Table 2. Continued

Year	Policy name	Content	Responsible authority
		Provincial fisheries authorities shall manage and trace origins of aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species originating from aquaculture or nature.  Article 99. Processing, export, import, re-	
		export, introduction from the sea and transit of aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species	
		1. The processing, export, import, re-export, introduction from the sea and transit of endangered, precious and rare wild aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species shall comply with CITES regulations and Vietnam law.	
		2. Processed specimens of aquatic species prescribed in Appendices of CITES and endangered, precious and rare aquatic species shall satisfy the following requirements:	
		<ul> <li>a. Specimens have legal origin and have been taken from facilities breeding, raising or carrying out artificial propagation of aquatic species;</li> </ul>	
		b. Specimens are derived from legal commercial fishing;	
		c. After processing, any seizures of specimens are in accordance with provisions of law.	
ND-CP guidelines for implementation of the law on fisheries  must certify the origin of aquiculate of farming establishments in provisions of CITES and An Law on Fisheries.  Article 67. Export, import, intransit of CITES-listed aquaendangered, precious and rare of company and rare aquatic species of species licensed for sale in No.	Articles 39, 40, 41. To breed, raise, and artificially cultivate aquatic species included in the Appendices to CITES and endangered, precious and rare aquatic species, the parties must certify the origin of aquatic species included in the CITES Appendix; conditions of farming establishments must meet the provisions of CITES and Article 38 of the Law on Fisheries.	Ministry of Agriculture and Rural Development and Ministry of Transport: Designate and publicize the list of seaports to carry out import, temporary import, re-export, border-gate transfer and transit of aquatic products and aquatic products originating from fishing through the territory of Vietnam and	
		Article 67. Export, import, re-export and transit of CITES-listed aquatic species, and endangered, precious and rare aquatic species	notify the designated port list for the Food and Agriculture Organization of the United
		Organizations and individuals issued with import licenses are not required to obtain a license for import of endangered, precious and rare aquatic species on the list of aquatic species licensed for sale in Vietnam, except for CITES-listed aquatic species.	Nations (FAO).

Table 2. Continued

### Year Policy name Content Responsible authority

Upon export, import, re-export, or introduction from the sea of CITES-listed endangered, precious and rare aquatic species, regulations of the law on management of endangered, precious and rare animals and plants and enforcement of CITES, and regulations of this Decree shall be complied with.

Article 68. Introduction from the sea of endangered, precious and rare aquatic species

Upon introduction from the sea of CITES-listed endangered, precious and rare aquatic species, regulations of the law on management of endangered, precious and rare plant animals and plants and enforcement of CITES, and regulations of this Decree shall be complied with

Article 70. Control of import, temporary import, re-export, temporary export, reimport and transit of fishery products originating from illegal, unreported and unregulated fishing

4. Check information related to foreign ships when the ships docked:

Content of inspection: Ship information (ship name, vessel number, IMO number); information on ship owners, fishing permits, trans-shipment permits, production and composition of aquatic species, fishing gear, documents required by CITES (if any).

Inspect and supervise the implementation of regulations on management regimes of endangered, precious and rare aquatic species; certify the origin of endangered, precious and rare aquatic species from aquaculture or exploitation from the wild; monitor establishments raising, breeding and artificially cultivating endangered precious and rare aquatic species, including species included in the Appendices to CITES and determined according to regulations; enforce the provisions of CITES.

Ministry of Finance, Ministry of National Defence, Ministry of Public Security: Directing the General Department of Customs and the Border Guard not to clear customs for shipments of illegally caught aquatic products; inspect fishing vessels and crew members entering and exiting fishing ports in accordance with law; manage fishing vessels, crew members and people working on foreign fishing vessels operating in Vietnamese waters, and Vietnamese fishing vessels operating in sea areas; coordinate with the Ministry of Agriculture and Rural Development in managing the transportation of aquatic products through seaports, logistics services and fishing vessels at seaports in accordance with the Agreement on Port State Measures.

Table 2. Continued

Year	Policy name	Content	Responsible authority
Year 2019	Policy name  Decree 42/2019/ ND-CP penalties for administrative violations against regulations on fisheries	Article 41. Violations against regulations on the collection, trading, handling, preliminary processing, processing, preservation and transport of fish and fishery products  1. The following fines shall be imposed for illegal collection, trading, handling, preliminary processing, processing, preservation or transport of endangered, rare and precious aquatic species in Group II or fish, fishery products and parts thereof of unknown origin of endangered, rare and precious species in Appendix II of CITES if not liable to criminal prosecution:  a. A fine ranging from VND 10,000,000 to VND 15,000,000 shall be imposed for a violation involving fishery products of < 20 kg;  b. A fine ranging from VND 15,000,000 to VND 20,000,000 shall be imposed for a violation involving fishery products of 20 kg to under 50 kg;  c. A fine ranging from VND 20,000,000 to VND 30,000,000 shall be imposed for a violation involving fishery products of 50 kg to under 100 kg;  d. A fine ranging from VND 30,000,000 to VND 40,000,000 shall be imposed for a violation involving fishery products of 100 kg to under 200 kg;  e. A fine ranging from VND 40,000,000 to VND 50,000,000 shall be imposed for a violation involving fishery products of 100 kg to under 200 kg;	Directorate of Fisheries; Provincial People's Committees; District People's Committees; Public Security at all levels; Traffic Police Department; Coast Guard Squadron; Market Management Team; General Department of Market Management; Department of Agriculture and Rural Development; Sub-Department for Quality Management of Agricultural, Forestry and Fishery Products; Ministry of Agriculture and Rural Development; Department of Quality Management of Agroforestry and Fisheries Products; Regional Fisheries Control Department: Have the right to impose penalties for administrative violations against regulations on the collection, trading, storage, preliminary processing, processing, preservation and transportation of aquatic products.
		f. fine ranging from VND 50,000,000 to VND 60,000,000 shall be imposed for a violation involving an fishery products of ≥ 500 kg.	

Table 2. Continued

Year	Policy name	Content	Responsible authority
		2. The following fines shall be imposed for illegal collection, trading, handling, preliminary processing, processing, preservation or transport of fish, fishery products and parts thereof of endangered, rare and precious species in Group I or those of unknown origin of endangered, rare and precious species in Appendix I of CITES if not liable to criminal prosecution:	
		a. A fine ranging from VND 30,000,000 to VND 40,000,000 shall be imposed for a violation involving fishery products of < 10 kg;	
		b. A fine ranging from VND 40,000,000 to VND 50,000,000 shall be imposed for a violation involving fishery products of 10 kg to under 20 kg;	
		c. A fine ranging from VND 50,000,000 to VND 60,000,000 shall be imposed for a violation involving fishery products of 20 kg to under 50 kg;	
		d. A fine ranging from VND 60,000,000 to VND 70,000,000 shall be imposed for a violation involving fishery products of 50 kg to under 100 kg;	
		e. A fine ranging from VND 70,000,000 to VND 80,000,000 shall be imposed for a violation involving fishery products of 100 kg to under 500 kg;	
		f. A fine ranging from VND 80,000,000 to VND 100.000.000 shall be imposed for a violation involving fishery products of ≥ 500 kg.	

# 2.3 Regulations and policies of the natural resources and environment sector

Table 3 shows the main policies in wildlife management and trade as defined in the policies of the natural resources and environment sector in Vietnam.

Table 3. Wildlife conservation policies related to the natural resources and environment sector

Year	Policy name	Content	Responsible authority
2013	Decree 160/2013/ND- CP on criteria to determine species and	This Decree amends and supplements Decree No. 64/2013/ND-CP dated 16 July 2019 with the purpose of expanding the list of endangered and rare species prioritized for protection.	The Ministry of Natural Resources and Environment shall organize and guide surveys, observations and assessments of situations of wild
	the regime of managing species	Article 4. Criteria to determine species prioritized protection  Species under lists of those prioritized for	fauna and flora species under lists of species prioritized for protection; and make statistics
	under lists of endangered,	protection must satisfy the following criteria:	and sum up information about changes in wild fauna and flora
	precious and rare species prioritized for	<ol> <li>The number of individuals is low or it is in danger of extinction as prescribed by Article</li> <li>of this Decree;</li> </ol>	species under lists of species prioritized for protection nationwide.
	protection	2. The species is endemic, or has special scientific, medicinal, economic, ecological, environmental landscape or cultural-historic value.	The Ministry of Agriculture and Rural Development shall organize and guide surveys, observations and assessments
		<b>Article 5.</b> Determination of species having a low number of individuals or being in danger of extinction	of situations of animal breeds, plant varieties, microorganisms and fungi under lists of species prioritized for protection; make statistics and sum up information about changes in animal breeds, plant varieties, microorganisms and fungi
		A wild animal or plant species is determined as having a low number of individuals or being in danger of extinction upon having one of following conditions:	
		a. Population has fallen by at least 50% according to observations or estimates within the last ten (10) years or three (3) generations calculated until the time of assessment; or a decline of at least 50% is forecast in the next 10 years or three (3) generations calculated at the time of assessment;	under lists of species prioritized for protection nationwide; and send information to the Ministry of Natural Resources and Environment for summing up, building and updating the database of species prioritized
		b. Range or distribution is estimated to be less than 500 km² and populations are isolated or distribution and range are in continuous decline;	for protection.

Table 3. Continued

Year	Policy name	Content	Responsible authority
		c. Population of species is estimated to be less than 2,500 mature individuals and has one of the following conditions: in continuous decline, with population falling by 20% or more over the last five (5) years or two (2) generations according to observations or estimates of population calculated until the time of assessment; or number of mature individuals is in continuous decline, with isolated subpopulations estimated to comprise no more than 250 mature individuals, or there is only one solitary subpopulation; d. Population of species is estimated to be less	
		than 250 mature individuals; e. The is a 20% probability or higher of the species' extinction outside nature within the next twenty (20) years or five (5) generations calculated from the time of making a dossier.	
		Article 6. Determination of species with special scientific, medicinal, economic, ecological, environmental and landscape or cultural-historic value	
		1. Species with special scientific value are species carrying precious and rare genetic sources for preservation and hybridization;	
		<ul><li>2. Species with special medicinal value are species that possess compounds with important bioactive properties directly used for or comprising raw materials for preparing medicinal products;</li><li>3. Species with special economic value are</li></ul>	
		species with capacity to generate high profits when commercialized;	
		4. Species with special ecological, environmental and landscape value are species that play a key role in maintaining the balance of other species in a biome; or represent the uniqueness of a natural geographical zone;	
		5. Species with special cultural-historical value are species associated with historical, cultural, or traditional processes or the customs and habits of a community's populace.	
		<b>Article 15.</b> Export and import of specimens of species under lists of species prioritized for protection	
		Apart from compliance with current provisions on export and import applicable to species under Annex I of CITES, Vietnamese management agencies executing CITES shall take opinion in writing of the Ministry of Natural Resources and Environment before any license is issued for export or import of specimens of species of wild fauna and flora under lists of species prioritized for protection.	

Table 3. Continued

Year	Policy name	Content	Responsible authority	
2008, 2018		Law on Biodiversity	This law provides for the conservation and sustainable development of biodiversity, and the rights and obligations of organizations, households and individuals in the conservation and sustainable development of biodiversity.  **Article 5.** State policies on the conservation and sustainable development of biodiversity**	Government: Unified state management of biodiversity  Ministry of Natural Resources and Environment: To be answerable to the government for state management of biodiversity.
		Giving priority to the conservation of natural ecosystems which are important, specific or representative of an ecological region and the conservation of species on the list of endangered precious and rare species prioritized for protection; ensuring control of access to genetic resources.	Ministries and ministerial- level agencies: within the remit of their tasks and powers perform state management of biodiversity as assigned by the government. People's Committees: at	
		Article 7. Prohibited acts related to biodiversity  Hunting, fishing, exploiting bodily parts of, illegally killing, consuming, transporting, purchasing and selling species on the list of endangered precious and rare species prioritized for protection; illegally advertising, marketing and consuming products originating from species on the list of endangered precious and rare species prioritized for protection.	all levels within the scope of their tasks and powers implement state management of biodiversity according to the decentralization of the government.	
		Illegally rearing or growing and planting or culturing wild fauna and flora species on the list of endangered precious and rare species prioritized for protection; illegally accessing genetic resources of species on the list of endangered precious and rare species prioritized for protection.		
2010	Decree 65/2010/ND- CP detailing and guiding a number of articles of the biodiversity law	Article 12. Criteria for identifying endangered precious and rare species on the list of species prioritized for protection  1. Wild animal and plant species; plant varieties, livestock breeds, microorganisms and fungi on the list of endangered precious and rare species prioritized for protection (below collectively referred to as species prioritized for protection) are those meeting the following criteria:  a. Being in danger of extinction;  b. Being endemic or having special scientific, ecological, landscape, environmental or cultural-historical value.	Ministry of Natural Resources and Environment; Ministry of Agriculture and Rural Development; Ministry of Culture, Sports and Tourism: Issue a Joint Circular specifically guiding the identification of species of special scientific, ecological, landscape, environmental or cultural-historical value; and specific guidance on the rescue of wild species; the longterm preservation of genetic resources and genetic specimens of species prioritized for protection.	

Table 3. Continued

Year	Policy name	Content	Responsible authority
		Article 16. Conditions on raising, cul rescue and preservation of genetic res and genetic specimens of species prior protection	sources
		1. Biodiversity conservation facilities obtain certificates for raising and craspecies prioritized for protection;	
		2. The establishment of wildlife rescu must meet requirements on rescue prioritized for protection.	
2018	Decision No.	Targets	
	2713/QD-BNN-TCLN dated 10 July 2018 promulgating action plan for ivory and rhino horn for the period 2018–2020; comply with international commitments to which Vietnam is party	ing ivory and rhino horn, such as the of regulations related to CITES enf	elated to the control of wildlife trade, includ- ne development, amendment and guidance forcement in Vietnam, specific regulations on Forestry and new regulations related to elity of specimens;
		through activities to strengthen cap sional work for investigation, prose crimes; other skills in specimen ide	strengthen inter-sectoral coordination pacity and skills for professionals and profesecution and trying of various types of related entification; application of new provisions of a corresponding penalty framework; and joint ;
		which Vietnam	
		horn products, including implemen	omestic market demand for ivory and rhino ting demand reduction campaigns based on towards a strategy to reduce demand and
			m on ivory and rhino horn seizures in the nd sharing between domestic agencies as well ats.
		Management Authority, Environment of Police, Ministry of Public Securition Using High Technology (Gene Security); Department of Foreign A and Crime Prevention and Control Smuggling Investigation Department of Finance); Forest Protection Department of Agriculture and Rural I Protection Forest Management (General Agriculture and Rural Development International Cooperation (General ture and Rural Development); Department of Environment); Market Management (General Environment); Market M	enting this Decision include: Vietnam CITES ental Police Department (General Department ity); Police Department for Crime Preventral Department of Police, Ministry of Public Affairs (Ministry of Public Security); Drug Department (Border Guard Command); Antient (General Department of Customs, Ministry artment (General Department of Forestry, Development); Department of Special-use and eneral Department of Forestry, Ministry of att); Department of Science, Technology and Department of Forestry, Ministry of Agriculartment of Nature Conservation and Biodivironment, Ministry of Natural Resources ement Department (Ministry of Industry and cry; Supreme People's Court; CITES Secre-

Source: Government of Vietnam (2010, 2013a, 2018b, 2018c)

### 2.4 Investment policies

Table 4 shows the main policies in the management and trade of wildlife covered by investment policy in Vietnam.

Table 4. Wildlife conservation policies related to the investment sector

Year	Policy name	Content	Responsible authority
2020	Law on investment	Article 6. Banned business lines	The government and relevant agencies,
		The business investment activities below are banned:	organizations and individuals: responsible for providing sufficient information and documents to facilitate
		Business in specimens of wild flora and fauna specified in Appendix 1 of CITES; specimens of rare and/or	verification; explaining issues related to investment project contents at the request of the National Assembly agency in charge of verification.
		endangered species of wild fauna and flora in Group I of Appendix III hereof;	The Ministry of Planning and Investment performs the unified state management of investment in Vietnam
		Appendix IV. List of industries	and investment from Vietnam to abroad.
		and trades with conditional business investment	Building and operating the National Investment Information System; building
		Raising and planting wild plants and animals listed under CITES Appendices and the list of endangered, precious and	a national database on investment; evaluating the operation of the system by state management agencies in charge of investment at central and local levels.
		rare forest plants, animals and aquatic animals.	

Source: Government of Vietnam (2020b)

## 2.5 Legal provisions on criminal procedure and handling of violations

Table 5 presents the main policies in the management and trade of wildlife as defined in the provisions of criminal law and handling of violations in Vietnam.

Table 5. Wildlife conservation policy in criminal procedure and violations

Year	Policy name	Content	Responsible authority
2015, 2017	Criminal Code	Regulations on sanctions for cases of trading, possession and harm to wild animals:	The Chief Justice of the Court has the authority to issue
		Article 234. Offences against regulations on management and protection of wild animals	decisions to summarize the penalties of the judgments.
		A person who commits any of the following acts shall be liable to a fine of VND 50,000,000 to VND 300,000,000 or face a penalty of up to three years' community sentence or six to 36 months' imprisonment:	Investigating agencies, procuracies or courts decide to apply reprimand measures to judgments.

Table 5. Continued

#### Year Policy name Content Responsible authority Illegal hunting, killing, raising, imparking, transporting, trading of endangered, rare animals in Group IIB or animals in Appendix II of CITES assessed at VND 300,000,000 to under VND 1,000,000,000; other common wild animals assessed at VND 500,000,000 to under VND 1,500,000,000; Illegal possession, transport, trading of endangered, rare animals in Group IIB or animals in Appendix II of CITES or body parts or products thereof assessed at VND 300,000,000 to under VND 1,000,000,000; common wild animals or body parts thereof assessed at VND 500,000,000 to under VND 1,500,000,000. Article 244. Offences against regulations on management and protection of endangered rare animals Any person who violates regulations on management and protection of animals on the list of endangered and rare species; endangered rare animals of Group IB or in Appendix I of CITES in any of the following circumstances shall be liable to a fine of VND 500,000,000 to VND 2,000,000,000 or face a penalty of one to five years' imprisonment: a. Illegally hunting, killing, imparking, transporting or trading animals on the list of endangered and rare species; b. Illegally possessing, transporting or trading animals specified in Point a of this Clause or body parts thereof; from 2 kg to under 20 kg of elephant tusks; from 0.05 kg to under 1 kg of rhino horns; c. Illegal hunting, killing, raising, imparking or trading of Group IB animals or animals in Appendix I of CITES other than those specified in Point a of this Article involving 3-7 individuals of class Mammalia, 3-7 individuals of class Aves or class Reptilia, or 10–15 individuals of other classes; d. Illegally possessing, transporting or trading vital body parts of 3–7 individuals of class Mammalia, vital body parts of 7-10 individuals of class Aves or class Reptilia, or vital body parts of 10–15 individuals of other classes specified in Point c of this Article;

Table 5. Continued

Year	Policy name	Content	Responsible authority
		e. The quantity of animals is killed, imparked or transformer of animals illegally posses or traded is below the low in Points b through d of the offender has incurred penalty or has an unspensame offence.	ported; body parts essed, transported ver limit specified his Article but an administrative
2015	Criminal Code of Procedures	border protection force, cu	horities of units, as assigned to investigate, under stoms, forest rangers, maritime police force, fisheries people's police force, People's Army
		and fisheries resources surv	Force, customs, forest rangers, maritime police force reillance, when exposing acts that exhibit signs ments to investigate, shall bear these duties and
		ants, conduct investigation one month upon the is	charges or institute legal proceedings against defend- ons and transfer case files to the competent Procuracy suance of a decision to press criminal charges against in flagrante and offenders with transparent personal
		transfer case files to the	charges, initiate preliminary investigations and competent Procuracy in seven days upon the issuance minal charges against serious crimes, felonies, severe demeanours.
2015	Law on	Article 9. Agencies tasked	to conduct a number of investigating activities
	organization of criminal investigation bodies	ties include the Border-C Prevention and Control I Task Force; provincial-le	es tasked to conduct a number of investigating activi- quard Reconnaissance Department; Drug and Crime Department; Crime and Drug Prevention and Control vel Border-Guard Command Posts; Port Border-Gate and Border-Guard Stations;
		clude the Anti-Smugglin Inspection Department; p	ed to conduct a number of investigating activities in- g Investigation Department; Post-Customs Clearance provincial, inter-provincial and municipal Customs -Gate Customs Sub-Departments;
		ties include the Forest Pr	ces tasked to conduct a number of investigating activi- otection Department; Regional Forest Protection acial-level Forest Protection Sub-Departments; and action Sections;
		ties include the Marine P mand Posts; Operation a	tes tasked to conduct a number of investigating activi- olice Command Post; regional Marine Police Com- nd Law Department; Drug-Related Crime Prevention naval fleets; naval flotillas; and operation teams;
			e offices tasked to conduct a number of investigating neries Surveillance Department and regional Fisheries ments.

Table 5. Continued

Year	Policy name	Content	Responsible authority	
2018	Resolution 05/2018/nq-hdtp guiding the application of Article 234 on violations of regulations on wild animal welfare and Article 244 on violations of regulations on endangered or	Article 3. Guidance on application of certain factors of the penalty frame  1. Hunting in prohibited areas means a hunt for wild, endangered or rare animals within preservation areas, national parks, nature reserves, species habitat reserves, and land-scape protected areas, or a hunt within other inhabited areas as specified in the regulations of the competent state agency;  2. Hunting during an inhibited period means a hunt for wild, endangered or rare animals during their reproductive or migration pe-	Council of Judges of the Supreme People's Court	
	rare animals of the Criminal Code	riod. The reproductive or migration period shall be determined according to the regula- tions of the competent agency;		
		3. Use of banned equipment means the use of any weapons, poisoned arrows, explosives, poisons, digging of tunnels and holes, use of spikes, spike traps, electric traps, large logs and other dangerous equipment banned by competent authorities for hunting;		
		4. Cross-border transport and trade means any cases in which a criminal has transported or is currently transporting wild, endangered or rare animals, their body parts or products made from them out of national borders of the Socialist Republic of Vietnam by land, water, air or underground. If the transport and trade thereof have completed customs procedures, they shall be considered cross-border transport and trade.		
		<b>Article 4.</b> Possession of wild, endangered or rare animals, vital body parts or products thereof		
		possession of wild, endangere mals, vital body parts and pro- constitutes a crime, the offend criminal responsibility for suc	1. From 0:00 am on 1 January 2018, if the possession of wild, endangered or rare animals, vital body parts and products thereof constitutes a crime, the offender shall bear criminal responsibility for such specific cases as mentioned in Article 234 or Article 244 of the Criminal Code.	
		2. A person who illegally possesses wild, endangered or rare animals, vital body parts and products thereof before 1 January 2018 shall bear criminal responsibility for such violation, except for cases in which a person possesses wild, endangered or rare animals, vital body parts and products thereof for the purpose of illegal trade and profits.		

Table 5. Continued

Year	Policy name	Content	Responsible authority
		Article 5. Illegal appropriation of wild, endangered or rare animals, vital body parts and products thereof	
		1. If a person illegally appropriates wild, endangered or rare animals, vital body parts and products thereof of another person, and such action constitutes a crime, he/she must bear the criminal responsibility for the specific case mentioned in the Chapter called "Property Ownership Infringement" of the Criminal Code;	
		2. If a person illegally appropriates wild, endangered or rare animals, vital body parts or products thereof and then commits one of the violations specified in Article 234 or Article 244 of the Criminal Code which constitutes a crime, he/she must bear the criminal responsibility for the specific case mentioned in the regulations on wild animal welfare or the regulations on protection of wild, endangered or rare animals.	
2019	Decree 35/2019/nd-cp penalties for administrative violations against regulations on forestry	Article 22. Illegal transport of forest products	Forest rangers; Presidents
		A fine ranging from VND 5,000,000 to VND 15,000,000 shall be imposed in one of the following circumstances:	of People's Committees at all levels; specialized inspectors in the field of forestry; Police; Borderlands security; Coast
		a. The violation involves forest animals of common species, body parts or products thereof assessed at < VND 15,000,000;	Guard; Market management; Customs: Competent to impose administrative penalties
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at < VND 7,000,000;	
		A fine ranging from VND 15,000,000 to VND 25,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 15,000,000 to under VND 25,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 7,000,000 to under VND 15,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at < VND 1,000,000;	

Table 5. Continued

Year	Policy name	Content	Responsible authority
		A fine ranging from VND 25,000,000 to VND 50,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 25,000,000 to under VND 50,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 15,000,000 to under VND 25,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 1,000,000 to under VND 3,000,000;	
		Article 23. Illegal storage, trading and processing of forest products	
		A fine ranging from VND 5,000,000 to VND 15,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at < VND 15,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at < VND 7,000,000;	
		A fine ranging from VND 15,000,000 to VND 25,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 15,000,000 to under VND 25,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 7,000,000 to under VND 15,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at < VND 1,000,000;	

Table 5. Continued

Year	Policy name	Content	Responsible authority
		A fine ranging from VND 25,000,000 to VND 50,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 25,000,000 to under VND 50,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 15,000,000 to under VND 25,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 1,000,000 to under VND 3,000,000;	
		A fine ranging from VND 50,000,000 to VND 70,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 50,000,000 to under VND 70,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 25,000,000 to under VND 35,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 3,000,000 to under VND 5,000,000;	
		A fine ranging from VND 70,000,000 to VND 90,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 70,000,000 to under VND 90,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 35,000,000 to under VND 45,000,000;	

Table 5. Continued

#### Year Policy name Content Responsible authority c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 5,000,000 to under VND 10,000,000; A fine ranging from VND 90,000,000 to VND 120,000,000 shall be imposed in one of the following circumstances: a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 90,000,000 to under VND 120,000,000; b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 45,000,000 to under VND 60,000,000; c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 10,000,000 to under VND 20,000,000; A fine ranging from VND 120,000,000 to VND 150,000,000 shall be imposed in one of the following circumstances: a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 120,000,000 to under VND 150,000,000; b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 60,000,000 to under VND 75,000,000; c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 20,000,000 to under VND 30,000,000; A fine ranging from VND 150,000,000 to VND 180,000,000 shall be imposed in one of the following circumstances: a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 150,000,000 to under VND 180,000,000;

Table 5. Continued

Year	Policy name	Content	Responsible authority
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 75,000,000 to under VND 90,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 30,000,000 to under VND 40,000,000;	
		A fine ranging from VND 180,000,000 to VND 210,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 180,000,000 to under VND 210,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 90,000,000 to under VND 105,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 40,000,000 to under VND 50,000,000;	
		A fine ranging from VND 210,000,000 to VND 240,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 210,000,000 to under VND 240,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 105,000,000 to under VND 120,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 50,000,000 to under VND 60,000,000;	

Table 5. Continued

Year	Policy name	Content	Responsible authority
		d. The violation involves < 0.3 kg of elephant ivory;	
		A fine ranging from VND 210,000,000 to VND 240,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 210,000,000 to under VND 240,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 105,000,000 to under VND 120,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 50,000,000 to under VND 60,000,000;	
		d. The violation involves from 0.3 kg to under 0.6 kg of elephant ivory;	
		A fine ranging from VND 240,000,000 to VND 270,000,000 shall be imposed in one of the following circumstances:	
		a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 240,000,000 to under VND 270,000,000;	
		b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 120,000,000 to under VND 135,000,000;	
		c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 60,000,000 to under VND 70,000,000;	
		d. The violation involves from 0.6 kg to under 0.9 kg of elephant ivory;	

Table 5. Continued

#### Year Policy name Content Responsible authority A fine ranging from VND 270,000,000 to VND 300,000,000 shall be imposed in one of the following circumstances: a. The violation involves forest animals of common species, body parts or products thereof assessed at VND 270,000,000 to under VND 300,000,000: b. The violation involves endangered, rare and precious animals of Group IIB, body parts or products thereof assessed at VND 135,000,000 to under VND 150,000,000; c. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 70,000,000 to under VND 80,000,000; d. The violation involves from 0.9 kg to under 1.2 kg of elephant ivory; A fine ranging from VND 300,000,000 to VND 330,000,000 shall be imposed in one of the following circumstances: a. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 80,000,000 to under VND 90,000,000; b. The violation involves from 1.2 kg to under 1.5 kg of elephant ivory, or < 0.03 kg of rhino horns; c. The violation involves endangered, rare and precious animals of Group IB or vital body parts thereof with one individual of class Mammalia, or 3–4 individuals of class Aves or class Reptilia, or 3-5 individuals of other A fine ranging from VND 330,000,000 to VND 360,000,000 shall be imposed in one of the following circumstances: a. The violation involves products of endangered, rare and precious animals of Group IB assessed at VND 90,000,000 to under VND 100,000,000; b. The violation involves from 1.5 kg to under 2 kg of elephant ivory, or from 0.03 kg to under 0.05 kg of rhino horns; c. The violation involves endangered, rare and precious animals of Group IB or vital body parts thereof with two individuals of class Mammalia, or 5-6 individuals of class Aves or class Reptilia, or 6-9 individuals of other classes.

Source: Government of Vietnam (2015a, 2015b, 2017c, 2018d, 2019e)

#### 2.6 Import and export policies

Table 6 shows the main policies in the management and trade of wild animals specified in import and export policies in Vietnam.

Table 6. Wildlife conservation policy related to import and export policies

Year	Policy name	Content Responsible authority
2013	Law on Customs	Article 89. Competence of customs authorities for the application of measures to tackle smuggling and illegal cross-border trafficking of goods
		1. Organize forces, set up databases, apply necessary customs control measures, collect customs operation-related information at home and abroad so as to actively tackle smuggling and illegal cross-border trafficking of goods, and serve customs clearance for goods and post-customs clearance inspection; cooperate with related agencies in keeping secret providers of information on cases of smuggling and illegal cross- border trafficking of goods in accordance with law;
		2. Conduct customs control of goods and vehicles to take charge, and cooperate with related regulatory bodies in, carrying out activities of tackling smug- gling and illegal cross-border trafficking of goods within customs operating locations.
		When conducting customs control of goods and vehicles in customs operating locations, customs authorities may apply patrol, investigation and verification or other professional measures in accordance with this law and the laws on handling of administrative violations, criminal procedure and organization of criminal investigations;
		<ol> <li>Request related agencies and entities to provide information and materials to serve inspection, supervision and verification of acts of smuggling and illegal cross-border trafficking of goods;</li> </ol>
		4. Request postal and express mail service providers to open postal parcels and goods exported or imported by mail or via express mail service for inspection when there are reasonable grounds that such postal parcels and goods contain materials and items related to smuggling and illegal cross-border trafficking of goods;
		5. Use banners, flashlights, flares, whistles and loudspeakers to use weapons and supporting tools in accordance with the law on management and use of weapons, explosives and supporting tools;
		6. Apart from customs operating locations, customs authorities shall coordinate and conduct customs control activities to tackle smuggling and illegal cross-border trafficking of goods in accordance with law.
		Article 90. Competence of customs authorities and customs officials in handling smuggling and illegal cross-border trafficking of goods
		<ol> <li>Handle administrative violations, apply preventive measures and ensure the handling of administrative violations in accordance with the Law on Handling of Administrative Violations.</li> <li>If they have reasonable grounds to suspect acts of smuggling or illegal crossborder transportation of goods, heads of Customs Sub-Departments, heads of control squads under Customs Departments, heads of anti-smuggling control squads and marine control flotillas under the Anti-Smuggling Investigation Department are competent to halt vehicles, temporarily hold people in custody and escort violators in accordance with the Law on Handling of Administrative Violations.</li> </ol>

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Table 6. Continued

Year	Policy name	Content	Responsible authority
		2. When detecting acts in violation of the Law of be examined for penal liability, customs authorinitiate criminal cases and lawsuits against the gations in compliance with the laws on crimin of criminal investigation.	orities and officers competent to e accused shall conduct investi-
		3. When carrying out activities prescribed in thi and customs officials shall be held responsible	
2013. 2016	Decree 127/2013/ND-CP on penalties for administrative violations and enforcement of administrative decisions pertaining to customs controls  Decree 45/2016/ND-CP amendments to some articles of Government Decree No. 127/2013/ND-CP dated 15 October 2013 on penalties for administrative violations against regulations on customs control and enforcement of administrative decisions on customs control	Article 14. Violations against policies on management of exports, imports and goods in transit, vehicles entering and leaving Vietnam, and vehicles in transit  A fine of VND 5,000,000 to VND 10,000,000 shall be imposed for any of the following violations:  a. Transiting goods; exporting, importing or transiting vehicles against the license issued by competent authorities;  b. Exporting or importing goods against the license;  c. Temporarily importing or temporarily exporting goods without a license though a license is compulsory, except for specified cases.  A fine of VND 10,000,000 to VND 30,000,000 shall be imposed for transiting goods, exporting, importing or transiting vehicles without a license though a license is compulsory.  A fine of VND 30,000,000 to VND 60,000,000 shall be imposed for any of the following violations:  a. Temporarily importing goods without any license though a license is compulsory; temporarily importing goods in the list of goods banned or suspended from temporary	The Directors of the General Department of Customs; the Anti-Smuggling and Investigation Department; the Post-Clearance Inspection Department under the General Department of Customs; the Customs Department; the Customs Sub-Department; and the Director of Sub-Department Inspectors are competent to decide to search places where documents, exhibits and means of administrative violations are hidden, and have the power to impose penalties and administrative sanctions for cases of violations.

continued on next page

Table 6. Continued

Year	Policy name	Content	Responsible authority
		b. Exporting, importing or bringing to Vietnam goods in the list of goods banned from export or import or the list of goods suspended from export or import;	
		<ul> <li>c. Exporting or importing goods without any license though a license is compulsory;</li> </ul>	
		<ul> <li>d. Exporting or importing goods that fail to meet the conditions or standards prescribed by law;</li> </ul>	
		e. Exporting or importing goods without labels;	
		Penalties for export or import of goods on the list of goods requiring a license without a license; export or import of goods that do not satisfy conditions, technical regulations and standards; export or import of goods without labels as prescribed by law:	
		a. A fine of VND 5,000,000 to VND 10,000,000 shall be imposed if the value of illegal goods is under VND 30,000,000;	
		b. A fine of VND 10,000,000 to VND 20,000,000 shall be imposed if the value of illegal goods is from VND 30,000,000 to under VND 50,000,000;	
		c. A fine of VND 20,000,000 to VND 30,000,000 shall be imposed if the value of illegal goods is from VND 50,000,000 to under VND 100,000,000;	
		d. A fine of VND 30,000,000 to VND 50,000,000 shall be imposed if the value is VND 100,000,000 or above but does not constitute a criminal offense.	

Source: Government of Vietnam (2013b, 2013c, 2016c)

#### 2.7 Regulations and policies of the livestock and veterinary industry

Table 7 shows the main policies in the management and trade of wild animals specified in policies on livestock and veterinary medicine in Vietnam.

Table 7. Wildlife conservation policies related to livestock and veterinary policies

Year	Policy name	Content	Responsible authority
2015	Law on	Article 3. Interpretation of terms	The Minister of Agriculture
	veterinary medicine	Terrestrial animals include livestock and poultry, wild animals, reptiles, bees, silkworms and other species of animals that live on land;  Aquatic animals include fishes, crustaceans, molluscs, amphibious and aquatic mammals,	and Rural Development shall promulgate the list of animal diseases subject to outbreak declaration, the list of diseases capable of transmitting between animals and humans, and the list of diseases; issue the compulsory prophylactic measures, veterinary hygiene standards and environmental
		and other species of animals that live in water.	
		Article 13. Prohibited acts	hygiene in animal rearing; requirements on animals/animal
		Import, temporarily import, temporarily export, transit through Vietnam's territory the animals/animal products from a country/region having	products for transporting out o epidemic zones.
		epidemics dangerous for animals susceptible to such diseases.	The Minister of Health shall preside over and cooperate with the Minister of Agriculture
		Import of animals, animal products, and/ or pathology specimens are forbidden by the veterinary authority	and Rural development in processing the information relating to diseases capable of transmitting between animals and humans; promptly arrange
		Article 16. Supervision of animal diseases	for the treatment of infected people; provide an outbreak
Veterinary authorities shall:	declaration according to		
		Periodically or irregularly conduct supervision of infectious diseases capable of transmitting between animals in the wild and animals raised at wild animal-rearing establishments, zoos, bird gardens, biodiversity sanctuaries, nature	provisions in law on prevention and fighting against infectious diseases.

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Table 7. Continued

#### Year Policy name Content Responsible authority 2018 Law on animal Article 2. Definitions The Minister of Agriculture husbandry and Rural Development shall "Breeding activity" means raising of livestock issue regulations on the update, for growth and reproduction purposes and use and management of the other activities relating to livestock and animal national animal husbandry products for food, animal traction or decoration, database; send proposals for and other human purposes. collection, preservation, use and development of livestock "livestock" includes cattle, poultry and other gene sources under agricultural farm animals. management to the government; stipulate species and numbers "other farm animal" means any animal other of livestock required to be than cattle or poultry and not on the list of declared, declaration date and endangered and rare species or the list of form of livestock breeding endangered and rare forest animals or ordinary declaration; stipulate the safe forest animals or aquatic creatures or the list of distance in livestock farms to forest wild animals provided in the Appendices ensure biosecurity, resistance of CITES. to diseases and environmental "livestock breed" means a population of protection. livestock of the same species and the same stock, having similar appearance and genetic structure, having been generated, consolidated and developed by human manipulations. A livestock breed must have a certain number of individuals for multiplication and inheritance of its characteristics by offspring generations. "precious and rare livestock breed" means any livestock breed with special significance to science, healthcare and economy that is small in number or on the verge of extinction. **Article 3.** Principles for livestock breeding Preserve, utilize and develop local and precious and rare livestock gene sources in a logical manner; promptly get access to world breed genetic advances; combine modern breeding with traditional breeding and develop animal husbandry consistent with ecoregions. Article 19. Lists of livestock breeds in need of conservation and prohibited from export The list of livestock breeds in need of conservation includes livestock breeds that are small in number or on the verge of extinction. The list of livestock breeds prohibited from export includes precious and rare livestock breeds that are advantageous to Vietnam. The government shall issue lists of livestock breeds in need of conservation and livestock breeds prohibited from export, and set out procedures for issuance and update of the aforesaid lists.

Source: Government of Vietnam (2015c, 2018e)

## ${\bf 2.8}$ International conventions related to wildlife to which Vietnam is a signatory

Table 8 shows the main policies in the management and trade of wild animals as stipulated in international conventions that Vietnam has joined and signed.

Table 8. Wildlife conservation policies as stipulated in international conventions that Vietnam has signed

Year	Policy name	Content	Responsible authority
1994	The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.  An import permit, export permit or re-export certificate issued by the Management Authority of the State of import, export or re-export is required. This may be issued only if the specimen is not to be used primarily for commercial purposes and if the import, export or re-export will be for purposes that are not detrimental to the survival of the species.	Scientific authority shall monitor both export permits and actual exports of specimens of certain species listed in Appendix II to maintain numbers of those species above the limits listed in Appendix I and imported for purposes that do not harm the survival of the species.
		Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.	Management Authority: Issues licenses or certificates on behalf of the country in import and export. Full justification
		An export permit or re-export certificate issued by the Management Authority of the State of export or re-export is required.	is that the specimen was collected in accordance with state laws and CITES provisions for the protection of flora and fauna, prepared and transported in a manner that minimizes injury, damage to health or rough treatment.
		An export permit may be issued only if the specimen was legally obtained and if the export will not be detrimental to the survival of the species.	
		A re-export certificate may be issued only if the specimen was imported in accordance with the Convention.	
		Appendix III contains species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade. Changes to Appendix III follow a distinct procedure from changes to Appendices I and II, as each Party is entitled to make unilateral amendments to it.	
		In the case of trade from a State that included the species in Appendix III, an export permit issued by the Management Authority of that State is required. This may be issued only if the specimen was legally obtained and, in the case of a live animal or plant, if it will be prepared and shipped to minimize any risk of injury, damage to health or cruel treatment.	

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Table 8. Continued

Year	Policy name	Content	Responsible authority
		In the case of export from any other State, a certificate of origin issued by its Management Authority is required.	
		In the case of re-export, a re-export certificate issued by the State of re-export is required.	
		Conditions for raising endangered wildlife species listed in CITES appendices for commercial purposes: Ensuring legal seed sources; ensuring enclosures are built in accordance with the characteristics of the species; ensuring safety conditions for people and livestock, environmental sanitation and epidemic prevention; ensuring cultured species (species declared by the Vietnam CITES Scientific Authority) have the ability to reproduce continuously for many generations in a controlled environment; and ensuring breeding and growing does not affect the existence of farmed species and related species in nature.	
1994	The Convention on Biological Diversity (CBD)	Article 2.  "Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.	The Ministry of Natural Resources and Environment is responsible for acting as the national focal point for the implementation of the CBD.
		"Biological resources" includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.	
		Article 3	
		States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.	

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Table 8. Continued

Year	Policy name	Content	Responsible authority
		Article 8	
		Each Contracting Party shall, as far as possible and as appropriate:	
		Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;	
		Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species;	
		Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species;	
		Develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations.	
		Vietnam has built a system of management agencies, policy frameworks and laws on biodiversity; a system of protected areas has been established; rare and endangered species of flora and fauna are protected by law and through action programmes; and it is acquiring and promoting the implementation of new biodiversity conservation issues such as biosecurity, access to genetic resources and benefit sharing from the use of genetic resources.	
1989	Convention for the Conservation of Wetlands of Special International Importance as Waterfowl Habitat (RAMSAR)	The Contracting Parties,  CONSIDERING the fundamental ecological functions of wetlands as regulators of water regimes and as habitats supporting a characteristic flora and fauna, especially waterfowl;  RECOGNIZING that waterfowl in their seasonal migrations may transcend frontiers and so should be regarded as an international resource  Article 2  Each Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance, hereinafter referred to as "the List" which is maintained by the bureau established under Article 8. The boundaries of each wetland shall be precisely described and also delimited on a map and they may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands, especially where these have importance as	The Ministry of Natural Resources and Environment conducts an inventory and assesses the current status of wetlands across the country and recommends important wetlands to be demarcated and protected.  The National Wetland Working Group advises on the development of documents, policies, and activities on the management, conservation, and wise use of wetlands.

Table 8. Continued

Year	Policy name	Content	Responsible authority
		Each Contracting Party shall consider its international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl, both when designating entries for the List and when exercising its right to change entries in the List relating to wetlands within its territory.	
		Article 7	
		The representatives of the Contracting Parties at such Conferences should include persons who are experts on wetlands or waterfowl by reason of knowledge and experience gained in scientific, administrative or other appropriate capacities.	

Source: Government of Vietnam (1989, 1994a, 1994b)

## 3 Opportunities in wildlife conservation and management

#### 3.1 Government intentions to protect wildlife

According to Pham et al. (2021b), an increasing number of government agencies in Vietnam are devoting more and more political attention to wildlife issues. The many introduced and created policies guiding law enforcement have made a synchronous legal framework between provinces in dealing with wildlife violations. An assessment by the CITES Secretariat rated Vietnam's wildlife management legal system A (good), or relatively complete at many levels from policies, legal documents and sub-laws covering the following aspects: wildlife management regime; the list of endangered and rare species; sanctions; assigning responsibilities for wildlife management and adopting cross-border, cross-sectoral regulatory approaches that address the complex causes of biodiversity loss and unsustainable wildlife management (NFGA 2016; WCS 2016; Jiao et al 2021). The policy system on wildlife protection was promulgated relatively early (in the 2000s), and has always been supplemented and improved to suit the actual situation in Vietnam and the International Conventions that Vietnam is participating in, such as CBD and CITES (Nguyen et al. 2008). In addition, the Government of Vietnam also advocates the application of digital technology to better manage wildlife.

Part 2 shows that Vietnam has six wildlife related laws in seven sectors: forestry, biology, livestock/ veterinary medicine, investment, fisheries, import-export and sanctions; is party to many international conventions; and has more than 20 pieces of regularly updated and supplemented legislation regulating the management of trade in endangered, precious and rare wild animals. Vietnam regularly amends, supplements and updates its list of rare and precious wildlife prioritized for protection in order to be able to manage and conserve its decreasing biodiversity. Recent examples are in Decree 84/2021/ND-CP and Decree 64/2019/ND-CP. In addition, Vietnam has been praised internationally as one of the pioneer countries (along with China, Korea, Bolivia and Gabon) in applying urgent measures to face the pandemic by strengthening the legal framework for wildlife trade (Borzée et al. 2020; Booth et al. 2021) with Decree No. 84/2021/ND-CP dated 22 September 2021. In addition, Vietnam also revised its Criminal Code in 2017 (Law No. 12/2017/QH14) with a 40-fold increase in the maximum fine (VND 15 billion) and a threefold increase to 15 years in the maximum prison sentence for crimes related to endangered and rare species (Jiao et al. 2021).

With its policy system, Vietnam has been moving towards more effective management of the exploitation, breeding, exporting and importing of wild fauna and flora. According to CITES Dashboard 2021, the number of animals and plants derived from artificial cultivation and legal rearing has increased significantly in recent years. In many places, the exploitation, rearing and planting of wild animals and plants has brought jobs and incomes to many families and communities, and contributed to local economic development and poverty alleviation (Nguyen et al. 2008).

#### 3.2 Support from national and international organizations

Biodiversity conservation activities and national parks and protected areas in Vietnam receive financial and technical support from many international organizations (Giacomo et al. 2001). This support has helped government agencies refine biodiversity conservation and management plans, and raise stakeholder awareness of the importance of biodiversity, national parks and protected areas for socioeconomic development.

In addition to international organizations, the formation and development of local NGOs also creates new resources for conservation. Civil society organizations are also actively involved in monitoring wildlife trade and breeding, which has helped enhance law enforcement.

#### 3.3 New sources of finance for sustainable wildlife conservation

Pham et al. (2018) emphasize that the state budget contributes only 29% of the total investment capital for the forestry sector, and most of the funding for forest conservation activities so far has come from non-state budgets, particularly international funding sources such as ODA, FDI and the private sector (49%). Financial initiatives such as Payments for Forest Environmental Services (PFES) and Reducing Emissions from Deforestation and Forest Degradation (REDD+) must all comply with the Warsaw Framework, which emphasizes biodiversity as an important benefit. Potential revenue from these initiatives could support biodiversity conservation activities. According to a representative of the Ministry of Natural Resources and Environment (MONRE) participating in a policy dialogue, Vietnam is also exploring new financial sources such as green bonds, forest securities, and mobilizing finance from the private sector to implement wildlife conservation policies and measures. Representatives of international NGOs participating in policy dialogues have also pointed out that in response to Covid-19 and to help prevent future pandemics, international donors are channelling increasing amounts into wildlife research, which could help strengthen biodiversity monitoring and assessment in Vietnam (Pham et al. 2021c).

#### 3.4 Improved awareness of biodiversity and wildlife conservation

Younger generations have greener consumer preferences and are gradually eliminating meat from their diets (Pham et al. 2020). Policy dialogue participants have seen Covid-19 as a warning to many Vietnamese, and there are growing reports of public support for closing wildlife markets. Changes in lifestyle and a better awareness of human-ecosystem-animal interactions facilitate sustainable wildlife management (Pham et al. 2021c). Provincial authorities in Vietnam have also said raising local people's awareness of wildlife protection, through focused campaigns and Covid-19, has resulted in local people handing over more wild animals to state agencies (Pham et al. 2021a).

Many farms in Vietnam have been involved in wildlife farming for generations and have extensive knowledge of how to treat diseases and promote successful breeding of rare and endangered species; knowledge that rangers do not have. As a result, these farms have helped increase populations of many rare and endangered species. In addition, more attention has been paid to the opening of eco-resorts and safaris where companies have large-scale safari zones to feed wild animals, and veterinary staff and employees are well trained on wildlife conservation (Pham et al. 2021a).

# 4 Challenges in implementing policies related to wildlife conservation and management

Even though legislation and heavy penalties have long been applied to combat illegal wildlife trade across all parts of Vietnam, rather than decreasing, numbers of cases have increased steadily in recent years (Figure 2).

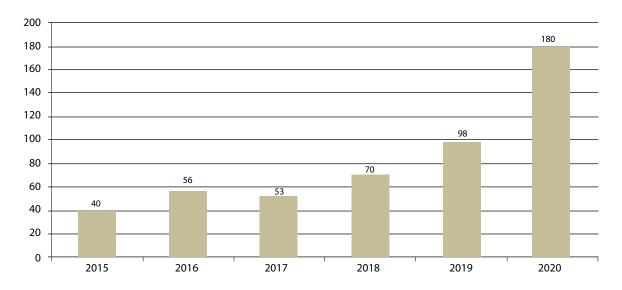


Figure 2. Numbers of illegal wildlife trade cases in Vietnam from 2015 to 2020

## 4.1 Difficulties managing conservation areas, national parks and public implementation of biodiversity conservation activities

A major obstacle to biodiversity conservation in Vietnam is that national parks and protected areas often lack operating budgets and have inadequate facilities (Giacomo et al. 2001). Stakeholders participating in policy forum discussions have pointed out that with current budgets and management practices, national parks and protected areas only have enough resources for carrying out administrative activities rather than conservation work. Many previous studies have also shown forest rangers lacking professional and working capacity and basic levels of expertise for managing protected areas (Brunner 2012). The importance of wildlife conservation is also underestimated when incentives and sanctions do not focus on this work. For example, a ranger could be penalized for allowing a forest to burn, but only lightly, or even without liability, for allowing wildlife to be hunted (Brunner 2012).

Harmonizing conservation and development policies is also a major challenge in biodiversity conservation. With current policies, provincial agencies are encouraged to develop the economy, and with the financial allocation mechanism being based on economic development standards, there are many challenges for conservation (Giacomo et al. 2001). The development of agricultural products such as coffee and aquatic products is another major cause of deforestation and forest degradation, and has serious impacts on Vietnam's biodiversity indices (Pham et al. 2019a, 2019b). Population growth,

commercial deforestation, rampant wood-cutting, illegal animal trade, conversion for agriculture and hunting have combined to impact severely on primates in Vietnam (Lois and Vu 1998). In addition, industrial activities that cause water and waste pollution also degrade the quality and quantities of natural resources and ecosystems (Giacomo et al. 2001).

#### 4.2 Managing legal wildlife trade

The development of commercial wildlife farms has long been championed as a direction for increasing people's incomes and helping provinces achieve their poverty reduction goals (Pham et al. 2021b).

According to CITES (2021), most species imported to and exported from Vietnam are mammals, reptiles or fish, with numbers reaching tens of thousands of individuals each year, particularly reptiles, which average hundreds of thousands of individuals annually, and have even been known to reach one billion individuals (Figures 3 and 4).

However, discrepancies between export data provided by Vietnam and data published by importing countries causes difficulties in tracking, monitoring and assessing exact numbers of individuals being exported from the country.

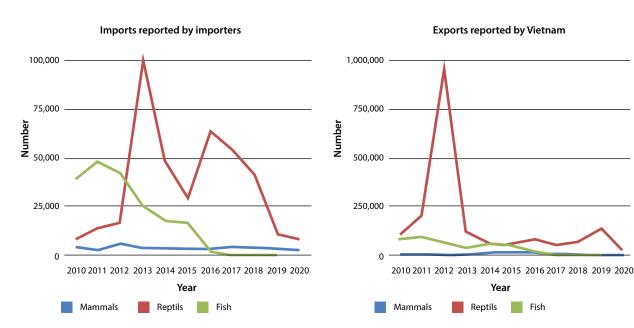


Figure 3. Numbers of individuals reported by importing countries as originating from Vietnam

Source: EIA (2021)

Figure 4. Numbers of exported wild animals reported by Vietnam

Considering the animal import and export percentages shown in Figures 5, 6 and 7, it is apparent that imports of mammals of natural origin tended to increase from 2014 to 2018. This raises concerns that Vietnam has become a place to 'launder' and legalize wild animals caught abroad.

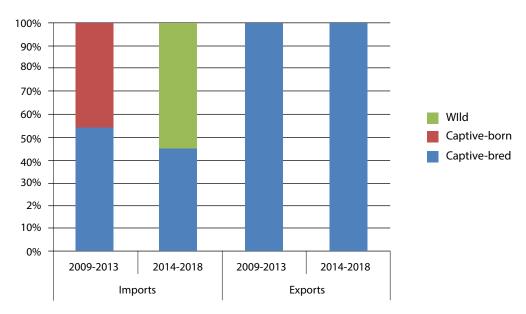


Figure 5. Origin of imported and exported mammals as reported by Vietnam

Source: CITES 2021

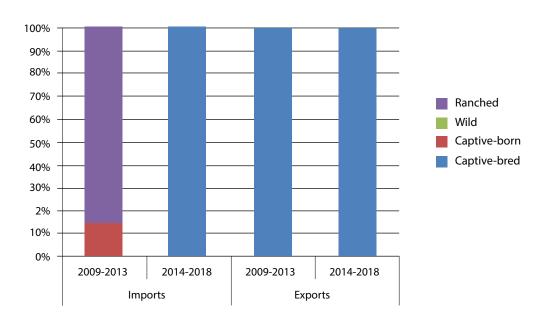


Figure 6. Origin of imported and exported reptiles as reported by Vietnam

Source: CITES Dashboard 2021

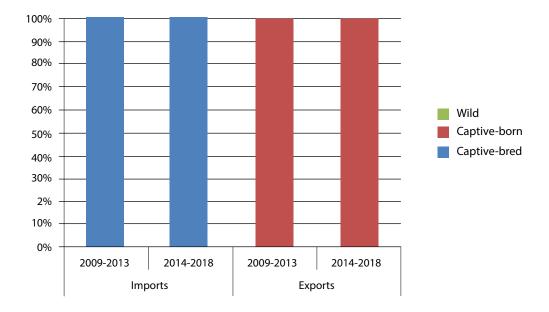


Figure 7. Origin of imported and exported fish as reported by Vietnam

Source: CITES Dashboard 2021

#### 4.3 Managing the illegal wildlife trade in Vietnam

Illegal wildlife trade in Vietnam is very complex and sophisticated, operating in a trade chain with many links. Local traders colluding with foreign criminals or export, import or tourism companies, and even government officials on business trips can also be part of illegal wildlife trade in Vietnam (The National Assembly of Vietnam 2019). Wildlife traders transport illegal goods by many modes of transport: road, water and air (Figure 8). Some cases have involved transportation by sending gifts to Vietnam via international students or tourists, or directly to recipients in Vietnam. In such cases, if goods are discovered and seized, the recipient can refuse the order and evade responsibility (The National Assembly of Vietnam 2019).

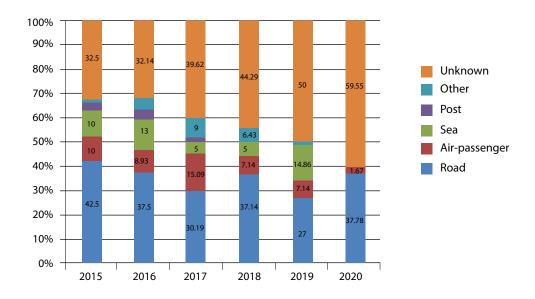


Figure 8. Transport of illegally traded wildlife from 2015-2020

Source: EIA (2021)

The number of illegal wildlife trafficking arrests increased fivefold in the five years from 2015 to 2020, despite heavier penalties coming into effect with the 2015 Criminal Code and its amendment in 2017. The illegal wildlife trade shows no signs of abating (EIA Dashboard 2021), with volumes of prohibited goods including at least 39 metric tons of ivory, equivalent to 5,947 individual elephants; eight metric tons of rhino horn; hides, bones and other products derived from at least 79 tigers; and at least 51 metric tons of pangolin body parts and scales (EIA 2021).

Trading activities took place in most provinces and regions of Vietnam between 2015 and 2020, with the highest numbers of arrests for illegal wildlife trafficking and stocking in cities like Hanoi and Ho Chi Minh, followed by border provinces such as Gia Lai with 37 arrests, and Quang Ninh with 34 arrests (Figure 9). In 2020, numbers of wildlife trafficking cases fell in Hanoi and Ho Chi Minh cities with social distancing and border closures due to Covid-19. Instead, wildlife trafficking was more prevalent in border and maritime provinces such as Gia Lai, Dak Lak and Lam Dong. (Figure 10).

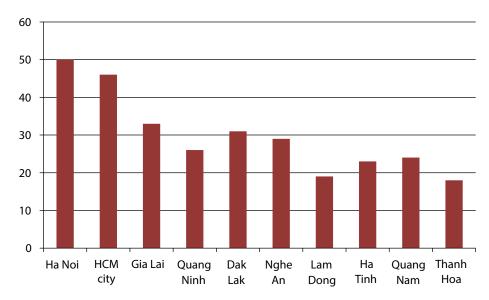


Figure 9. Numbers of arrests by province from 2015-2020

Source: EIA (2021)

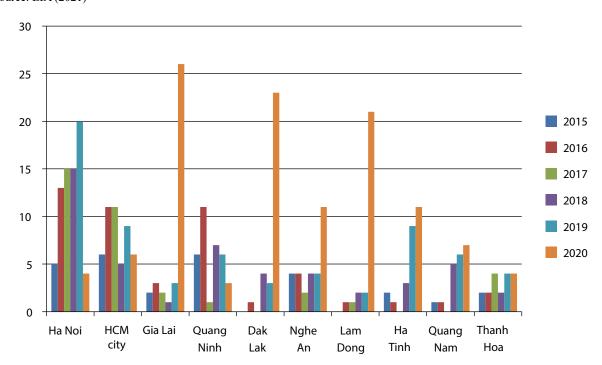


Figure 10. Numbers of reported cases by province from 2015-2020

Source: EIA (2021)

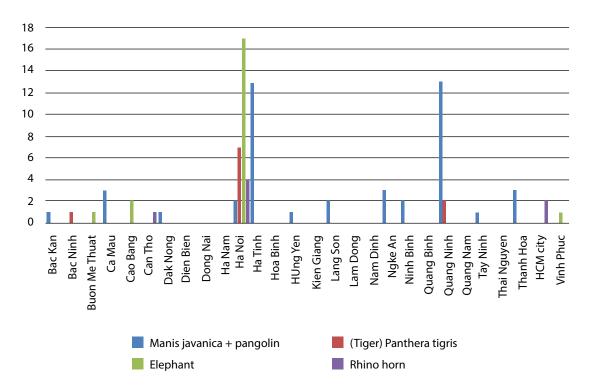


Figure 11. Arrests for the four most frequently trafficked species by province, 2018–2020

Source: CITES 2020

From 2018 to 2020, there were 107 arrests for wildlife trafficking, mostly in Hanoi, Quang Ninh, Ha Tinh and Kien Giang, with more than 4,500 pangolins, 1,800 kg of ivory and 56.5 kg of rhino horn seized. Arrests were made for illegal trafficking of pangolins in many provinces, with the most being made in Ha Tinh and Quang Ninh. Arrests for tiger trafficking were concentrated in Bac Ninh, Hanoi and Quang Ninh provinces, with the highest number of arrests at seven being made in Hanoi. Arrests for illegal ivory trafficking were made in four provinces: Buon Ma Thuot, Cao Bang, Hanoi and Vinh Phuc, with the most arrests at 17 again being made in Hanoi. Arrests for illegal trade in rhino horns were made in Can Tho, Hanoi and Ho Chi Minh City, with Hanoi accounting for the highest number at four cases. These species are all on the Vietnam Red List and Appendix I of CITES, which prohibit all forms of trade, as well as being endangered or extinct in Vietnam (CITES 2020).

#### 4.4 Wild animal lists are not comprehensive

Vietnam currently uses many lists of wild animals, including the lists specified in the CITES Convention and in Decree No. 06/2019/ND-CP, No. 160/2013/ND-CP, No. 64/2019/ND-CP, and No. 84/2021/ND-CP (Table 9).

Table 9. Regulations providing lists of wild animals

Legislation	Details
the Convention on International Trade in Wild Fauna and Flora (CITES)	Appendix I lists species threatened with extinction due to or possibly due to trade.
(CITES)	Appendix 2 lists species that although not currently threatened with extinction, may become so if the trade in specimens of those species is not subject to strict regulations aimed at ensuring their trading will not be detrimental to their survival in the wild.
	Appendix 3 lists species that Member States regulate under their own laws to prevent or limit exploitation, and where necessary cooperate with other Member States to control their trade.
Decree 06/2019/ND-CP dated 22 January 2019 on the management of endangered, precious and rare	Group IB: Endangered species of forest animals that are strictly prohibited from exploitation and use for commercial purposes, and species listed in CITES Appendix I naturally distributed in Vietnam (92 species).
forest plants and animals and the implementation of CITES	Group IIB: Forest animals that are not yet threatened with extinction but are in danger of being threatened if not strictly managed, where limited exploitation and use for commercial purposes is allowed, and species liste in CITES Appendix II naturally distributed in Vietnam. (87 species).
	Appendix I further stipulates that F2 wild animals listed in Appendix I that have been bred in a CITES-issued breeding facility may be traded.
Decree 160/2013/ND-CP dated 12 November 2013 on criteria	Species on the list of species prioritized for protection must meet the following criteria:
for species identification and the management regime of species	1.Be in danger of extinction;
on the list of endangered precious and rare species prioritized for	2. Be endemic or have special scientific, ecological, landscape, environmental or cultural-historical value.
protection	The list of wild animals is not divided into groups IB or IIB like Decree 06/2019/ND-CP, but is grouped into a list of 83 endangered, precious and rare species prioritized for protection.
Decree 64/2019/ND-CP amending Article 7 Decree	Supplementing the list of endangered precious and rare species prioritized for protection in Decree 160/2013/ND-CP.
160/2013/ND-CP on criteria for species identification and management regime for species on the list of endangered precious and rare species prioritized for protection	A further 16 endangered, precious and rare wildlife species including primates, viverrids, Phasianidae, Eublepharidae, Crocodylidae, Agamidae and Platysternidae.
Decree 84/2021/ND-CP	Additions to the list of endangered, precious and rare forest animals in
amending and supplementing a number of articles of Decree 06/2019/ND-CP dated 22	Decree 06/2019/ND-CP are divided into groups IB and IIB:  Group IB: Amending Decree 06/2019/ND-CP to include 105 species;
January 2019 on management of endangered, precious and rare forest plants and animals and CITES enforcement with some new points	Group IIB: Amending Decree 06/2019/ND-CP to include 81 species.

#### 4.5 Inconsistent regulations in the import and export of wild animals

Figures 12, 13 and 14 show the import and export, re-export and naturalization regulations under CITES.

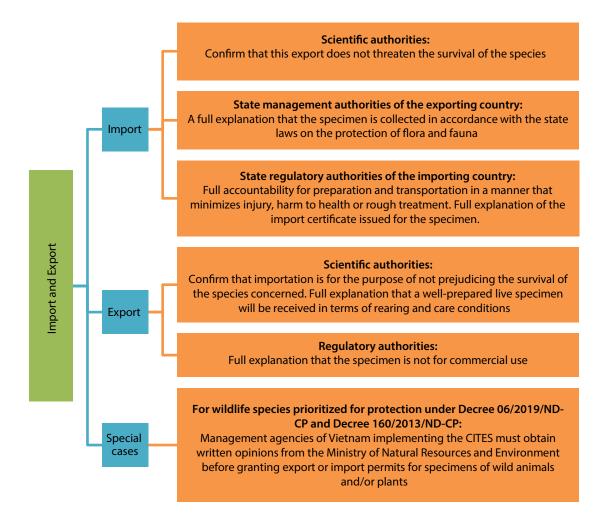


Figure 12. Import and export processes



Figure 13. Re-export processes

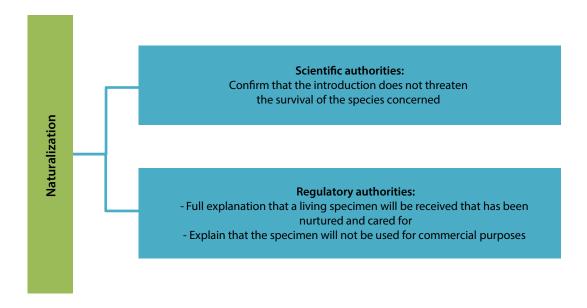


Figure 14. Naturalization processes

## 4.6 Unsynchronized punishment and low fines fail to deter illegal wildlife traders

Table 10. Comparison of legal treatment of illegal animal trade

	Species in Appendix I	Species in Appendix IIB and CITIES Appendix II
Criminal Code 2015 (amended in 2017)	• A fine of VND 50,000,000 to VND 300,000,000, non-custodial reform for up to three years or imprisonment from six months to three years	• A fine of VND 500,000,000 to VND 2,000,000,000 or imprisonment from one to five years.
2017)	• Depending on the seriousness of the acts under Sections 2.198 and 3.199, punishment can be more severe at up to 12 years imprisonment	• Depending on the seriousness of the more serious violations specified in Clauses 2.231 and 3.232, the penalty will increase up to a maximum penalty of 15 years imprisonment
Decree 35/2019/ND- CP		• For forest animals, body parts or products of wild animals on the list of endangered and precious forest plants and animals, valued up to under VND 7,000,000, a fine of VND 5,000,000 and VND 15,000,000 shall be imposed
		• For forest animals, body parts or products of forest animals on the list of endangered and precious forest plants and animals valued at VND 7,000,000 to under VND 15,000,000, a fine of VND 25,000,000 shall be imposed

According to experts participating in policy discussions, punishments are not severe enough and fines are too low compared to the profits made by illegal wildlife traders. According to Article 21 of Decree No. 35/2019/ND-CP, the highest administrative penalty for illegal wildlife trading is a fine of VND 15-25 million. Meanwhile, under the 2015 Criminal Code (amended in 2017), the maximum penalty for a criminal offence is 15 years in prison. Consequently, illegal wildlife trading has become a low-risk, high-return business in Vietnam.

## 4.7 Many State agencies have overlapping functions and responsibilities in investigating and controlling wildlife trade

According to Article 21 of the Ordinance on Organization of Criminal Investigations, the Forest Protection Agency is the main body responsible for organizing and directly investigating cases of illegal wildlife trading. However, due to its lack of training in criminal investigation skills, resource shortages with few legal inspectors having titles prescribed by criminal procedure law, its lack of detention facilities, and due to the international commercial nature of illegal wildlife trade, the Forest Protection Agency must coordinate with customs, police and border guard agencies for information exchange, coordination, training, handling and arrests as most cases of illegal animal trafficking fall under the auspices of these agencies.

However, customs, police and border guard agencies have no officials qualified to manage wildlife farming, and local forest rangers are put in charge of managing animal husbandry activities, whereas effective management of wild animals requires training in veterinary medicine, biology and wildlife ecology. Further, customs officers, police and border guards lack wildlife identification skills.

Consequently, the Forest Protection Agency, Customs Authority, Public Security Agency and Border Guard all have functions and responsibilities in the investigation and management of wildlife trade. The absence of any mechanism for effective cooperation between these different agencies has led to delays in investigations and oversight, and made it difficult to attribute responsibility, punishment and reward to the agencies and units involved in investigations and management.

In addition, biodiversity conservation and wildlife management still face many difficulties due to weak law enforcement capacity, an unclear legal framework, a lack of transparency, accountability and responsibility, poor coordination between local government agencies, limited community participation and weak governance (Le et al. 2018; Duong et al. 2021).

## 4.8 Restrictions on enforcement and prosecution of illegal wildlife trafficking cases

Decree 157/2013/ND-CP on administrative sanctions relating to forest management, forest development, forest protection and forest product management only provides the police and border guard forces with authority to impose sanctions, and assigns no sanctioning competence to the Forest Protection Department or customs force. According to Articles 153 and 163 of the 2015 Criminal Procedure Code and Articles 234 and 244 of the 2015 Criminal Code (amended in 2017), customs officers and the Forest Protection Agency only have criminal procedure jurisdiction over individuals. This means that in most cases of illegal wildlife trading, investigation outcomes and case files have to be transferred to the Criminal Procedure Authority, which is the Investigation Agency and the Procuracy. This is detrimental to the investigation work of customs officers and rangers, which are much more likely to detect crimes and arrest illegal wildlife traders. Having to wait for the handling and prosecution of illegal wildlife trade crimes makes it difficult for customs officers and rangers to detain suspects and retain evidence for prosecution.

## 4.9 Lack of cooperation and information exchange between international agencies

Information exchange between countries is essential for investigating illegal wildlife trade chains effectively and making arrests. However, data holders frequently fail to share valuable intelligence for fear of revealing information or losing credibility. The CITES Enforcement Agency, which relays information about all wildlife trade activities to parties to the Convention, has no authority to investigate or deal with transactions involving wild animals in Vietnam. Further, there is no mechanism in Vietnam for coordination and cooperation between CITES and competent authorities to investigate crimes and impose sanctions.

## 4.10 Lack of human resources for wildlife trade investigations and management

Forces involved in forest management and protection, and inspection and control of violations of the wildlife management regime still face many difficulties due to the lack of trained human resources with information technology skills. In recent years, there has been an alarming increase in illegal wildlife trading via the Internet. By buying and selling online, especially through social media networks, sellers can easily access and advertise to buyers while concealing their own identities (Thien Ngoc 2021). This poses the requirement to strictly handle these violators in order to deter and prevent wildlife crime.

In Vietnam, there are no courses for training human resources in farmed wildlife management or wildlife veterinary medicine. Staff assigned to manage wildlife breeding facilities have limited capacity, lack professional qualifications and pay little attention to research projects on wildlife rearing and growth (Vuong 2018).

Data and analyses showing increases in wildlife trafficking cases indicate the ineffectiveness of laws and implementation of policies to manage, prevent and halt wildlife trafficking. Some provisions in legislation are unclear, hard to understand and difficult to apply. They also result in overlapping responsibilities between state agencies in the prevention and control of wildlife trading (Nguyen and Dinh 2020).

#### 4.11 Demand for products derived from wildlife remains high

Societal views differ on the need to use and commercialize wildlife, despite Vietnam having a long tradition of farming wildlife (Giacomo et al. 2001), and livestock still playing a large role in agriculture. Regional culture and labour structures have significant impacts on wildlife farming. For example, in provinces in the Mekong Delta and Southeast regions where 70% of the nation's wildlife farming establishments are located, local cultures have long considered local residents "have the right to exploit" wetlands wildlife, such as the southern tortoise, pythons and snakes of all kinds freely, especially in the flood season. In addition, sponsored awareness campaigns have had no discernible impact on demand for wildlife products. The hypothesis that the increasingly westernized middle class will reduce demand for wildlife products is false, the middle classes in Vietnam and China are still driving the carnage of pangolins in South Africa and large-scale poaching of sea turtles in the South China Sea (Brunner 2012). International markets with great demand that still promote illegal wildlife farming include China, the EU, Japan, Korea and the United States, where wildlife is used for food, the fashion industry, pets and biomedical research. Such markets will promote commercial wildlife farming on an industrial scale (Pham et al. 2021b).

#### 4.12 Unsustainable wildlife farm management

In Vietnam, commercial wildlife farms must provide proof of origin and farm origin when selling animals, but many ranchers still purchase wild animals and conceal their origin for commercial trade (Brooks et al. 2010; You 2020). The farming of protected wild animal species listed in Group IB of Decree 06/2019/ND-CP and its update; Decree 84/2021/ND-CP requires registration with CITES Vietnam, while farming Group IIB species requires registration with the Forest Protection Department (FPD). While farming of common species requires registration with the relevant district FPD, according to some participants in policy dialogues, sourcing and consumption of wild animals is common because monitoring is based solely on numbers of individuals recorded on paper. Further, a lack of detailed guidelines on livestock standards, housing and biosecurity makes it more difficult to manage wildlife farms, potentially posing a public health risk. Experts involved in policy dialogues have also cited corruption and weak law enforcement as being major barriers to sustainable and effective management of wildlife farms. In addition, Vietnam has no regulations on animal welfare, which policy dialogue participants have highlighted as being a major barrier to sustainable wildlife management.

#### 4.13 Ineffective monitoring, reporting and verification

Data on the status of biodiversity, legal and illegal wildlife trading, and direct and online trade in Vietnam are limited and not up-to-date (Giles et al. 2006; Van et al. 2019; Pham et al. 2021b). Existing data often underreports wildlife crime, fails to accurately represent the large volumes of wildlife being poached and trafficked (Yiming and Dianmo 1998), or only reflects part of the complex wildlife management chain (OECD 2019; Jiao et al. 2021). Performance indicators have frequently rated law enforcement and oversight in Vietnam as being inefficient due to overlapping policies, lack of resources for enforcement, inefficient transnational and cross-sectoral cooperation, and vested interests and corruption (To 2009; Nguyen et al. 2019). Current practices also indicate a perception in protected area management that there is very little wildlife left to save, and therefore, little incentive for the government to do a better job of conservation (Brunner 2012).

#### 5 Recommendations

To carry out biodiversity conservation and wildlife management, the Government of Vietnam and other stakeholders need to consider activities as follows:

Develop appropriate policies focusing on the conservation of endangered, precious and rare wildlife species: Globally threatened wildlife in Vietnam can be divided into two main groups: (i) species classified as Critically Endangered (CR) by IUCN that are either endemic or largely endemic to Vietnam (Category 1); and (ii) species assessed as Endangered (EN) and retain cultural significance in Vietnam (Category 2). As human and financial resources are limited, to reduce extinction risk, policies and financial resources should focus on prioritizing the conservation of Category 1 species (Brunner 2012). Such species require close, ongoing protection, intensive management and monitoring, and in some cases, assisted reproduction (Giacomo et al. 2001). Policies to support national parks and protected areas are needed to ensure the necessary habitats and ecological conditions for wildlife conservation. In addition to terrestrial protected areas, attention should be paid to wetlands and marine ecosystems as some of the most threatened habitats in Vietnam (BirdLife and FIPI 2001). Further, it is necessary to consider and support the formation and socioeconomic development of specialuse forest buffer zones and integrate conservation into the master development plans of such areas. Socioeconomic development in priority conservation areas must account for population growth and immigration (BirdLife and FIPI 2001). To improve law enforcement efficiency and wildlife trade tracking and monitoring with patrol and crime scene data collected by rangers, solutions to combat wildlife crime could be built on the knowledge and situational awareness of rangers, especially in strengthening relationships and cooperation between rangers and local communities in the detection and handling of wildlife trade violations (Rizzolo et al. 2021).

Improve management efficiency for protected areas by promoting co-management models and stakeholder participation: Some studies have cited co-management models with local community participation as being effective solutions for achieving or improving conservation efficiency (Giacomo et al. 2001; Polet and Ling 2004). Pham et al. (2021) also emphasized the parallelism between wildlife conservation policies and the implementation of social and environmental justice. Developing and implementing benefit-sharing mechanisms that meet the aspirations and needs of people living around and depending on forests will create financial and social incentives that encourage people to participate in forest protection and development (Walde et al. 2019). As zoos and national parks in Vietnam currently lack experience in and finance for conservation, it would be beneficial to promote cooperation with zoos and national parks around the world that are able to provide support for specific projects for threatened species and enable the provision of equipment and financing, as well as training at home and abroad for national park staff (Peter and Adler 1995).

Diversify approaches and apply many integrated policy tools: Pham et al. (2021) believe it is necessary to have a multi-sectoral approach and to harmonize policy tools such as the One Health approach with financial tools such as taxes and payment for forest environmental services. Forests have monitoring, evaluation and appraisal tools, as well as mechanisms to encourage socioeconomic sector participation. Strict control measures should be applied to all existing wildlife farms in Vietnam, and those failing to meet minimum standards or posing risks to wild populations should be shut down (Brunner 2012). Notes for the future include determining which species can be farmed legally (IUCN has published technical guidance on managing populations for conservation) and ensuring breeding centres contribute directly to conservation within nature. Modelling solutions for ecotourism, wildlife watching and visits to places of special interest, which have become the economic mainstays in many countries around the world, especially in Africa, should also be considered and applied in Vietnam.

The government should also consider helping conservation organizations gain access to financial resources and secure facilities for conservation work. Cross-border coordination and cooperation is an inevitable trend and an important policy tool for comprehensively resolving the illegal transnational wildlife trade problem. Conducting criminal psychology studies related to the hunting, trafficking, consumption and use of wildlife products would also help the government to develop more effective crime prevention solutions (Viollaz et al. 2021). Future conservation actions should also aim to improve capacity to manage and address deforestation and forest degradation, as these are the main drivers of biodiversity loss (Pedrono et al. 2009).

Ensure sustainable financial resources for conservation activities: The development of mechanisms for building conservation funds with domestic and international support, public-private sector partnership projects and payment models for forest environmental services should all be encouraged (Phan 2001). Currently, support projects often focus on developing socioeconomic programmes to support communities in buffer zones. However, it is also essential to ensure financial resources for national parks and protected areas to carry out conservation activities, and this should be done in parallel with buffer zone development. Many national parks are building ecotourism models to increase revenues for conservation, but there need to be strategies for sustainable ecotourism development to ensure pressures from tourism activities are not detrimental to conservation (Le et al. 2018).

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In an increasingly complex international, regional, national and local context, Vietnam is working hard to perfect the legal framework and improve the effectiveness of wildlife conservation and management policies. In addition to demonstrating national policies are harmonized with and regional regulatory frameworks improve international policy implementation effectiveness and analyze opportunities challenges for wildlife management and conservation thereby perfecting the legal document system, removing barriers to legal policy effectiveness. Based on a review of secondary documents and interviews with experts, this report was prepared with three main objectives: (i) Review of current documents related to wildlife conservation and management in Vietnam. Vietnam; (ii) Evaluate the effectiveness of the implementation of these policies and (iii) propose policy directions to improve the effectiveness of conservation and management policies and ensure the well-being of people.



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