

"Mapping Environmental Crime in the Amazon Basin": Introduction to the series

The "Mapping Environmental Crime in the Amazon Basin" Case Study Series seeks to understand the contemporary dynamics of environmental crime in the Amazon Basin and generate policy recommendations for key stakeholders involved in combating environmental crime at the regional, national and local levels.

The Amazon Basin sprawls across eight countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela) and one territory (French Guiana). The research and policy communities have in the past years progressively developed a sound understanding of deforestation and degradation dynamics in the region, as well as of the ways economic actors exploit forest resources under different state regimes. This series sheds light on a less explored dimension of the phenomenon: the role played by illicit actors and economies in fueling deforestation in recent years.

This series of four studies draws a complex picture of the continuous socio-environmental impact of authorized and/ or licit economic activities on the Amazon forest and its people. It reveals the spatial and temporal dynamics of specific categories of environmental crime and their crossing with legalized economic activities, as well as their linkages with other types of crimes and social violence. It also sheds light on the underlying political economy of criminal markets, the organizational characteristics

of crime groups and government agencies' collusion in environmental crimes. The country reports also discuss the record of past and current governmental measures to disrupt and dismantle criminal networks that have diversified into environmental crime across the Amazon Basin.

The four studies further expose how licit and illicit actors interact and fuel environmental crime and degradation in a time of climate emergency and of accelerated socio-political change across the region. Meanwhile, government attention and action to combat environmental crime in recent years, mainly to reduce deforestation and illegal mining, is stymied by the weakening of environmental protections and land regulations, in which political and economic elites are either complicit in or oblivious to the destruction of the Amazon forest.

This series was funded by the Government of Norway under the Igarapé Institute-led multi-year project "Mapping Environmental Crime in the Amazon Basin: From Diagnosis to Policy Recommendations" (2019-2022). Three studies were commissioned by the Igarapé Institute to InSight Crime, a nonfor-profit organization conducting on-the-ground-reporting, research and investigations on issues related to organized crime in Latin American and the Caribbean.

The Roots of Environmental Crime in the Peruvian Amazon

This present study on Peru was led by InSight Crime. The findings and analysis are based on desk-top research, fieldwork in the city of Lima, Peru and phone interviews conducted in 2021 with environmental crime experts, government officials, members of local communities, and members of international organizations.

The report provides a snapshot of the complex web of actors (state and non-state) and relationships fueling environmental crime in the Peruvian Amazon in the last decade. Rather than just diagnosing the issue, the study aims to raise new dialogue and intervention opportunities when it comes to environmental crime in the region. This includes addressing long standing issues of securing land rights to traditional communities in the Amazon, many of which currently face new forms of land grabbing and land trafficking notably by export companies extracting natural resources.

It also includes ideas for reforming and strengthening structurally weak and corruption-prone public institutions in the Peruvian Amazon, notably those related to land, environmental and security issues. Finally, the report also sheds light on the transnational and cross-border dynamics of environmental crime in Peru in activities such as wildlife trafficking and illegal mercury trafficking for river-gold mining, and illegal logging exports. The complexity of increasingly globalized supply chains initiating in or cutting through the Peruvian Amazon call for more and stronger regional and international cooperation to dismantle environmental crime and protect the forest and its peoples.

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THE ROOTS OF ENVIRONMENTAL CRIME IN THE PERUVIAN AMAZON

Executive Summary

In 2010, Peru's then-Minister of the Environment, Antonio Brack, said Peru aimed to halt deforestation in the Amazon by 2021. Today the country could not be further from reaching this goal. Peru is experiencing the highest levels of deforestation in the nation's history, with a total of 203,272 hectares of forest lost in 2020, 37 percent more than in 2019. President Pedro Castillo has recognized the importance of mitigating environmental crime. In his first speech after being inaugurated in 2021, he said his administration will promote the protection of the Amazon and work to curb deforestation.

However, there is still no sign of a coherent policy capable of tackling environmental crime and the corruption that facilitates it, let alone any action. Part of this is due to the political chaos Peru has had in recent years. Waves of corruption scandals have tainted the highest echelons of government. In 2020, Peru had three presidents in just one week. This political instability has sidelined efforts to counter the

environmental crimes devastating the Peruvian Amazon and pushed it far down the haphazard list of government priorities.⁷ The pandemic, meanwhile, has made efforts to protect the Amazon even more difficult.

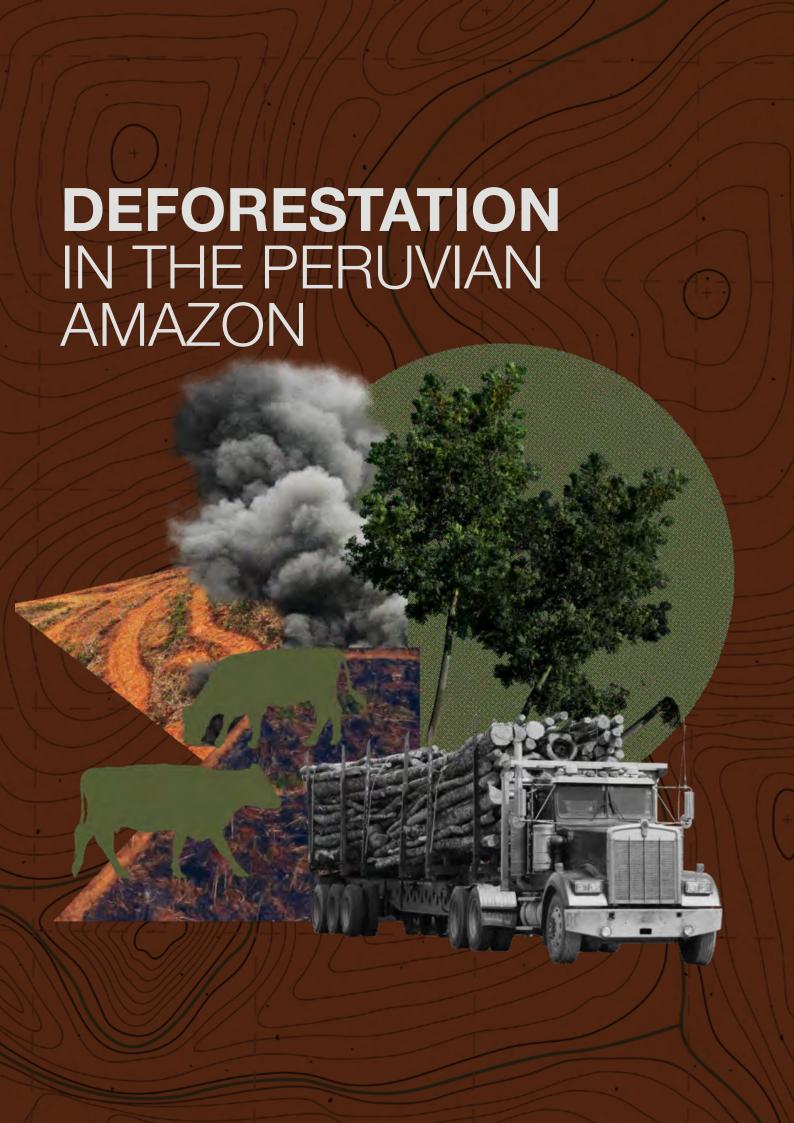
This report is about environmental crime in the Peruvian Amazon. It is the product of one year of open-source and field investigation – including desk-top research, telephone and face-to-face interviews with environmental experts, government officials, law enforcement, academics, and others – in Peru.⁸ The information gathered has been used to develop a picture of how environmental crime works, including which actors are involved, and its overlap with legal economies and other criminal activities. The report also reviews what the Peruvian government is doing to curb deforestation and its drivers, and it concludes with some opportunities for intervention.

Criminal structures in recent years have seized on environmental crime as a business opportunity, with high earning potential and low risk. Profits generated by environmental crime complement earnings from other criminal economies, such as drug trafficking, human trafficking, and arms trafficking. Peru, which is among the ten most biodiverse countries in the world, provides ample opportunities for a range of environmental crimes. Its extensive rainforest is home to about 10 percent of Earth's flora species and thousands of animals, including exotic birds and jaguars. Additionally, the Peruvian Amazon is full of gold deposits.

Products derived from illegal mining, timber trafficking and wildlife trafficking in Peru have flooded both national and international markets. Most environmental crime activities are carried out across the departments of Loreto, Amazonas, and San Martín in the north of the country, and Ucayali and Madre de Dios in the east bordering Brazil, as well as in another ten departments in the Amazon region.¹¹ Some of these activities have grown due to the spread of other criminal activities, most notably coca production. But much of the destruction of the Peruvian Amazon can be traced to how successive governments have prioritized large agricultural development over the protection of the environment. Widespread, systematic corruption fuels both the legal and illegal businesses that are destroying the region's biosphere.

The principal actors behind environmental crime in the Peruvian Amazon can be broken down into three categories. At the top of the ladder are legal actors, such as corrupt state authorities or legally registered companies, that facilitate environmental crimes. Below them are various types of small and large entrepreneurial criminal networks that help finance and orchestrate these crimes. At the bottom rung sits a labor force who perform low-level tasks, such as cutting down trees, sifting for gold or poaching animals. All of these actors share the blame, but some should be higher priority targets for the government than others, particularly those at the top who destroy large swaths of the Amazon.

President Castillo faces a daunting task: mitigating environmental crime and curbing record levels of deforestation – all within the context of the economic crisis brought on by the pandemic and the political chaos Peru has experienced in recent years. In the short-and medium-term, the government must target the corruption greasing the wheels of environmental crimes in the Peruvian Amazon. In the long-term, it has to make the hard choice of prioritizing the defense of the Amazon with adequate regulatory measures and careful consideration of how to protect the environment while promoting economic development.



Deforestation in the Peruvian Amazon

With almost 70 million hectares of forest, the Peruvian Amazon covers more than half of the country's territory. The region extends from north to south across the departments of Loreto, Amazonas, San Martín, Ucayali, and Madre de Dios. Another ten departments overlap with the Amazon region: Cajamarca, Huancavelica, La Libertad, Pasco, Piura, Puno, Ayacucho, Junín, Cusco, and Huánuco. 13

As a resource-rich forest, the Peruvian Amazon is being plundered at an accelerated rate. In 2020, Peru reached the highest levels of deforestation in the country's history, with a total of 203,272 hectares razed, almost 40 percent more than in 2019.¹⁴

Prior to this surge, from 2017 to 2019, the country exhibited constant deforestation rates of around 150,000 hectares per year, equivalent to an annual tree-cover loss of 19 percent.

Today, Peru ranks as the country with the fifth highest rate of deforestation in the world and the third highest in the Amazon, behind Brazil and Bolivia.¹⁵ In all, Peru has lost more than 26,000 square-kilometers of forest since 2001, an area greater than the size of El Salvador.¹⁶

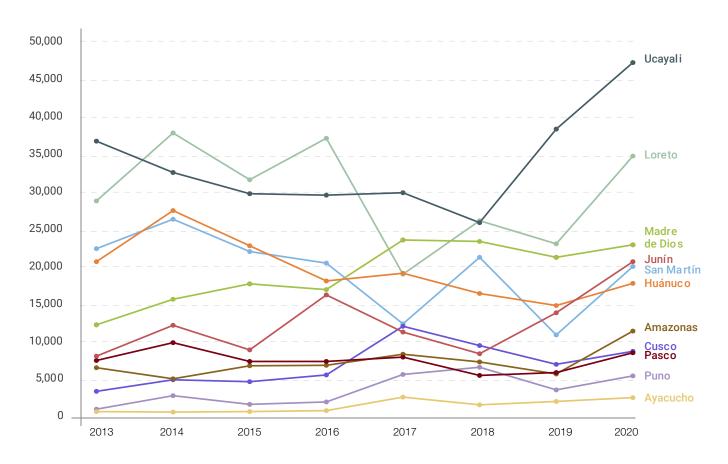
The areas most affected by deforestation fall within the Amazon basin and are concentrated in Indigenous communities in the departments of Ucayali, Pasco, Junín, and Huánuco, in the center of the country; ¹⁷ in Loreto, in the north; and Madre de Dios, in southern Peru. ¹⁸ The high levels of deforestation have many causes, not least of which is the near chronic political crisis and power vacuum that have assailed Peru in recent years. ¹⁹ The political chaos has undercut the fight against deforestation and environmental crimes, pushing these issues down the agenda.

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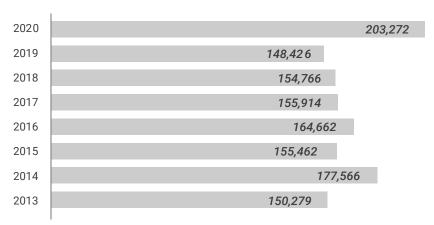


Deforestation Rates (ha)

in Peru 2013-2020



TOTAL PERU



Source:The Inter-American Dialogue and The Peruvian Ministry of Environment Visualization: insightcrime.org April 2022 The pandemic has also been a key factor in the record deforestation, turning government attention further from environmental protection and inviting rampant environmental crime.

"Covid-19 pushed people from urban areas into the jungle," says the former interior minister, Carlos Basombrío.²⁰

However, the ugly truth is that ecological destruction in the Amazon is part of a larger battle that dates back decades. Countries like Peru struggle to balance the need to promote economic growth with the need to protect the fragile ecosystems increasingly responsible for that growth.

"There [in the Amazon], many have taken up activities that cause deforestation, such as agriculture or mining," Basombrío adds.

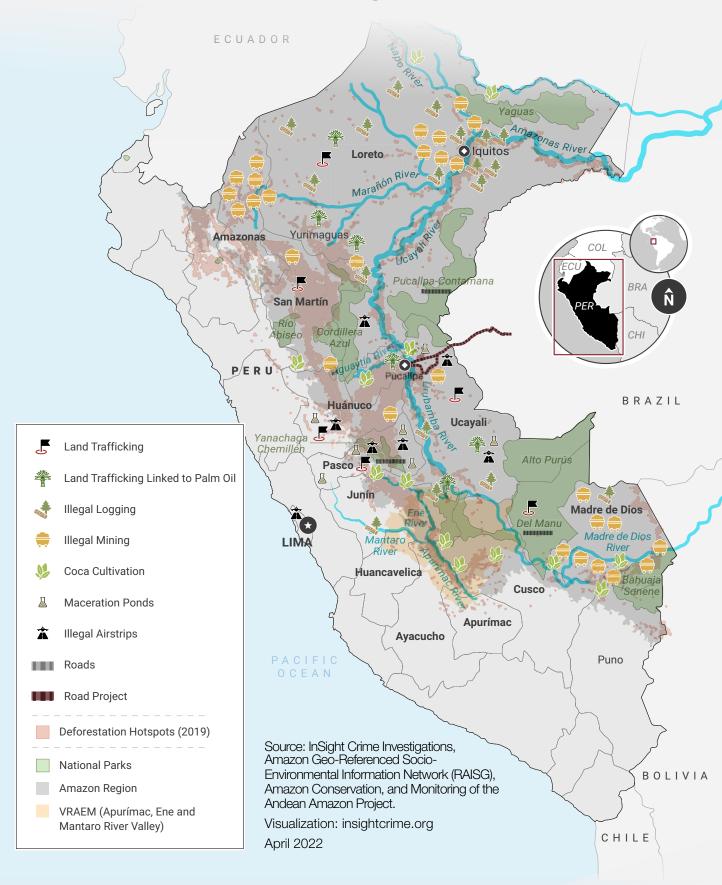
Main Drivers of Deforestation

Various activities drive deforestation in the Peruvian Amazon. Cattle ranching and agricultural activities – commonly aided by land trafficking – are the main drivers of deforestation in Peru. Other reasons behind the clearing of forest cover in the Amazon are drug trafficking and timber trafficking, both of which we will explore in this section, and illegal mining,²¹ which will be explored in a separate section later in this report.

"The ugly truth is that ecological destruction in the Amazon is part of a larger battle that dates back decades"

Main Drivers of Deforestation

in Peru's Amazon Region



Cattle and Agricultural Activities in the Peruvian Amazon

Land in the Peruvian Amazon is divided among private property holders, indigenous communities, and the public domain.²² A cross-section of national and local government agencies administer these lands. At the national level, the Ministry of Agriculture sells or grants land for logging and agribusiness.²³ At the local level, Regional Agricultural Directorates (Direcciones Regionales Agrarias – DRAs) administer lands within their jurisdictions.²⁴ The DRAs grant landownership certificates via what are known as Directorates for the Physical and Legal Regularization of Agricultural Property (Direcciones de Saneamiento Físico Legal de la Propiedad Agraria). The directorates provide the documents that allow settlers to acquire land in the Amazon on which they can develop agricultural activities, and then, having worked on said land, they may obtain a property title.25

While the Amazon basin has long been exploited, the government of Alberto Fujimori (1990-2009) opened the doors to small-, medium-, and large-scale agriculture in the Peruvian Amazon. ²⁶ In the Amazon, Fujimori did not see the lungs of the planet but an area ripe for economic development. As such, he promoted foreign private investment in the region. He also changed the legislation to, as economists Roxana Barrantes and Manuel Glave describe it, "achieve the long-awaited development of the Peruvian Amazon" through agricultural and extractive activities. ²⁷

"Fujimori had the belief the Amazon was an 'idle land' that should be exploited. One way to do so was through agricultural activities," explained Magaly Ávila, the director of the forest governance program for Proética, the Peruvian chapter of Transparency International.²⁸

Since then, the Peruvian Amazon has grappled with pressure from two fronts. On one front, small farmers invade areas of the Amazon and clear swaths of land to make way for cattle ranching and other agricultural activities. ²⁹ These settlers often start with small plots of up to ten hectares. However, these small settlements have a way of multiplying and are sometimes converted into large-scale agricultural farms. ³⁰

"We have seen how those ten hectares multiply and become 2,000," says Julio Guzmán, an attorney for Peru's Ministry of the Environment.³¹ "This has had a devastating effect."

"Small farmers invade areas of the Amazon and clear swaths of land to make way for cattle ranching and other agricultural activities"

Indigenous Land Rights in Peru

Although Peru's indigenous groups have the legal right to around 16 percent of the country's territory, amounting to around 27 million hectares, a further 24 million hectares are still awaiting formal recognition.³²

It was not until 1974 that indigenous groups in Peru were formally recognized as being entitled to collective land rights.³³ This advance in their rights was short-lived, as the Forest and Wildlife Law passed the following year formally recognized the country's forests as belonging to the government. This law states that no community, including any Indigenous community, can own forestlands but can instead only access them through contracts.³⁴ This has meant that even though large tracts of land are demarcated as indigenous-claimed, groups must wait for soil analysis results that determine if land will be used for forest, agricultural, or pasture use.

A full title can be gained for agricultural land, but those seeking to make use of forests must seek a "usufruct" contract, which gives them temporary rights to the land. Some have voiced concerns that the complexity and costs involved in obtaining these contracts has led to only around 10 percent of titled Indigenous groups receiving them. Without such contracts, they can only use the forests for subsistence use.³⁵

The fight for recognition of land rights still very much continues. The Santa Clara de Uchunya group claims an area of 86,000 hectares as its ancestral land, yet only currently holds the title to around 2 percent of this space. Though they presented a lawsuit to Peru's Constitutional Court, they have been waiting for more than five years for a ruling on the case.³⁶

On the other front, agro-industrial companies have entered the region.³⁷ These companies fill the surging international demand for commodities such as palm oil, which is used in cosmetics and food products. Palm oil plantations have grown by 95 percent during the last ten years in Peru.³⁸ Large agribusiness has led to deforestation in Loreto and San Martín in the north; Ucayali, Huánuco and Pasco, in the central part of the country; and Madre de Dios, in southern Peru.³⁹ Land trafficking fuels the development of small- and large-scale agricultural activities.⁴⁰

As happens throughout the region, land traffickers in Peru take advantage of existing legal loopholes or get help from regional government officials to buy and sell tracks of land. In most cases, these officials grant land titles to agro-industrial companies for parcels of land that historically belong to Indigenous communities. Despite inhabiting lands for years, Indigenous communities often do not have land titles, making them ripe targets for these officials and traffickers.

Land Trafficking in the Peruvian Amazon

Land trafficking is the name Peruvian experts give acquisition of tracts of land, mostly for the production of agricultural commodities, under corrupt land titling mechanisms.⁴⁴

In the Peruvian Amazon, criminal networks organize the occupation of the Amazon lands by farmers and and native communities, thus providing them with legal security to access titles that they later sell to the highest bidder. These networks rely heavily on corruption, including that of officials in regional agricultural directorates.

To cite just one example, Mongabay and Proética have reported on how, since 2012, the Indigenous community of Santa Clara de Uchunya, in Ucayali, has been cornered by a company once known as Plantaciones Pucallpa. The company, which has since changed its name to the Ocho Sur P.S.A.C, is dedicated to the production of palm oil. 45 Mongabay reported that this company bought land from land traffickers who invaded the community's territory, deforested it, and then requested the land title from the DRA. 46 Community leaders also reported being the target of threats from these land traffickers. 47

The results were devastating for the Santa Clara de Uchunya Indigenous community, which claimed a land area of 86,713 hectares. However, the Peruvian government recognized only around 2,000 hectares of their claim. Meanwhile, the rest was subdivided into hundreds of individual properties and sold to Ocho Sur. By the end of 2020, according to a report by the Inter-American Commission on Human Rights, the company had appropriated 6,845 hectares belonging to the community's ancestral territory. Between 2012 and 2015, the company cleared 7,000 hectares of forest.48 These accusations against agroindustrial companies will be discussed in greater detail later in this report. Watchdog

groups say the pattern has been repeated elsewhere in the Peruvian Amazon. "When agro-industrial companies begin to enter Peru, particularly palm oil companies, communities begin to feel a strong pressure in their territories," says Proética's Magaly Ávila.⁴⁹

"Criminal networks organize the occupation of the Amazon lands by farmers and native communities, thus providing them with legal security to access titles that they later sell to the highest bidder"

Drug Trafficking in the Peruvian Amazon

Peru has for centuries been a major producer of coca, the raw material for cocaine, and it has been an exporter of cocaine since the nineteenth century. The United States government outlawed cocaine in the early twentieth century and pressured the Amazon nation into doing so in 1948.⁵⁰ Peru later became a signatory to the 1961 United Nations Single Convention, which first scheduled coca and cocaine on an international level.⁵¹

An illegal drug trade emerged, which by 1975 was centered in the Huallaga Valley, in the north of the country. In the early 2000s, this trade shifted to the Valley of the Apurímac, Ene, and Mantaro Rivers. The VRAEM, as it is known for its Spanish acronym, is a region made up of 61 districts around the departments of Junín, Cusco, Ayacucho, Apurímac, and Huancavelica, to the south of the country.⁵²

Today, Peru is the world's second largest producer of coca. Production has "spread across the Amazon," according to Peru's antidrug prosecutor, Sonia Medina.⁵³ The minimal state presence, forced eradication, and constant counter-narcotics operations in the VRAEM are among the many reasons behind the reconfiguration of the drug production landscape.⁵⁴

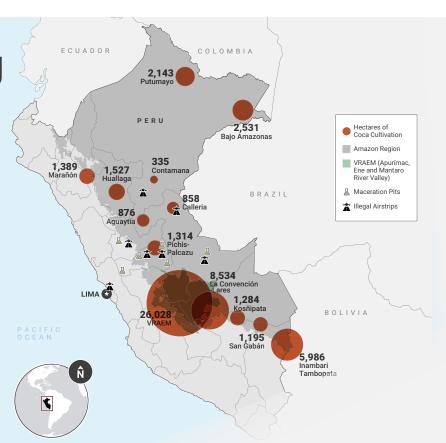
To make space for coca fields, forests are being felled and burned in the departments of Ucayali, Loreto, Huánuco, and Pasco, in addition to the Amazon Trapezoid where Peru borders Brazil and Colombia. 55 Other parts of the cocaine process also contribute to deforestation. Laboratories have sprung up around the coca plantations in the Amazon to convert coca leaves into cocaine. And clandestine airstrips have been built to facilitate drug trafficking. 56

One proxy measure for this growth is to count illegal airstrips. To cite just one example, 46 illegal airstrips were officially detected in Ucayali in 2020, and security expert Pedro Yaranga⁵⁷ said there could be more than 80 in that department alone.⁵⁸ In 2020, meanwhile, 42,000 hectares of forest loss were reported throughout Ucayali.⁵⁹

Drug Trafficking in the Peruvian Amazon in 2019

Source: DEVIDA, Mongabay Visualization: insightcrime.org

April 2022



According to Chris Fagan, director of the Upper Amazon Conservancy, an organization dedicated to protecting the Amazon rainforest, coca growers are also clearing forests in the Alto Purús and Manu national parks, in southeast Peru.⁶⁰ The same has happened in other areas to the southeast of the country, like the Bahuaja-Sonene National Park, and in the areas between Madre de Dios and Puno.⁶¹

The expansion of drug trafficking in the Amazon has also turned the Indigenous leaders and environmental defenders who oppose drug trafficking into targets. ⁶² Since the beginning of the pandemic, nearly 20 local leaders have been killed, and an untold number of them have been threatened. ⁶³

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Timber Trafficking in the Peruvian Amazon

The logging industry provides thousands of jobs and is a core part of the Peruvian Amazon economy.⁶⁴ Much of the timber extracted in the region is used domestically for construction or for making furniture, while a small percentage feeds foreign markets, principally China.65 Authorized logging sites include concessions in the Peruvian Amazon, which are found in what are known as Permanent Production Forests (Bosques de Producción Permanente). These are lands in the public domain that are granted in concessions by the Ministry of Agriculture. The Technical Forestry and Wildlife Administrations (Administraciones Técnicas Forestales y de Fauna Silvestre - ATFFS), which are part of departmental governments, also grant harvesting permits to Indigenous communities or to others in what are called Local Forests (Bosques Locales).66

However, most of the wood harvested in Peru may be illegally sourced. Indeed, some forestry experts estimate that as much as 80 percent of Peruvian timber is of illegal origin. And the Supervisory Agency for Forest Resources and Wildlife (Organismo de Supervisión de los Recursos Forestales y de Fauna Silvestre - Osinfor), the entity that oversees and controls forestry and wildlife use, believes that close to 90 percent of illegal logging in Peru takes place in the Amazonian departments of Loreto, Madre de Dios, and Ucayali. The remaining ten percent takes place in the departments of Amazonas and San Martín, in northern Peru.

The main wood species extracted in the Peruvian Amazon consist of cumala (*Virola calophylla*); tornillo (*Cedrelinga catenaeformis*); cumaru, also known as shihuahuaco (*Dipteryx odorata*); Lupuna (*Chorisia integrifolia*); and cachimbo (*Cariniana decandra Ducke*). To While less valuable than cedar and mahogany, these are resistant hardwoods, which are used for the manufacture of luxury furniture that is mostly sold on the local market. To ther lighter woods, less valuable but still desirable in international markets, have also been targeted by timber traffickers. This is the case of balsa wood, a species increasingly extracted since 2020 due to high demand for the construction of wind turbine blades.



The Balsa Boom at Peru's Borders

Balsa is a light, fast-growing wood that is used to make model aircraft and boats, but since 2019, the wood has been increasingly used to manufacture wind turbine blades, with international transitions to clean energy fueling its export out of Peru and Ecuador.⁷³

Fast growing, balsa trees can be chopped down within three years.

Criminal networks operating along Peru's borders with Ecuador and Colombia have been profiting from the thriving demand for balsa wood.⁷⁴

Juan Carlos García, an ecologist and project consultant at the Pachamama Foundation (Fundación Pachamama), a non-governmental organization seeking to protect Ecuador's Amazon region, told the media outlet Expreso, that the Pastaza River that connects Ecuador and Peru had been transformed into a "highway for balsa cut down illegally."⁷⁵

An expert in balsa trafficking told InSight Crime that wood from Ecuador's Amazon is often sent downstream to the city of Iquitos, a dispatch point for shipments bound for China and the United States.⁷⁶

While a balsa tree typically sold for five dollars in 2019, it could be priced as high as \$45 in 2020, García added.⁷⁷

Some of this illegal logging is the result of other legal and illegal activities happening in the Amazon, namely coca cultivation, unauthorized colonization by small farmers, and agricultural development. But some of it is part of an explicit plan to traffic timber. In either case, the timber production chain involves three steps: extraction, transport, and processing. Illegal wood is laundered into the legal supply chain in each of these phases to cover up illicit origins.

During the extraction phase, authorized logging zones – concessions, Indigenous communities, and Local Forests – must submit Annual Operating Plans (Planes Operativos Anuales - POAs). The POAs are supposed to act as controls. They include geo-referenced information and details about the timber

species to be harvested, as well as the volume to be extracted. In practice, however, these POAs are used as cover for illegally logged timber in lands where no logging concessions exist or in protected natural reserves, where logging is prohibited. Properties of the protected natural reserves.

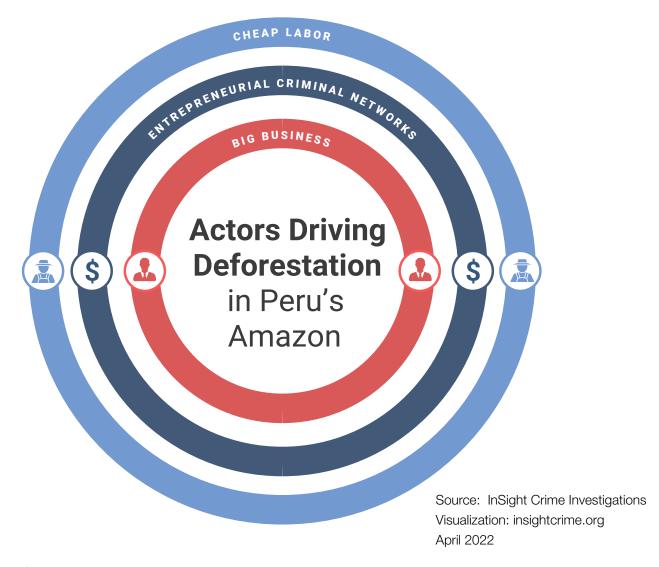
The wood is then transported to transit and processing hubs, like Pucallpa, the capital of the Ucayali department, and Iquitos, the capital of Loreto. Wood transport must be supported by a timber transport permit (Guía de Transporte Forestal - GTF), a document issued by the regional forestry authorities containing information on the origins of the timber. However, the GTFs can be doctored or falsified by regional ATFFS, something covered in more detail in a later section of this report.

In the processing hubs, the wood is transformed into boards, beams, or furniture by legal – and clandestine – sawmills, which effectively fold the sawn wood into the legal supply chain. The sawmills use multiple means to camouflage their illegal activities, including falsifying the registries that show the amount of wood entering and leaving their facility. The forestry authorities are also corrupted in this part of the process.⁸⁴

As well as being another driver of deforestation, timber trafficking is one of the motors behind biodiversity loss, forest degradation, and violence in the Peruvian Amazon. High value woods such as cedar and mahogany have been felled without control, almost to the point of extinction. What's more, the looting of the forests of Indigenous territories by timber traffickers who pursue the most valuable species on their lands has led to a violent hunt for Indigenous environmental leaders who oppose timber trafficking in the Amazon.

Actors: The Many Faces of Environmental Crime in Peru

There are many actors driving deforestation in the Peruvian Amazon through their involvement in agro-industrial farms and ranching, illegal logging, and drug trafficking. Parsing out which ones are behind the bulk of the deforestation is difficult, but they can be divided into three main categories: big businesses, entrepreneurial criminal networks, and cheap labor.



Big Business

Some big businesses operating at the top of the timber supply chains or running agroindustrial farms are the major actors at the heart of deforestation in the Peruvian Amazon. These businesses are satisfying the demand, both domestic and international, for palm oil, cocoa, and wood. They regularly maintain distance from the environmental crimes they promote, hiding behind shell companies, using falsified documentation, and working with middlemen and complicit state authorities. The role of the State will be explored later in the corruption section.

The cases of conglomerates such as the Melka Group (Grupo Melka), owned by Czech-American businessman Dennis Melka, and Romero Group (Grupo Romero) are good illustrations of this process. These companies have traditionally operated in Malaysia and Indonesia, countries with high levels of deforestation due to agro-industrial activities. They arrived in the Peruvian Amazon to harvest palm oil and cocoa. But an extensive investigation by journalists Milagros Salazar and Dánae Rivadeneyra reportedly showed how these companies have deforested thousands of hectares of forest in the departments of Loreto and Ucayali. But an extensive departments of Loreto and Ucayali.

They first encroached upon Amazon communities by establishing contact via third parties with land invaders—entrepreneurial criminal networks who, often under the threat or outright use of violence, displace the local population from the territory.90 The invaders then seized and clear-cut the forest, masquerading as farmers. These invaders then retroactively requested a certificate of land ownership from the DRA and sold the lands to companies such as the Melka Group,91 who then used it for agribusiness ventures. Indeed, according to Ojo Público, government officials sold plots of land obtained from different land trafficking schemes to companies like Ocho Sur SAC.92

Still, it is difficult to say who is directly responsible for the deforestation. Subsidiaries of Melka Group, including Ocho Sur and Cacao Norte – now called Tamshi SAC – have been accused of deforesting more than 13,000 hectares in the departments of Loreto and Ucayali since 2013. And on July 25, 2019, a Loreto court sentenced Melka's company Cacao Norte to pay 15 million soles (more than \$3 million) in restitution to the State for the deforestation caused by the company.

However, in a 2015 interview with Directors Talk Interviews, an organization dedicated to providing interviews with top executives in publicly-traded companies, Melka denied the accusations and said the area they purchased had already been deforested.

"By the time the plantation companies actually get to the land, that land has been logged or clear cut of all tropical hardwood. It's simply not a rainforest," Melka representatives said. 94

What's more, in December 2020, the Criminal Appeals Chamber of the Superior Court of Justice (La Sala Penal de Apelaciones de la Corte Superior de Justicia) of Loreto annulled the lower court's decision. ⁹⁵ Experts in environmental crime were furious after the high court's ruling.

"This is frustrating. We expected an exemplary sentence," Julio Guzmán, attorney for Peru's Ministry of the Environment, said to Mongabay. "It is a serious blow to the fight against deforestation." ⁹⁶

Environmental watchdogs and media reports suggest that the Romero Group, which consists of the industrial businesses of Espino, Alicorp SA, Trading SA, and Sociedad Industrial Yurimaguas SAC (today Industrias del Shanusi SA), has employed a similar strategy as the Melka Group. 97 According to an investigation by the Forest Peoples Programme, an organization that supports Indigenous communities and forest management, Romero Group has invaded historically Indigenous territories such as Nueva Italia, in the department of Junín, and the Kechwa and Shawi Indigenous communities in San Martín, Ucayali, and Loreto. 98

As in the Melka Group case, Peruvian authorities claimed some companies within the Romero Group, such as Palmas del Shanusi and Palmas-Barranquita, deforested hundreds of hectares of forest in Loreto and San Martin. The case also followed the same pattern: Romero Group denied responsibility, and, after a series of public hearings, a local court acquitted them of the charges.⁹⁹

Other companies have also played an important role in timber trafficking by providing infrastructure, such as building roads that are not properly permitted for loggers. ¹⁰⁰ They also launder illegally sourced timber through their concessions or with legitimate timber transport permits (GTFs) containing fraudulent information. The permits are issued by their contacts in the regulatory agency, the ATFFS. ¹⁰¹

GTFs have been used by companies as a kind of certificate of the timber's legal origins. Once the timber is laundered, it is then processed and sold. Exporters also sometimes buy illegal timber that patrones networks, which are described in greater detail below, extract from the Amazon. These exporters and other end-users hide their timber trafficking operations behind legitimate paperwork, such as the GTFs.

"As long as the documents say it is legal, and the state forestry agencies haven't proven otherwise, then they are 'good faith buyers,'" according to a 2020 InSight Crime investigation on timber trafficking in Peru. 104

This is what happened in the emblematic case of Yacu Kallpa. The case was named for the vessel on which the largest seizure of illegally-sourced timber in Peru's history took place in January 2016 in Mexico's port of Tampico, on its way to Houston, Texas. Exporters of almost 9,500 cubic meters of illegally-harvested timber claimed they bought the wood in "good faith" and that it had the appropriate documentation.¹⁰⁵ Nevertheless, Peruvian regulators from Osinfor later showed that 96 percent of the timber shipment was of illegal origin. 106 What's more, an investigation by Global Witness, an environmental watchdog, uncovered how the representatives of the main exporting companies of the wood on the Yacu Kallpa — such as Inversiones La Oroza and Inversiones WCA — were aware of the illegal origin of the wood by the time it was exported. 107

Entrepreneurial Criminal Networks

The entrepreneurial criminal networks are market-driven and motivated by profits from the trade in timber, land, or drugs. These networks finance and coordinate environmental crimes in the Peruvian Amazon while relying on the work of intermediaries and abundant cheap labor. These networks are dynamic, and their leaders often prefer to remain anonymous. They also conspire with corrupt authorities to carry out illegal activities.

Some of these networks are led by the patrones (bosses). Patrones is a euphemism for those who serve as the brains and capital behind timber trafficking operations. 108

The patron can also be a broker for the big companies that supply national and international markets, especially for larger operations that require technical capacity, transport, and machinery. 109

"The patrones are one of the major enablers of timber trafficking in the Peruvian Amazon," explained Rolando Navarro, the former director of Osinfor.¹¹⁰

The patrones' job stretches the length of the illicit value chain. They receive and execute orders for larger companies by financing local logging ventures.111 This includes an upfront payment - with fuel, supplies, and cash advances – to logging crews. 112 These payments are used to pay laborers and cooks, as well as those responsible for clearing paths. They also pay for the chainsaws and equipment needed for their operations. 113 It can sometimes lead to a kind of debt peonage system, with laborers falling hopelessly into debt when they cannot fill an order or via deception on the part of large-scale or small-scale patrones. Over time, it has taken on a name: sistema de habilitación (habilitation system).

Patrones can fill other roles as well. They can hire trusted transporters who know they are part of a timber trafficking operation and will pay bribes to authorities at checkpoints. The patrones can employ fixers, or intermediaries, who will take charge of filling in and organizing fraudulent documents. These fixers often have

connections with the forestry authorities. 115 In one example, a fixer named Norma Chuquipiondo Carillo, alias "Tia Norma," or "Aunt Norma," handled the paperwork needed to launder illegally-sourced timber in Ucayali. Her resources included books of blank but signed processing reports from sawmills, falsified logging contracts, and official stamps from the forestry authorities, among other illegal documentation. 116

Land traffickers and drug traffickers also facilitate deforestation. They illegally seize lands throughout the Amazon, often in Indigenous reserves and protected forests, and then they legalize the properties in their name or in the names of third-party operators. As previously mentioned, these networks often cut and burn the forests. Sometimes they use the land for agriculture or for cattle and then sell it to small farmers or to large agribusiness. ¹¹⁷ Sometimes they steal the land and sell it right away.

For their part, authorities blame the rise of drug trafficking operations in the Amazon on small family clans. 118 Peruvian authorities have identified about 50 such clans, many of which have been around for a decade or more. 119 They not only control drug production but also infrastructure, such as clandestine airstrips. 120 In the VRAEM, these clans have the protection of the Shining Path (Sendero Luminoso), or the Militarized Communist Party of Peru (Militarizado Partido Comunista de Peru - MPCP), the most organized and lethal non-state armed group (NSAG) in Peru. 121 But in other areas, they operate independently.

Cheap Labor

Part of what fuels the deforestation is the widespread availability of cheap labor. Workers cut down trees, burn forests, plant coca crops, and transport timber. They often receive little payment for their work and are often victims of forced labor, particularly those in logging, ¹²² and they can fall into a debt peonage system via their relationship with the aforementioned *patrones*.

While these people are employees of entrepreneurial criminal networks, they are not necessarily members of these criminal networks. They often participate in these environmental crimes due to a lack of economic alternatives or pressure from the *patrones*. Some members of indigenous communities residing in the Peruvian Amazon, for example, have been subjected to forced labor, especially amid timber trafficking operations.¹²³

The labor force for illegal logging is composed mainly of cutters, cooks, and those responsible for clearing trails. ¹²⁴ According to the Environmental Investigation Agency (EIA), an organization dedicated to the study of environmental crime and the destruction of the environment, workers usually enter the timber supply chain on the promise of a well-paying job. However, they often find themselves immersed in conditions of forced slavery and sexual exploitation. ¹²⁵

When it comes to drug trafficking, the labor force consists of clearers who are employed to cut and burn the forest to make way for the coca crops. This role is often created once the land is trafficked and occupied by land invaders. The farmers who come to occupy the land then plant the coca leaf. Some workers are employed to help build infrastructure such as clandestine airstrips. Many farmers camouflage coca bushes among their licit crops, as it is more profitable to plant coca than harvest licit crops. According to an investigation by Ojo Público, farmers can earn about \$12 a day working on a coffee plantation, while they receive more than double that for coca. 128



Illegal Mining in the Peruvian Amazon

Peru is the largest gold producer in Latin America and has various government agencies regulating the industry. 129 At the top is the Ministry of Energy and Mines (Minem), which oversees and regulates mining operations nationwide, and maintains a public database of mining concessions. 130 Mining concessions, as well as license fees, are administered by the Mining and Metallurgical Geological Institute (INGEMMET). 131 To obtain a concession, an environmental impact assessment must be submitted to the National Service of Environmental Certification for Sustainable Investments (SENACE). 132

The countless reserves of the precious metal, along with record gold prices, have brought a boom in this activity, which has been a magnet for criminal networks that have lined their pockets with proceeds from illegal mining. An estimated 28 percent of gold is illegally mined in Peru, meaning it is extracted in prohibited land or with unauthorized equipment or machinery. The illegal gold rush in Peru has left a deep environmental footprint and has become one of the main drivers of deforestation in the Peruvian Amazon.

Gold Production in Peru

2010 - 2020



Source: Peru's Ministry of Energy and Mines, Instituto de Ingeniería

de Mina del Perú and Gold Prices Visualization: insightcrime.org

April 2022

Arguably the most important mining region in the Peruvian Amazon is the department of Madre de Dios, in the country's southeast, with more than 3,000 mining concessions. 134 In addition, thousands of illegal miners are scattered across as much as 500,000 hectares of land in what is known as the "mining corridor."135 According to an investigation by the Amazonian Center for Scientific Innovation (Centro Amazónico de Innovación Científica - CINCIA), which is dedicated to studies on reforesting the Peruvian Amazon, mining in Madre de Dios was responsible for the deforestation of 64,000 hectares of forest between 2009 and 2017. 136 In 2018 alone. the Monitoring of the Andean Amazon Project (MAAP) estimated that 18,440 hectares of forest in Madre de Dios, Cuzco, and Puno were destroyed due to mining. 137

Illegal Gold Mining Supply Chain

The destruction of the Amazon is tied to the process of mining. That process begins with miners extracting a muddy mixture of silt and stones from rivers using dredges, which contain suction pumps and erode the mountainsides, forests, and rivers. In this amalgam, small pieces of gold are found. The practice is especially prevalent along La Pampa, and across the Tambopata, Manu, and Malinowski national reserves.¹³⁸

During the extraction phase, mercury is used to separate the tiny particles of gold from the sediments. The unrestrained use of mercury also is both destructive to the environment and the people of the Amazon. According to the Artisanal Gold Council, a Canadian non-governmental organization dedicated to studying artisanal gold mining, more than 180 tons of mercury are disseminated yearly through the air, river, and soil in Madre de Dios alone. As mercury is burned off into the air or spilled into nearby rivers, far-reaching threats to the environment and health emerge. In In communities where fish is an important part

of the diet, people can accumulate mercury in their bodies, which can lead to damage to the nervous system, as well as vision and hearing impairments. In severe cases, it can lead to birth defects or death. In 2016, a state of emergency was declared in the region due to mercury contamination.¹⁴²

After it is mined, the gold is transported by carriers to local and regional hubs, such as Puerto Maldonado, where buyers are based. 143 These middlemen buy in bulk and then sell it to a processing plant, where the gold is melted, melded with other gold, and then transformed into ingots.144 Only gold that comes with a receipt that certifies its legal origin should be sold to the plant and from the plant. However, processing plants and acopiadores (bundlers) – who buy and sell the mineral - pay for fake receipts from *facturadores* (billers), who provide these receipts so gold produced at illegal mines can be sold at these processing plants. 145 As it is with wood processed at sawmills, once the illegal gold has been laundered with the legal, it is virtually impossible to trace.

Peruvian gold is distributed to markets around the world. Since 2011, most of the gold exports have gone to refineries in Switzerland, the United States, India, Canada, and the United Arab Emirates (UAE), where a kilo can be sold for nearly \$60,000.146

Illegal Gold Mining Chain in Peru



To extract gold, miners use machinery such as dredges, which contain suction pumps.

To separate gold from the soil and sediment, mercury is used, leaving huge ponds in the middle of the rainforest.

The areas most affected by mining in the Peruvian Amazon are the departments of Puno, Cusco, and Madre de Dios (especially in the area of La Pampa), as well as in the Tambopata National Reserve, and the areas around the Pariamanu and Alto Malinowski rivers.



Puno



MERCURY

Gold is taken to regional economic hubs, such as Madre de Dios's capital Puerto Maldonado, where it is bought by collectors who then resell it to international refineries.

3 Transformation and Commercialization

The gold is transformed into ingots and refined abroad. This refinement often takes place in the United States, Switzerland, Canada, India, and the United Kingdom.

Refineries in India have become important to the gold trafficking chain due to the increasing pressure on Swiss and American refineries to cut their ties with those who export Peruvian gold that is of questionable origin.

Source: InSight Crime Investigations, Henry Peyronnin, USAID Visualization: insightcrime.org April 2022 Mercury contamination has persisted even though Peru ratified the Minamata Convention in 2015, an initiative that has sought to eradicate the use of this chemical worldwide. While there has been a significant reduction in formal mercury imports into the country, ¹⁴⁷ César A. Ipenza, a Peruvian lawyer and professor specialized in environmental issues, told InSight Crime that large quantities of mercury are still smuggled into the country from Bolivia, much of which is used by illegal miners in Madre de Dios. ¹⁴⁸

To counter illegal mining in La Pampa, Peruvian authorities launched Operation Mercury, which aimed to remove more than 5,000 illegal miners from the area. ¹⁴⁹ The operation started in 2019, with the deployment of 1,200 police, 300 soldiers, and 70 prosecutors. ¹⁵⁰ This operation signaled a step forward in the fight against illegal mining in Peru, as it managed to reduce deforestation and environmental destruction in the area by 92 percent. However, this victory was clouded by the balloon effect: Miners moved into other areas of Madre de Dios. ¹⁵¹ Today, one of the new hubs of illegal mining is located along the Pariamanu River, close to the border with Brazil and Bolivia. ¹⁵² Locally, it is known as the "New Pampa." ¹⁵³

Actors Behind Illegal Mining

There are many similarities between illegal mining and timber trafficking. Both industries are fomented by big business. Moreover, both depend on entrepreneurial criminal networks and cheap labor.

Big Business

Gold refineries, as well as import/export companies, fuel the illegal gold supply chain. Most of these companies operate far from source areas. They create plausible deniability with false receipts generated by *acopiadores* and *facturadores*. And they use these intermediaries and so-called "gold bosses" to obtain their supplies. (See below)

Some of these companies have been exposed in judicial cases. In 2019, for example, prosecutors in Peru accused Swiss refiner Metalor Technologies of being involved in an alleged money laundering and organized crime scheme. The refinery had been singled out for the alleged purchase of tons of gold of illegal origin in Peru and in other countries. However, the company denied the allegations, and there are currently no charges against it.

In 2017, the United States-based company Elemetal LLC pleaded guilty to charges of breaching anti-money laundering protocols to prevent illegal gold from being imported into the United States. ¹⁵⁷ The guilty plea by Elemetal came after Samer Barrage, Juan Granda, and Renato Rodríguez – three employees of the company Northern Texas Refinery (NTR), a subsidiary of Elemetal – were convicted of running an international money laundering scheme in which they bought billions in illegally-mined gold in the Amazon. ¹⁵⁸

According to US court documents, Elemental acquired \$350 million in gold from four companies in Peru — which were front companies — that bought illegally mined gold and paid foreign bribes. To operate, these companies worked with a well-known money launderer linked to the drug trade, Pedro Pérez Miranda, aka "Peter Ferrari." Pérez died of COVID-19 in September 2020.

Entrepreneurial Criminal Networks

Some of the most important players in illicit gold mining in Peru are intermediaries who act as financiers and brokers for the trade. These are known popularly as *barones del oro* (gold bosses). Gold bosses decide when and where illegal mining takes place and have all the right connections. They hire informal miners, and buy machinery, precursor chemicals, food, water, and transportation. They also have connections with *acopiadores* and *facturadores*, as well as legitimate buyers and sellers who enable the gold to be laundered locally and sold on international markets.

One alleged gold boss in Madre de Dios is Gregoria Casas Huamanhuillca. Known as "Tía Goya," or "the Queen of Gold," Casas is currently being investigated for money laundering and tax fraud. Her network is reportedly made up of her husband and their six children. The Casas family allegedly oversees all stages of the gold supply chain, from extraction to connection with refineries abroad. According to investigations by Ojo Público, for instance, the aforementioned Swiss refiner Metalor made million dollar deals with the Casas Family. 168

In an interview with El Comercio, Casas denied the allegations of money laundering and tax fraud, stating that she has been consistently audited and has since fired her accountant who she claimed was responsible for any tax fraud. Casas maintains all her gold is of legal origin and that she welcomes investigations into mining.

"Investigate everyone, not just me," she said. "Let them bombard me if they find me working in natural reserve areas." 169

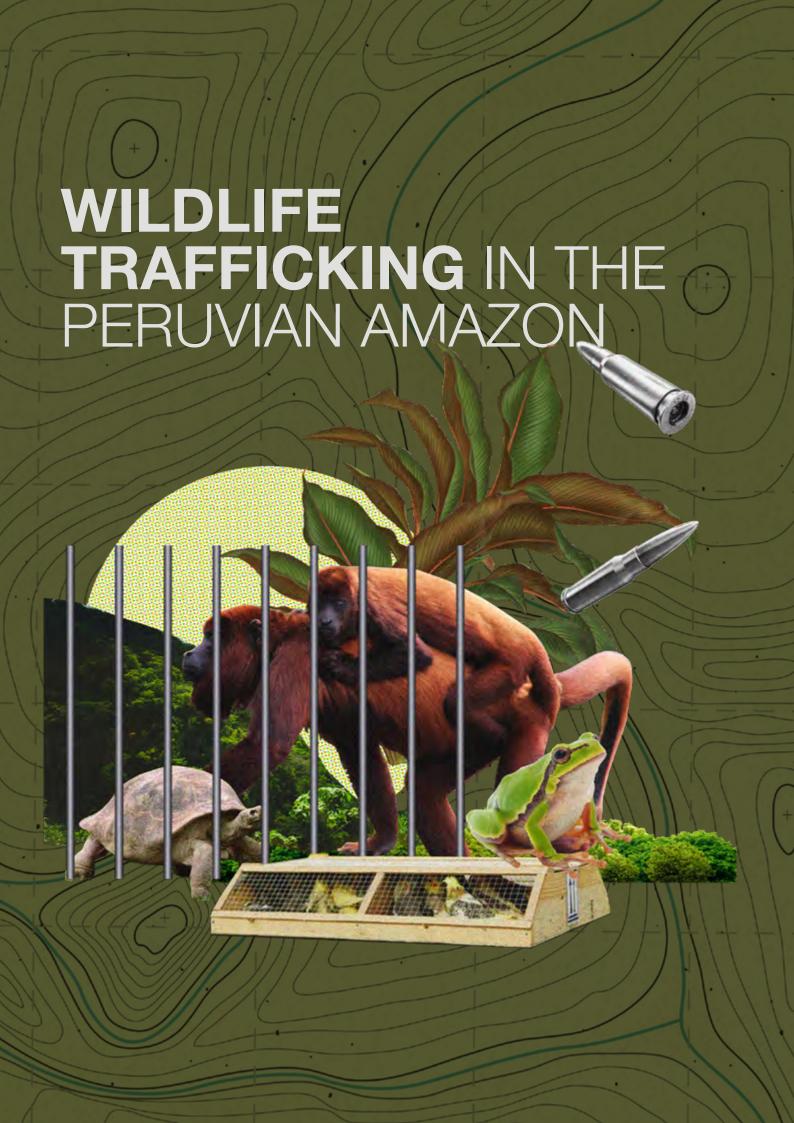
Cheap Labor

At the bottom rung of the mining distribution chain sits the cheap labor pool. It is made up of low-income miners travelling independently from poorer regions in search of metal, or locals and members of Indigenous communities hired by gold bosses. Some of them, by Peruvian law, have the right to mine the areas where they operate. To Others mine in prohibited areas or with equipment that is prohibited. Regardless, they are consistently the lowest paid and the most at risk of health and legal problems. Miners work in the sediments of the river where the gold is found with the help of heavy machinery such as pumps, excavators, and backhoes.

A comparatively easy target, this cheap labor, rather than the higher echelons of the illegal mining chain, is most frequently targeted by state interventions like Operation Mercury. When the Peruvian army cleared mining hotspots like La Pampa in Madre de Dios, it was the estimated 5,000 individual miners and their families that were forced to abandon the sites and relocate.¹⁷⁴

Fabiola Muñoz, the Minister of Agriculture at the time of the operation, recognized the paradox. "The people who we find here are not the ones who run the mining activity, who launder money," she told The Guardian. "The people here are the workers. What we have to do is follow the clues to catch those who are really moving this illegal economy."

"At the bottom rung of the mining distribution chain sits the cheap labor pool. It is made up of lowincome miners travelling independently from poorer regions in search of metal, or locals and members of Indigenous communities hired by gold bosses."



Wildlife Trafficking in the Peruvian Amazon

Peru is among the world's top ten most biodiverse countries. According to the Peruvian Ministry of Environment, it is second only to Colombia in terms of the number and types of birds, and it ranks in the top five globally for amphibians, mammals, and plants. This has made the nation a hotbed for wildlife trafficking. Some of this wildlife is poached for the pet trade. It is also hunted to be consumed as bush meat, or sacrificed for traditional remedies and religious rituals. Others are used in scientific research or to attract tourists.

The National Forest and Wildlife Service (Servicio Forestal y de Fauna Silvestre - Serfor) is responsible for developing and implementing the national strategy for fighting wildlife trafficking. Serfor is also in charge of enforcing the Convention on International Trade in Endangered Species (CITES) — the international agreement governing the hunting and trade of endangered species. The government agency's responsibilities include granting export licenses, hunting licenses, trapping quotas, and regulating and monitoring commercialization of animal products. 178

The Agency for the Supervision of Forest Resources and Wildlife (Organismo de Supervisión de los Recursos Forestales y la Fauna Silvestre - Osinfor), for its part, plays the role of inspecting wildlife, including management plans, rescue centers, breeding centers and zoos, as well as sanctioning violators.¹⁷⁹

According to Serfor, between 2015 and 2020, authorities seized more than 20,000 live animals destined for trafficking. Amphibians, particularly titicaca frogs (*Telmatobius marmoratus*), featured most commonly in seizures. Reptiles, such as green iguanas and turtles, and mammals are also highly trafficked. However, birds are the species that most attract traffickers' attention.

"Their beauty is their perdition," says Jessica Gálvez-Durand, the director of Serfor's Sustainable Management of Wildlife Heritage Directorate.¹⁸³

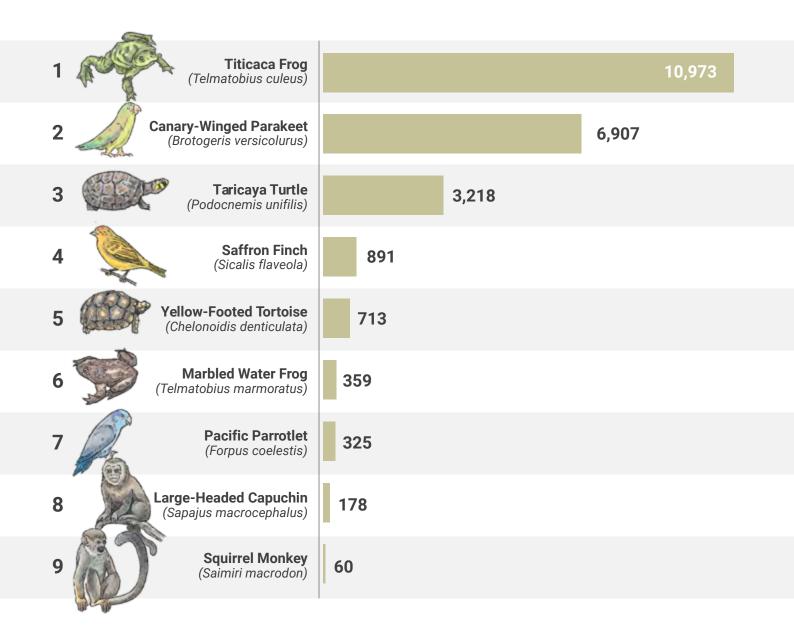
Human couriers smuggle the birds in their carry-on luggage to Europe, where the animals are part of the pet trade. ¹⁸⁴ Songbirds, such as the thick-billed seedbed and the goldfinch, are trafficked for use in singing contests. ¹⁸⁵ Mammals are also trafficked. According to Gálvez-Durand, jaguar parts, such as fangs, are sought for sale in China. She says a jaguar tooth can cost 200 soles (\$50) for Peruvians, while Chinese buyers will pay \$200. ¹⁸⁶

Insects, on the other hand, including beetles and butterflies, are trafficked for collectors' markets in Europe and Japan, said Eduardo Franco Berton, a journalist who has closely followed environmental crimes in Peru.¹⁸⁷ Source areas include Loreto, Ucayali, and Madre de Dios. In Loreto, for example, authorities have detected more than 40 extraction zones.¹⁸⁸

These areas are most often located within walking distance of roads or close to inhabited areas, according to a 2020 report by the Peruvian agency responsible for forestry controls. Protected areas, such as national parks and forest reserves, are under extreme pressure. César A. Ipenza, a lawyer who specializes in environmental issues, says that animals are often poached from protected areas despite existing conservation management plans. 190

The Most Trafficked Species in Peru

Number of Live Specimens Seized Between 2015 – 2020



Source: Directorate of Information and Registration of the National Forest and Wildlife Service (SERFOR)

Visualization: insightcrime.org

April 2022

Wildlife Trafficking Supply Chain

Wildlife trafficking in Peru's Amazon region occurs in three stages: extraction, transportation, and commercialization. Some of the animals are concealed throughout these journeys. Others, which are part of an established trade, are laundered into the supply chain like timber and gold.

Animals are captured in numerous ways. Birds, for example, are caught in nets and, in some cases, their wings are clipped. In other cases, trees are felled, and the trunks are hollowed to extract chicks from their nests. ¹⁹¹ Traps are set for others. Some traffickers dig pits and cover them with sticks, placing bait in the middle. ¹⁹² Local fishermen harvest river turtles with ordinary fishing gear, such as rods, nets, and bait, and then they peddle their catch at local markets or via social media. ¹⁹³

Once the wildlife is captured or killed, it is moved to wildlife trafficking centers in the Peruvian Amazon. Some traffickers use the rivers of Amazonas, Marañón, Huallaga, Putumayo, Ucayali, Pastaza, Saramiriza, Trapiche, Puhunahua, and Mariscal Castilla to move wildlife around the region. The animals are also transported by air from remote provinces to Iquitos, the unofficial capital of the Peruvian Amazon. Pucallpa, the capital of Ucayali, is also a major collection and transit point for wildlife trafficked in the region.

Animals that have traveled south along the river from Loreto transit through Pucallpa. To the south, Puerto Maldonado, the capital of Madre de Dios, is also used as a wildlife trafficking collection point. Wild animals reach the city from the provinces of Tahuamanu and Tambopata. ¹⁹⁷ Trafficked wildlife has been shipped to Bolivia as well, through the southeastern department of Puno. ¹⁹⁸ From these regional transit centers, the wildlife is moved to other parts of Peru, particularly to Lima. An investigation conducted by Serfor in 2017 identified 15 primary wildlife trafficking land, river, and air routes. ¹⁹⁹

During or after transit, the animals, or their parts, can be laundered into the licit distribution chain. This involves document falsification and

legal fronts, such as breeding farms, zoos, and aquariums. Some companies actively buy illegally-sourced animals, and use falsified documentation to give themselves plausible deniability.²⁰⁰ Lawyer César Ipenza says that false documentation is allowing more and more animals to leave the country.

However, most of the trafficked wildlife is sold locally. A study by Serfor identified 41 markets in ten departments where illegal animals and animal parts and products are sold.²⁰¹ These markets are primarily based in Loreto, Ucayali, and Lima.²⁰² The creatures are also sold on the Internet, especially on social media, a Peruvian wildlife trafficking expert said.²⁰³ Only around 20 percent of wildlife is trafficked via international markets. ²⁰⁴ Rare frog species, for example, are sold for up to \$100 a head in international markets, while a turtle species sold in the United States fetches up to \$500 each. A black-beaked parrot can be sold for as much as \$1,000.²⁰⁵

Some species are sold in neighboring countries like Ecuador, Bolivia, Brazil, Colombia, and Chile. ²⁰⁶ Taricaya turtles are traded on Peru's border with Ecuador for example, ²⁰⁷ while the saffron finch is smuggled into Brazil for singing contests. ²⁰⁸ Officials with the Loreto prosecutor's office also said that macaws are commonly sold along the border with Brazil. ²⁰⁹ Birds, reptiles, monkeys, and frogs are trafficked to Europe, often through Lima airport. ²¹⁰ These species end up in the hands of zoos and illegal collectors from countries like Holland, Belgium, Spain, France, Germany, Switzerland, and Austria. ²¹¹

Other species are sold to Asian buyers. China is the largest market for plants and animals smuggled out of Peru, followed by the United States.²¹² Ornamental fish are sold in China. Hong Kong, and Japan.²¹³ Meanwhile, Taricaya turtles are sent to Hong Kong. Their illegal export goes hand in hand with legal trade, in which they are sent to Hong Kong before being sold in nations such as Kuwait, Japan, the United States, Indonesia, South Korea, Italy, the Philippines, and Malaysia.²¹⁴ Jaguar fangs and skins from Peru are also sold in Asia. According to investigative journalist Eduardo Franco Berton, they are often trafficked first to Bolivia in small quantities, 215 where customs controls are less stringent, particularly at airports.²¹⁶

Actors Behind Wildlife Trafficking

There are many actors involved in international wildlife trafficking from the Peruvian Amazon. They fall into three main categories: legal entities, such as breeders, aquariums, exporters, and importers; entrepreneurial intermediaries and brokers; and local farmers and poachers.

Legal Entities

Legal entities – breeders, exporters, and importers – feed the illicit international wildlife trade emanating from the Peruvian Amazon. The most successful international traffickers work with certificates of origin and export permits, using a legal varnish to smuggle endangered creatures abroad.²¹⁷ They connect the small-time poacher with larger international

markets. Legal actors also sometimes finance the trade and work with criminal entrepreneurs, such as intermediaries and brokers, while enjoying political protection.²¹⁸ They work through companies that are engaged in the legal export of wild fauna and flora to smuggle creatures that cannot be sent abroad.

For example, as illustrated in a recent case chronicled by InSight Crime, there are around 21 companies in the department of Loreto with licenses to export wildlife, most of which trade in tropical fish.²¹⁹ However, some of these exporters hide rare and exotic fish protected by law in legal shipments.²²⁰ Indeed, some of the companies with licenses to export wildlife outside the department of Loreto have been caught trafficking and are on a "red list" compiled by the National Superintendence of Customs and Tax Administration (Superintendencia Nacional de Aduanas y de Administración Tributaria - SUNAT). 221 And at least two of the 21 were shell companies created to obtain export licenses and then "rent" them to traffickers, Loreto investigators revealed on the condition of anonymity. 222



Aquariums in the region have also been accused of wildlife trafficking. They allegedly traffic prohibited species and controlled species extracted in Colombia and Brazil, where restrictions are looser. The director of Direpro, Clara Chuquimbalqui, stated that aquariums "finance the traffickers."

"They help them and support them logistically," she said.²²³

Larger aquariums pay fishermen directly with cash advances. John Jairo Garnica, a former tropical fish exporter who now runs a wildlife rescue center, said some aquariums use their own staff to go to "collection stations" where they "receive the fish and then bag them." In some cases, he adds, the aquariums will also pay for collectors to fly to more remote areas.²²⁴

Some conservation groups have also been alleged to provide cover for the illegal trade of fauna, such as those involved in conservation of the taricaya turtle. 225 In Loreto, grupos de manejo, or management groups, which are made up of local communities, are charged with protecting taricaya eggs and ensuring hatchlings reach Amazon waterways. In return for caring for these turtles, the groups are allowed to sell some turtles for export.²²⁶ But Peruvian authorities and an environmentalist in the program alleged to InSight Crime that they discovered irregularities in breeding records for some management groups, leading to suspicions that turtles meant to be released in the wild were being diverted for export.²²⁷

Intermediaries and Brokers

There are various intermediaries and brokers who facilitate wildlife trade. They request specific species of fauna in certain quantities, and sometimes finance hunting and fishing expeditions. Brokers also use legal loopholes and grey zones in the laws. Where subsistence hunting is allowed, for instance, they typically source large numbers of animals.

Some of these brokers have taken on monikers. The *habilitadores* (fixers) are the financiers that orchestrate large hunting expeditions. They

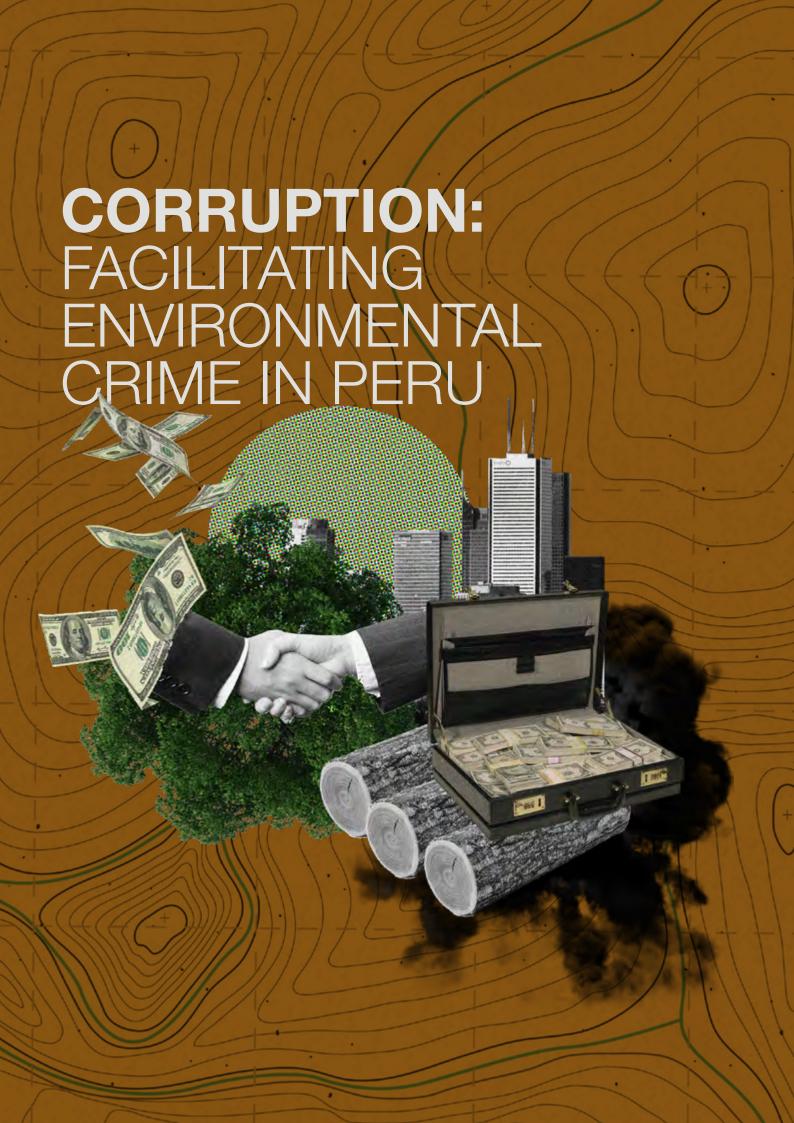
offer cash advances to poachers to hunt certain species and provide them with equipment.²²⁸ The acopiadores (collectors) carry out more organized trafficking. They keep in contact with local communities based in extraction zones, to stockpile animals and move them in large numbers. 229 They buy animals dead or alive. In some cases, collectors travel between communities to buy wildlife directly from extraction zones.²³⁰ In other cases, poachers bring them wildlife they have caught.²³¹ Collectors are also involved in transporting wildlife to sales points.²³² A third type of intermediary are known as rematistas (resellers). These work on local markets in cities closest to extraction zones. They buy meat, live animals and parts directly from poachers. Then they take the animals or their parts to markets and sell them.

Poachers and Farmers

Wildlife trafficking starts with poachers, often locals who have been contacted by exporters, brokers, or intermediaries to hunt certain species upon request. Some also generate supplemental income by capturing live animals or selling animal parts for artisanal or superstitious purposes, according to a poacher working in Iquitos.²³³ The primary weapons of choice for poachers tend to be shotguns and machetes, though certain species require them to employ traps as well.

Poachers generally earn very little from capturing and killing animals.²³⁴ A poacher from the city of Iquitos said he usually earns 500 soles – about \$150 – on a three-week hunting trip.²³⁵ As the wildlife has disappeared due to overhunting and habitat destruction, poachers are increasingly venturing farther into the jungle.²³⁶ This increases both the time and cost of each trip in exchange for few benefits.²³⁷

For their part, farmers catch or kill animals while they are protecting their land or hunting for game. This is particularly true as it relates to jaguars. According to the Serfor official, Jessica Gálvez-Durand, when farmers encounter a jaguar, they will kill the mother to sell its fangs and claws, and capture its babies to sell as pets.²³⁸



Corruption: Facilitating Environmental Crime in Peru

From unchecked agricultural development to wildlife trafficking, corruption greases the wheels of every environmental crime in the Peruvian Amazon. Bureaucrats, security forces, prosecutors, regulators, and regional politicians all act as facilitators to allow land trafficking, deforestation, and the illegal extraction, transport, process or sale of timber, gold, and fauna.

Unchecked Agricultural Development and Corruption

Agribusiness starts with the control of land, and land in the Peruvian Amazon is controlled by the Regional Agricultural Directorates (Direcciones Regionales Agrarias - DRAs). Specifically, the DRAs have the power to grant property titles, ²³⁹ which makes them the principal targets of corruption as it relates to agricultural development projects. Specifically, officials at the DRAs are often part of land-trafficking schemes, where they issue land ownership titles to front men or agricultural associations, who then sell the lands to agribusinesses that drive deforestation. ²⁴⁰

"The regional government is finally the one that gives the go-ahead [the land title] and that's where all the mafias and all the corruption are," says Ricardo Fort, an investigator for GRADE, a think tank that studies environmental, economic, and social issues in Latin America.²⁴¹

The Cocha Anía case exemplifies this process. Multiple media reported the then-director of the DRA of Ucayali worked with two former directors of sanitation and land titling in charge of the registry of state lands²⁴² to title 128 properties in the name of 121 people who were friends and relatives of workers of the DRA of Ucayali. These plots were to be sold to palm oil companies,²⁴³ including the Melka Group. But the deal did not go through²⁴⁴ and the DRA director was arrested.²⁴⁵

Timber Trafficking and Corruption

Corruption occurs at all stages of the timber supply chain. At the lowest levels, there is petty corruption. At checkpoints, for instance, police officers and officials from the forestry and wildlife regulatory agency, the ATFFS, often turn a blind eye to illegally-sourced timber after collecting a bribe.²⁴⁶

Corruption becomes more systemic when regulators sell transit stamps to timber traffickers who need to demonstrate their timber was transported via a certain route. This practice was illustrated in a recent case chronicled by InSight Crime.²⁴⁷ Timber trafficking networks had different transport permits (GTFs) stamped by an ATFFS official. This gave them cover as they could show their illegally-sourced timber was extracted from an Indigenous territory, which had permission to fell the wood.²⁴⁸

Further up the ATFFS chain, the focus shifts to forest regents, who have the power to authorize and approve operational plans (POAs) and GTFs. One expert from Peru's forestry sector, who spoke on the condition of anonymity, explained that many forest regents offer legitimate POAs and GTFs with false information after charging a bribe.²⁴⁹

"The problem is that the GTFs are not fake. These are official documents issued by the forestry authority, but they contain false information," said the forestry expert. "This is how easy it is to 'legalize' wood of illegal origin." ²⁵⁰

Judicial authorities are also often corrupt. Different experts in the forestry sector allege prosecutors rig or archive timber trafficking investigations in return for bribes.²⁵¹

Politicians are also involved in systemic corruption. They weaken regulatory efforts or provide protection for criminal schemes. In recent years, for example, political figures that directly benefit from timber trafficking have exerted pressure to weaken regulatory controls over the country's timber sector, according to different experts on timber trafficking in Peru.²⁵² Since the emblematic case of Yacu Kallpa, for example, Osinfor has been defunded and strident investigators like Rolando Navarro, the former director of Osinfor, have been removed.²⁵³ In 2018, the government moved Osinfor from the Presidency of the Council of Ministers (Presidencia de Consejo de Ministros - PCM) to the Ministry of Environment (MINAM), cutting its ability to independently investigate timber trafficking.²⁵⁴ Civil Society organizations like Global Witness, EIA, and others, campaigned for this decision to be reversed, and it was. However, many Osinfor officials resigned along the way.²⁵⁵

Illegal Mining and Corruption

To operate effectively, illegal mining requires the complicity, and, at times, outright collaboration of public officials. In the Peruvian Amazon, this corruption runs from everyday police officers to regional governors providing the necessary equipment, paperwork and political backing for the extractive processes.²⁵⁶

Lower-tier officials have been implicated in aiding illegal mining. In 2018, two Navy officers were sentenced to six years in prison for accepting bribes from traffickers delivering fuel to informal mining sites. According to the media outlet Inforegión, they were paid over \$9,000 to allow 26 boats to smuggle gasoline to miners in Madre de Dios.²⁵⁷ The magnitude of this case was unique, but the basic facts were not. Bribing police officers along the Interoceanic highway, a road cutting through

the Madre de Dios mining region, is a common practice for smugglers carrying mercury, gasoline, and illegal gold.²⁵⁸

Another emblematic case within Madre de Dios was the arrest of six officials of the Regional Directorate of Energy, Mines and Hydrocarbons. According to the Public Ministry, the officials were accused of accepting bribes from illegal miners in exchange for giving them permission to mine.²⁵⁹

Within the criminal justice system as well, there are cases of public officials favoring illegal miners. Ojo Público reported on a case involving two former officials within the Specialized Environmental Prosecutor's Office (Fiscalía Especializada en Materia Ambiental - FEMA) being investigated for malfeasance in 2018. The prosecutors allegedly encountered five miners illegally extracting gold. However, they submitted a report charging them with only attempted illegal mining, a lesser crime that led to a lower sentence. According to Ojo Público, this type of corruption is common.²⁶⁰

Wildlife Trafficking and Corruption

From customs officials to those who patrol the markets at the Regional Production Directorates (Direcciones Regionales de Producción – Direpro),²⁶¹ there is widespread corruption connected to wildlife trafficking. Bribes are commonplace, according to journalist Eduardo Franco Berton.²⁶² And the former Direpro official, Carlos Perea, said that officials responsible for inspections in extraction zones at Direpro often get their jobs because of their personal connections, not because of their career experience or knowledge. In many cases, their main interest is profiting off bribes rather than regulating the wildlife trade.²⁶³

"Unfortunately, a lot of people arrive at these public sector positions not to do their work as a public servant but to make money for themselves," Perea said.²⁶⁴

Broadly speaking, there are few legal repercussions for corrupt officials. A wildlife trafficking expert said that Direpro and ATFFS officials are fired if they are found to be corrupt, but few are prosecuted. Sometimes, the expert added, the investigations are dismissed and the officials rehired.

The same is true for companies caught exporting illegally-sourced wildlife. An InSight Crime investigation found that while two cases have been passed to prosecutors in the last two years, accused companies have only had to pay a fine, and no charges have been levied against them.²⁶⁷ Exporters of fish and turtles linked to wildlife trafficking also enjoy political protection. Officials responsible for monitoring exports said they had been pressured by a Loreto congressman to "ease off" on investigating the wildlife trade.²⁶⁸

"Illegal mining requires the complicity, and, at times, outright collaboration of public officials."



State Resilience

While there are some efforts to build resilience, including the passing of new legislative frameworks and some other signs of political willingness to tackle the problem, there is still a long way to go. The confluence of the presence of corrupt actors who benefit from environmental crime and the political crisis that Peru has faced in recent years has resulted in a lack of capacity and resources to combat environmental crimes. What's more, the Peruvian government continues to prioritize economic development over the protection of the Amazon rainforest.

"The Peruvian government continues to prioritize economic development over the protection of the Amazon rainforest."

Legislative Framework

For years, Peru has built a legislative framework aimed at mitigating environmental crimes. The most important part of that framework is the General Law on the Environment of 2005. The law is the backbone of all government attempts to protect the environment, as it bases these attempts on the constitutional rights of all Peruvians to live in a healthy environment.²⁶⁹ A subsequent law led to the creation of the Ministry of the Environment, which is the highest entity in this area and is in charge of developing, directing, supervising, and executing the national environmental policy.

To protect its forests from unregulated agricultural development and cattle ranching, Peru has relied on the Forest and Wildlife Law No. 27308 of 2002. The law promotes the conservation and sustainable use of forest²⁷⁰ and clearly prohibits using protected forest resources for agricultural development. However, in practice, this does not happen as cattle and agriculture are spread throughout the Peruvian Amazon.²⁷¹ For this, the law has had little success so far in protecting the country's trees.

To help mitigate timber trafficking, the Peruvian government signed the National Pact for Legal Timber in December 2014, with the private sector, NGOs and Indigenous federations for the purpose of controlling the flow of wood to international markets, including to the United States and the European Union.²⁷² The pact sought to ensure the use of legally obtained primary resources, so both the seller and the buyer and any intermediary can expect to handle legal resources such as timber and gold.²⁷³

In addition, it developed the National Multisectoral Strategy to Combat Illegal Logging (La Estrategia Nacional Multisectorial de Lucha contra la Tala Ilegal - ENLTI 2021-2025), which is intended to contribute to the reduction of illegal logging in the forest and the trade of products of illegal origin.²⁷⁴ ENLTI tasks a commission within the Ministry of Agrarian

Development and Irrigation with overseeing the creation of a forest surveillance system, a forensic laboratory for identifying timber, as well as better coordination between relevant government agencies in tracking the transportation of timber by land and water, among other measures.²⁷⁵

Regarding mining, Legislative Decree No. 1105 of 2012 charges the Ministry of Energy and Mines with overseeing mining formalization processes in conjunction with regional governments. Since 2006, a normative and institutional framework has been developed in order to fight against illegal mining. One of the pillars of the fight against illegal mining has been the formalization of mining licenses, contained in Legislative Decree No. 1105 of 2012. Through the formalization process, the government aimed to differentiate between informal miners, who can be brought into the legal economy through authorization, and illegal prospectors who operate in areas where mining is prohibited.

However, disentangling informal and illegal mining has been one of the great challenges Peru faces. The infiltration and co-optation of informal mining by criminal networks makes drawing a neat line between the criminal and the informal extremely difficult, and the government has struggled. Experts in illegal mining, such as Álvaro Cano, say that the formalization in Peru has been a failure, mostly because it is so slow and onerous.²⁷⁹ As InSight Crime has reported, around 70,000 miners signed up to be integrated into the illegal mining industry in 2017; several years later, only 161 mining operations representing approximately 3,000 miners have completed the process.²⁸⁰ Still, although legalizing the miners has been challenging, several mining experts said the process should not be abandoned.²⁸¹

With regards to wildlife trafficking, watchdog groups say the laws are too weak. And since 2019, various Peruvian organizations have insisted on the need to classify the trade as "organized crime," as the government did with illegal logging and illegal mining. ²⁸² Currently two initiatives in Congress seek to do this. However, neither have become law. ²⁸³

International Cooperation

Peru joined the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1974, which sought to establish international regulations for the wildlife trade. CITES is one of the most commonly used means to tackle wildlife trafficking in the world. The Peruvian government also signed bilateral conventions with Brazil (1975) and Colombia (1979) to protect wildlife in the Amazon. Another eight countries within the Amazon basin signed a trade and cooperation agreement to develop the region while caring for biodiversity in the Amazon. 285

Another important catalyst for updates to Peru's legal framework for forestry matters was the signing of a free trade agreement with the United States in 2007. Officially called the Trade Promotion Agreement, the accord included a forest annex that urged the government to verify the origins of harvested timber and to apply sanctions when illegal logging is suspected.²⁸⁶ However, implementation of this annex still faces challenges.²⁸⁷ For example, an information and tracing system has yet to be implemented to guarantee the legality of timber from the moment it is harvested.²⁸⁸

In 2008, the United States passed the Lacey Act, which prohibits the commercialization of forestry products of illegal origin, including wood. The law has yielded positive results. For example, on September 3, 2021, US company Global Plywood and Lumber Trading admitted to violating the Lacey Act. Additionally, the company said that it did not do its due diligence when it imported timber from the Peruvian Amazon in 2015. The ruling required the company to pay \$200,000 to Peru's Ministry of the Environment (Ministerio de Ambiente de Perú - MINAM) and a \$5,000 fine. 291

As noted earlier in the report, Peru signed the Minamata Convention in 2013, which seeks to curb mercury pollution and eliminate its use in artisanal and small-scale gold mining.²⁹² However, mining networks throughout Madre de Dios continue to use mercury.²⁹³

Civil Society

Civil society plays a crucial role in the fight against environmental crimes. Organizations such as the Peruvian Society of Environmental Law (Sociedad Peruana de Derecho Ambiental - SPDA), the Environmental Investigation Agency (EIA) and Proética regularly investigate and report on environmental crimes in the Amazon region. In the case of illegal logging, civil society is on the front line in protesting and questioning government decisions, as well as spotlighting issues related to illegal logging through declarations and joint actions.²⁹⁴

Contributions by civil society to the fight against environmental crimes also include activities that educate young people about preventing this illegal activity through conferences, workshops, and meetings.²⁹⁵ In March 2020, the Madre de Dios Forest Anti-Corruption Network, a meeting point for civil society organizations, held a training session in Madre de Dios called "Anti-Corruption and Forest Governance School." Backed by Proética,²⁹⁶ the initiative aimed to build citizen actions to confront corruption, a factor that drives deforestation in the Amazon.²⁹⁷

In Madre de Dios, several civil society and political organizations have come together to combat illegal mining.²⁹⁸ They regularly highlight the negative impact mining has on the area, not only in regards to deforestation but also in fomenting other illegal activities, such as human trafficking, land trafficking, and targeted killings.²⁹⁹ Likewise, they have pressured the state to implement sustained strategies to confront illegal mining.³⁰⁰

Efforts by civil society, however, are hampered by violence and threats. Nineteen Indigenous leaders and environmental defenders have been killed during the pandemic³⁰¹, and many others continue to be targeted, particularly in areas where activities such as logging, drug trafficking, illegal mining, and land trafficking are widespread.³⁰²

Criminal Justice

In 2008, the Resolution of the Board of Supreme Prosecutors created the Special Prosecutor for Environmental Matters (Fiscalía Especializada en Materia Ambiental - FEMA), a specialized unit dedicated to preventing and investigating environmental crimes. The FEMAs are currently operating in the departments of Loreto, Amazonas, San Martín, Ucayali and Madre de Dios. The FEMAs have carried out important operations that have resulted in seizures and prison sentences against those who promote illegal mining, 305 wildlife, 306 and timber trafficking. 307

In order to strengthen the work of the FEMAs, the Supraprovincial Prosecutor's Office Specialized in Environmental Matters (Fiscalía Supraprovincial Especializada en Materia Ambiental) was formed in December 2021. 308 It is located in Lima and will have jurisdiction over the entire Peruvian territory. 309

The Financial Intelligence Unit (Unidad de Inteligencia Financiera- UIF), which is designed to combat money laundering, has uncovered the deep connections between money laundering and environmental crime in Peru.³¹⁰ In 2018, the UIF identified how profits from timber trafficking, at the time equivalent to approximately US\$155 million annually, were laundered by family clans. These actors used false documentation, offshore companies in tax havens, and front companies to give an air of legitimacy to the profits derived from the trafficking of timber.³¹¹

This case demonstrates how money laundering investigations related to environmental crimes in Peru, unlike those in Colombia, have prioritized the analysis of various environmental crimes, not just illegal mining.

While the Peruvian justice system has won some battles against illegal logging, land trafficking, and mining, it is losing the war. Part of this is related to the political chaos Peru has faced in recent years. Although a handful of corrupt officials within the highest spheres of political power have been prosecuted, the prosecution of those

driving deforestation and protections for environmental defenders have been sidelined.³¹² This makes impunity the norm for environmental crimes in the Amazon.³¹³

The Yacu Kallpa timber trafficking case illuminates the complexity that often accompanies these criminal proceedings. In September 2021, six years after the case was opened, more than 90 people were indicted by the Peruvian Attorney General's Office for crimes such as timber trafficking and the illegal granting of rights. Those charged face prison sentences ranging from two to 11 years in prison. The sentences ranging from two to 11 years in prison.

However, former Osinfor head Rolando Navarro says that, while it is a step in the right direction, there is still a long way to go in the fight against illegal logging.316 To be sure, light penalties faced by heavyweights in the illegal timber chain have overshadowed the perceived gains. According to an investigation by Ojo Público, Doris Sadith Noriega Paredes, representative of Inversiones La Oroza - a company that allegedly owned more than 80 percent of the timber seized in the Yacu Kallpa case - faces just a three-year prison sentence.317 Corrupt former regional officials, who according to the prosecutor's office authorized the transport of the wood from the Amazon with false documentation, face similarly light penalties.318

Impunity is also pervasive for wildlife trafficking in Peru. An investigation by Neotropical Primate Conservation (NPC), an organization dedicated to the conservation of primates and their habitats, revealed that most charges filed in relation to wildlife trafficking never reach a judge.³¹⁹

Political Will

There are currently two initiatives in Congress that seek to classify wildlife trafficking and other crimes against natural resources as organized crime. The bills intend to strengthen penalties, meaning that those involved could face sentences of between eight to 15 years in prison.³²⁰ if approved, the bills would demonstrate that Peru is taking the protection of its fauna and its Amazon more seriously.

The new Functional Unit for Environmental Crimes (Unidad Funcional de Delitos Ambientales-UNIDA)³²¹ was created in March 2021 by the Ministry of Environment to target environmental crime in Peru and to deepen the exchange of information between respective environmental agencies.³²²

While the government of President Castillo has expressed a commitment to updating and strengthening its legal framework in terms of environmental regulations,³²³ the reality is that there is little political will to fight these crimes, especially on the local and regional levels.³²⁴

Part of this is related to the decentralized political system. Peru gives departments and municipalities considerable independence, power and resources to deal with many of these issues. In practice, this often means that each side blames the other for the gaps in regulatory and law enforcement efforts. National authorities have transferred responsibilities, such as forest management, to regional governments, 325 thus giving them the ability to defer responsibility to the local authorities. Local governments, meanwhile, argue they have neither received the proper training nor the resources to handle these issues. 326

Efforts are also complicated by the struggle to strike a balance between environmental protection and economic development. The most recent example of this came when President Castillo announced the country's

Second Agrarian Reform. The reform seeks to promote comprehensive development in rural areas of Peru.³²⁷ However, experts in environmental crime in Peru said the reform could have a perverse effect on the Amazon, as more forests could be cut down to make way for agriculture.³²⁸

Agencies like Osinfor appear to be caught in the middle of these battles. After Rolando Navarro was dismissed in 2016,³²⁹ his team continued to defend Osinfor's autonomy. However, in 2018 when Osinfor was brought under the control of the Ministry of the Environment, at the time headed by Fabiola Muñoz, a minister with a history of intervening in investigations on behalf of timber companies,³³⁰ the watchdog was rendered toothless, according to Julia Urrunaga, the director of the Peruvian branch of the EIA.³³¹

Meanwhile, another Peruvian forestry expert, who requested to remain anonymous for security reasons, says that Osinfor has become progressively weaker: "Because it [Osinfor] goes against the interests of the beneficiaries of this business." 332

"Efforts are also complicated by the struggle to strike a balance between environmental protection and economic development."

Conclusions and Opportunities for Intervention

While progress has been made in protecting the Peruvian Amazon, and there is greater political will among some regional governments to combat environmental crimes, they have been hampered by a lack of institutional capacities and corruption. As a result, the Peruvian Amazon continues to be systematically destroyed.

1. Legal Companies Are Among the 'Big Fish' Behind the Deforestation of the Peruvian Amazon

Agribusiness plays a key role in environmental crimes, orchestrating land trafficking and subsequent deforestation. Meeting global demand for products such as palm oil often proves to be a higher priority for local governments than stopping the deforestation promoted by these industries. Companies have a plethora of coercive tools at their disposal to appropriate land and fight Peruvian courts if necessary.³³³ Increasing pressure on these companies to comply with environmental norms and standards is essential.

2. Corruption Facilitates Environmental Crime

The complicity of corrupt facilitators follows every stage of environmental crimes. Corruption allows environmental crimes in the Peruvian Amazon to occur without much resistance.³³⁴ State officials facilitate titles

for land traffickers and produce GTFs with fraudulent information, thus enabling timber laundering. Corrupt authorities warn miners of possible raids on their operations. Many more law enforcement resources and transparency measures are needed to make progress here.

3. The Peruvian Government Was Overwhelmed by Environmental Crime in 2020

Peru has been unable to reach its zero-deforestation target by 2021. 336 Paradoxically, the country has reached record levels of forest loss, partly the result of years of political crisis that have pushed the fight against deforestation and environmental protection to the bottom of Peru's political agenda.

President Castillo has recognized the need to protect the Peruvian Amazon and reduce deforestation.³³⁷ His election was largely driven by the support of the same rural communities that are often directly affected by environmental degradation in the Amazon. Despite this apparent promise of change, skepticism looms in Peru. Environmental issues, so far, have not been included in any of the government's published plans to date.³³⁸

Meanwhile, drug trafficking is gaining more ground in the Amazon, leading to deforestation and violence against environmental defenders. What's more, sectors tasked with combating illegal logging and wildlife trafficking, such as Osinfor, are increasingly sidelined.³³⁹

Looking to the Future: Opportunities to Combat Environmental Crimes

Peru's current trajectory of environmental degradation is concerning. The country's biodiversity is at stake.³⁴⁰ The complexity of the problem demands profound changes for any tangible transformation to be achieved. There is no single way to address deforestation and the forces driving it in the Peruvian Amazon. Rather, it requires a confluence of state, private, and international actors working in coordination.

The Castillo Administration Must Make Environmental Protection a Higher Priority. This Includes Promoting Agriculture Outside of the Amazon

Castillo's government must view the second agrarian reform as more than just an issue of economic opportunity but as a chance to demonstrate its commitment to defending the Amazon.

The reform should focus on coastal and mountainous areas while spurring a gradual reduction of agricultural practices in the Amazon.³⁴¹

International Cooperation

Just as these crimes are often transnational in nature, measures to curb them must also be transnational.

At the regional level, existing agreements such as the Amazon Cooperation Treaty Organization (Organización del Tratado de Cooperación Amazónica - OTCA), of which Peru is an active member, should be promoted. This would allow for a greater

exchange of information and the potential for cross-border collaboration.³⁴²

The ratification of the Escazu Agreement would be an important step forward for the Castillo administration with regards to defending environmental leaders, who are increasingly being threatened and murdered.

A more detailed analysis of the supply chains for environmental crimes is also required. This work, while arduous, could help stem the flow of illegal goods. This means that Peru must be willing to work more, not only with its regional partners in the fight against environmental crimes, but also with the United States, the European Union and China to ensure that due diligence is practiced when trading in potentially illicit goods. ³⁴³

Adopt a Nuanced Approach to Law Enforcement

It must be understood that in order to achieve lasting change, the workers extracting gold, timber, and wildlife are only the lowest rung on the ladder within the sophisticated criminal networks driving environmental crimes. Efforts to combat environmental crimes must therefore be more nuanced than the jailing of low-paid workers involved in timber extraction, the militarized eradication of coca crops, and the seizures of mining sites such as those seen in Operation Mercury. Authorities must identify the "big shots" that oversee these illicit economies.³⁴⁴

The government should shift its focus on criminal punishment to the exploration of preventive measures. The government is beginning to address this strategy gap and, in 2020, published its National Narcotics Policy, which will be in effect until 2030. The policy requires typical methods of intervention and eradication, but it also includes objectives to provide licit economic alternatives in areas where coca growth prevails. It remains to be seen whether these goals will materialize in tangible steps by the Castillo government. 345

<u>Protect Indigenous Communities</u> and Nature Reserves

Environmental crimes thrive in the Peruvian Amazon. This is often due to the limited state presence, the large size of such spaces and, in some cases, the lack of legal protections for Indigenous communities. Greater resources need to be allocated to protect these areas, and law enforcement patrols need to be increased. Additionally, investments must be made in the titling process of the 647 Indigenous communities that are not yet recognized by regional authorities in five regions of the Amazon.³⁴⁶

"The Peruvian government should shift its focus on criminal punishment to the exploration of preventive measures."

Use of Technology as a Tool to Combat Environmental Crime

A two-year study in Loreto demonstrated that massive state intervention is not always necessary to combat illegal logging, mining, or drug trafficking. In 2018, Indigenous communities were equipped with smartphones, GPS, and drones to better track deforestation activity in their communities. After two years, they succeeded in significantly reducing deforestation, as they could quickly move to areas that were being destroyed, rather than having to spend weeks patrolling their lands on foot. Continuing to empower local communities with technology that allows them to better monitor large swaths of territory is a proven method for reducing deforestation. Imitating the strategy of the Regional Organization of the Indigenous Peoples of the East (Organización Regional de los Pueblos Indígenas del Oriente -ORPIO) could reduce the burden on the State and allow villagers to safeguard their own communities more efficiently. 347

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