



POLITICAL ECONOMY ANALYSIS OF ENVIRONMENTAL CRIMES IN PERU

Preventing Illegal Gold Mining, Timber and Wildlife Trafficking in Loreto, Ucayali, and Madre de Dios

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CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	6
PURPOSE OF APEA ON ENVIRONMENTAL CRIMES	6
METHODOLOGY	7
STAKEHOLDERS	7
RESEARCH LIMITATIONS	9
GENDER EQUITY AND SOCIAL INCLUSION	10
USAID'S APEA FRAMEWORK	13
DETAILED FINDINGS AND ANALYSIS	14
FOUNDATIONAL FACTORS	14
RULES OF THE GAME	23
THE HERE AND NOW	37
DYNAMICS	46
KEY RECOMMENDATIONS	49
SUMMARY OF KEY PEA FINDINGS AND RECOMMENDATIONS	51
TABLE OF KEY FINDINGS AND RECOMMENDATIONS	52
CONCLUSIONS	55

ACRONYMS

ACCA	Amazon Basin Conservation Association
AIDSESP	Inter-ethnic Association for the Development of the Peruvian Amazon
APEA	Applied Political Economy Assessment
ARA	Regional Environmental Authority
CI	Conservation International
CIFOR	Center for International Forestry Research
CIOH	Construction Phase Inter-Oceanic Highway
CIPTO	ORPIO's Center for Information and Territorial Planning
CITES	Convention on International Trade of Endangered Species of Wild Flora and Fauna
CNM	National Council of the Judiciary (now defunct)
CONAFOR	National Commission on Forestry and Wildlife
CONAFOR PERU	National Forestry Confederation of Peru
CSO	Civil Society Organization
DAR	Derecho, Ambiente y Recursos Naturales
DGFM	General Direction of Mining Formalization, Ministry of Energy and Mines
DREMEH	Regional Direction of Energy and Mines
ECA-RCA	Executor of the Administrative Contract – Amarakaeri Communal Reserve
FADEMAD	Agrarian Federation of the Department of Madre de Dios
FECO	Specialized Prosecutor for Organized Criminality
FEDEMIN	Miners Federation of Madre de Dios
FEMA	Specialized Prosecutor for Environmental Matters
FENAMAD	Native Federation of the Madre de Dios River and Tributaries
GDP	Gross Domestic Product
GESI	Gender Equity and Social Inclusion
GIS	Geographical Information System

GIZ	German International Cooperation Agency
GoP	Government of Peru
GTF	Guide for Forestry Products Transportation
IDL	Institute for Legal Defense
IGAC	Instrument for Corrective Environmental Management
IGAFOM	Environmental Management Instrument for Formalization of Small and Artisanal Mining
IIAP	Institute for Research on the Peruvian Amazon
INGEMMET	National Geological, Mining, and Metallurgy Institute
IOH	Operational Phase, Inter-Oceanic Highway
JNJ	National Judicial Board
MIMP	Ministry for Women and Vulnerable Populations
MINAM	Ministry of the Environment
MMPV	Ministry of Women and Vulnerable Populations
MP	Public Ministry (Prosecutors)
ONAMIAP	National Organization of Andean and Amazonian Indigenous Women in Peru
ORPIO	Regional Organization of Indigenous Peoples of the East
OSINFOR	Organism for Supervision of Forest Resources
PEA	Economically active population
PIACI	Indigenous peoples in a situation of isolation or initial contact
PIOH	Prior to Inter-Oceanic Highway
PREVENT	USAID/Peru program, formerly Combating Environmental Crimes
RECPO	Registry of Entities Trading or Processing Gold
REINFO	Integrated Registry for the Formalization of Mining Rights
SBS	Superintendency of Banks, Insurance Companies, and Administrators of Pension Funds
SERFOR	Peruvian Forestry and Wildlife Service
SERNANP	National Service for Natural Protected Areas

SERVINDI	Servicios en Comunicación Intercultural
SERVIR	Peruvian Civil Service Commission
SINANPE	National System of Natural Protected Areas, Ministry of the Environment
SUNAT	National Superintendency for Customs and Tax Administration
TWP	Thinking and Working Politically
UIF	Financial Intelligence Unit, Superintendency of Banks, Insurance, and Pension Funds
USAID	United States Agency for International Development
ZEE	Ecological, Economic Zoning
ZRTC	Tambopata-Candamo Reserved Zone

EXECUTIVE SUMMARY

Prevention of environmental crimes in the Peruvian Amazon in the post-pandemic world has entered a new era of crisis and opportunity. Illegal activity threatens the rich biodiversity of the Amazon region and has created underlying social conflict that threatens the cultural diversity of one of the most unique places in the world. The global reach of the coronavirus pandemic has exposed pressure points in Peru's commitment to eradicating these crimes. Measures of governance capacity indicate a significant gap between national level institutions established to identify and prosecute perpetrators and the regional level administration and execution of these efforts. Central government officials blame the systemic weakness on regional government officials and these local officials decry the national level reluctance to entrust regional authorities with the resources they need to prevent and control environmental crimes. Behind the finger-pointing are the perceived ties of some of the regional authorities to organized crime networks and the coziness of the private sector with evidently corrupt political elites with stakes in the status quo. Public perceptions of the problem and the role of civil society in this context is critical to improving the prevention of environmental crimes.

Interviews with almost 100 respondents reveal a pattern of fractionalized authority that accompanies ineffective coordination and response. At both the national and the regional levels, the emergence of champions who see the environmental damage perpetuated by the corruption of the political actors with links to national level authorities and institutions is tempered by powerful interests in the profits of environmental crimes. Emblematic of this problem is the Yacu Kallpa case in Loreto where the ex-governor appeared to have clear interests in obstructing prosecution of environmental crimes. The ex-governor is now in Congress representing Loreto, where he enjoys parliamentary immunity. Many respondents referred to a revolving door of unethical politicians re-entering the political space after charges of corruption. These politicians are re-elected by their constituents, respondents were quick to point out. That situation reflects both a lack of transparency with little widely disseminated information on political candidates and the nature of Peruvian political patronage, particularly at the sub-national level.

Illegality is a function of the complex legal requirements and administrative procedures that foster illegality by making compliance too burdensome. Criminality is a narrower slice of illegality and organized crime is constituted in many nebulously articulated forms. Illegal timber extraction, illegal gold mining and exportation and wildlife trafficking activities overlap with narco-trafficking, land trafficking, money laundering, and trafficking in persons. The lines among these activities can be blurry but results from illegal territorial occupation to extract and traffic resource. Fraudulent paperwork enables laundering and the governing systems has little to no incentives or motivation to respond to environmental crimes. Such incapacity and inefficiency are linked with larger patterns of political abuse and corruption.

The recent implementation of prosecutors specialized in environmental matters (FEMA) has made some progress in uncovering and prosecuting environmental crimes including illegal gold mining, illegal timber extraction, and trafficking in wildlife species, but these offices are understaffed and under-resourced, particularly regarding logistics support for their operations. Moreover, complex and even contradictory existing laws and regulations, the segmented structure of the government, incomplete and inadequately resourced decentralization, and a lack of inter-institutional coordination and transparency of records make their work excessively difficult. Also, there is a need for greater focus on preventing environmental crimes than in prosecuting them after the fact.

Central to the issue of fragmented authority is the failure of coordinated and integrated land-use planning and governance. Transparency around the superimposition of competing land use

authorizations issued at both the regional and national level would help expose the nefarious relationships driving the dominant narrative of exasperation over the failures of inter-institutional articulation that make it impossible to implement the law. Based on interviews with respondents across a wide range of stakeholders, findings indicate that political coalitions in Peru act to oppose environmental objectives and to impede investigations of environmental crimes. Political groups actively seek to exclude or diminish indigenous communities, supervisory agencies, and forest and wildlife land use practitioners from effectively participating in land use governance. With regard to the formalization of mining, the intent to legalize and regulate small scale mining has failed to weigh the incentives currently aligned with illegal mining against the risks of illegality.

Such control mechanisms that have been implemented include military interventions in a few specific hotspots, such as *La Pampa*, adjacent to the Tambopata Natural Reserve. Enforcement temporarily cleared the area of illegal gold miners, but they and the criminal elements that operate in the area are simply dispersed to other areas. Moreover, illegally produced gold in Peru is easily laundered with falsified source documentation and then marketed and exported legally, since there is a “free market” in gold with no effective controls. Overall, the many institutions positioned to regulate the marketing of forest products and gold have enabled the administrative laundering of illegality. A multi-pronged approach is needed to address illegal mining through a better understanding of the incentives and interests that motivate different actors within the hierarchy and layers of workers and titleholders involved in gold mining. Moreover, there needs to be marketing controls and illegal export prevention strategies for gold to complement the ongoing efforts to control illegal mining. Only through an understanding of the dynamics at the local level can solutions be found to make formalization of mining a viable pathway to escape illegal gold mining and exportation of gold.

Respondents pointed out that where coordination among responsible actors does occur, it does not necessarily produce environmentally sustainable and socially just land use outcomes. Successful initiatives to monitor deforestation association with environmental crimes that also result in tangible benefits for local people are based on effective coordination among well-informed actors through significant political organizing efforts over time by activists, indigenous communities, local people, nongovernmental organizations, and international cooperation agencies. The coalitions that are brought together in the PREVENT team have the crucial ingredients that can build on just these kinds of positive organizing efforts. The project has the potential to shape public opinion on the extent and significance of environmental crimes. PREVENT’s team must deploy messaging that recognizes explicitly the political dimensions of land use governance. This messaging is needed to change the narrative of the need for better institutional articulation. Reducing and preventing environmental crimes hinges on government responding to civil society, media, and public opinion pressure to develop areas of successful collaboration with local people.

INTEGRATED CADASTER

Respondents indicated overwhelmingly the need for a cadaster that recognizes and captures the overlapping land use rights allocated through concessions, titles, and other forms of use rights. Clarifying the pressures on statuses of land, combined with intensive monitoring of and recognition of indigenous territories and parks through co-management approaches could reduce conflicting land use, pinpoint illegal changes in categorizations of land use and improve the prevention efforts of environmental crimes. Innovations in technology that put the indigenous land holders in a position to monitor and protect their territories are an effective deterrent to environmental crimes. Local resilience requires economic solutions and these will include adjustments to enable small holders to benefit from legal and sustainable forest management. Largely resulting from Peru’s historic segregation

of administrative functions by economic sector, overlapping land use rights predominate throughout the Peruvian Amazon. Indigenous community land titles, natural protected areas, colonist certificates of possession, timber concessions or extraction permissions, Brazil nut concessions, rubber concessions, mining concessions, and private conservation concessions may be granted over the same territorial base, often to different rights holders. That situation has generated abundant litigation and physical violence, including assassinations. The overlapping rights and existing conflicts make preventing environmental crimes very challenging.

A clearer understanding of preventing environmental crimes starts with a clearer understanding of the rights and social dynamics associated with the different forms of land use rights and competing claims as well as the social dynamics of the crimes.

TRANSPARENCY

Transparency needs a domestic constituency if Peru is to make a measurable difference in reducing forest crimes and illegal gold mining. The Government of Peru has committed to the idea of transparency, but many steps remain to enable information to be easily accessible to different institutions within government, let alone from outside government. Transparency and digital solutions are championed by civil society, and while real-time access to information may not be realistic, the sharing of information about the legal function of government actors in the target regions should be public knowledge in order to support the prevention of crimes. A clearer understanding of preventing environmental crimes starts with a clearer understanding of the social dynamics associated with the different forms of land use rights and competing claims.

Peru's Forestry and Wildlife Service (SERFOR)'s focus on complex forestry regulations belies a fundamental bias toward the large-scale forest operations for generation of export revenue when an estimated 80 percent of the timber harvested in Peru is done by smallholders and largely for domestic consumption. A significant portion also enters the export market via laundered documentation. To address the need for transparency, rather than increasing the compliance requirements for smallholders and forest industries alike, respondents suggested that SERFOR focus on more collaborative approaches for co-management of forests and more proactive supervision of forestry operations. The Forestry Supervision Office (OSINFOR) and regional authorities in their efforts to control violations of forestry legislation tend to capture administrative violations by predominantly indigenous and rural community forestry operations. The volume of these administrative violations may amount to large amounts of timber, but they detract from the larger-scale criminality. Many regional government authorities would rather not investigate these areas too deeply, partly because the criminal organizations have supported them politically and partly because they fear retaliation, including attempts on their lives. Similar conditions apply to illegal gold mining, particularly in the marketing of gold that is illegally sourced.

The administrative bureaucracy, at both national and regional levels is focused on formalization of existing rights, or purported rights, to mining concessions for artisanal and small-scale gold mining operations, while the prosecutors and the judiciary are chasing those responsible for actual illegal mining activities. Insufficient attention is paid to the ways in which small-scale miners are caught up in webs of illegality not necessarily of their choosing. There are complex social dynamics and layers of exploitation of local miners that make formalization a non-solution for many of those involved in mining, according to respondents. There are diggers, foremen, and a significant participation of women who play active roles sorting and processing. Efforts to bring them together to understand their varied

views helps distinguish the “real miners” (those involved in the hands-on mining) from those who own claims and collect rents from the actual miners. Respondents indicated that digitization solutions are critical, but need to support the “real” miners, because in most cases, those registered are not the ones on the ground. Mining formalization favors those who can file a petition to claim ownership. The informal miners doing the actual digging and processing of gold are the ones with incentives to formalize and have the least capacity (education, bargaining power, sociocultural status, and resources) to do so. Gold miners from indigenous communities have even less capacity since community territories are defined to be outside the mining corridor and therefore illegal for mining claims. Regulation of gold transactions through more carefully designed systems that are compatible with the social dynamics and digitization of legitimate gold sales could make a huge advance in the social and environmental goals of mining formalization efforts while squeezing the operating space of gold mining and marketing by criminal organizations.

INTERNATIONAL DIMENSIONS OF ENVIRONMENTAL CRIME

Since the beginning of the COVID-19 pandemic in Peru and worldwide, gold prices on international markets have exceeded US\$ 1,900 per ounce (US\$63 per gram), surpassing the previous all-time record of 2011. As a result, illegal gold miners remain active in Madre de Dios, while legal economic activities have been suspended. The international timber trade has slowed down during the pandemic because of shipping constraints, but the logging has continued according to respondents who reported that the international demand for wood is only temporarily disrupted. The global dimensions of the timber trade are substantially oriented toward legal exports. In the forestry sector, the falsification of paperwork to create the appearance of a legal chain of custody is the main objective. Investigators have to get ahead of the illegal loggers to prevent forest crimes.

Respondents noted the rise of the global coronavirus pandemic has brought attention to the dangers of zoonotic diseases spreading from trafficked wildlife, but they were less optimistic about controlling it. Wildlife trafficking lacks the political attention of the global drug trade linked to gold and money laundering. The global illegal trade in wildlife is valued at US\$19 billion annually and is the fourth largest illicit market after drugs, counterfeit, and human trafficking. Customs and border patrols are the main enforcement entity to prevent these illicit exports, but the main legal tool for wildlife, the Convention on International Trade of Endangered Species of Wild Flora and Fauna (CITES), limits the ability to legally enforce international regulations on wildlife trade because there are many species that CITES does not include. Even for those it does include, the permitting system is open to fraud, from reuse of permits to false permits. The majority of wildlife species trafficked legally from Peru is believed to fall in this category of fraud. In light of the coronavirus, the interest in closer regulation of wildlife trade has never been higher globally. Peru’s customs agents need significantly more support and collaboration to dismantle the networks facilitating the trade of illegal wildlife and wildlife products. Domestic trade in exotic pets and bushmeat may be an area of traction for activists in the wake of the coronavirus pandemic, but political interest is not high.

Experts indicated that a higher-level driver of land conversion in the region underpins mining, forestry, and infrastructure that contradicts the predominant narrative of small-scale mining and logging as a

poverty-driven activity. The flow of international capital, both legal¹ and illegal² and the associated threats to governance associated with the illegal flows are a key driver³. While individual mining operations may be small and individually managed, they are linked through sources of the capital financing their operations and can be seen as almost franchises of larger enterprises. Given these connections to large sources of legal and illegal capital, some call into question the appropriateness of use of the term “artisanal” in describing mining in Southeastern Peru. More accurate terms may be network or syndicate mining. The economics of how this capital affects mining and its relation to not only the overall magnitude of deforestation, but also its spatial extent and spread, is an important opportunity for research. It is crucial to understand the spatial distribution and spread of mining, as well as implementation of effective policy to constrain the patterns of its growth.⁴

Peru’s Financial Intelligence Unit (UIF) reported in 2019 to the US government that a third of the gold leaving Peru is illegally mined and that illegal gold mining emerged as the largest source of money laundering, at more than double the amount for narcotics.⁵ Financial intelligence units are collaborating internationally and domestically, but they too are limited in their tools and administrative procedures to pursue capital flows associated with the atomized illegal activities. When confronted with cash transactions, especially if they are not directly linked to terrorism or drugs, the expert analysts cannot pursue the crimes. Expanding money laundering laws to explicitly recognize environmental crimes and identifying the concrete steps needed to require and track transparent, digital transactions and link them with locations on a cadaster could greatly assist prosecutors in pursuing high level operatives engaged in egregious environmental crimes while enabling administrative infractions to be distinguished from serious environmental crimes. Once ratified by the Peruvian Congress, the Escazú Accord could provide a useful framework for this purpose, but national implementation legislation and clear policy definition is also needed.

¹ Galaz *et al*, 2015.

² McSweeney *et al.*, 2017.

³ Reitano, 2018.

⁴ Cabellero Espejo, *et al.* 2018.

⁵ United States Senate Committee of Foreign Relations Hearing, December 5, 2019.

INTRODUCTION

This report is a preliminary assessment of the political economies around environmental crimes that threaten biodiversity focusing on three Amazon regions in Peru: Loreto, Ucayali, and Madre de Dios for USAID's five-year PREVENT program. PREVENT supports the Government of Peru and Peruvian civil society to help anticipate and prevent environmental crimes through a comprehensive, multi-sectoral approach, including strengthening the justice system, leveraging science and technology, monitoring and protecting flora and fauna, defining economic costs and incentives, and working with informal miners and loggers to bring them into the formal economic sector. The project is structured to maximize the collaboration and learning between government and the producers and marketers of forest products and alluvial gold in the three regions of PREVENT engagement: Madre de Dios, Ucayali, and Loreto. PREVENT is also supporting engagement of institutions and agencies involved in tracking and preventing environmental crimes. This report is based on interviews with respondents across these three regions and in Lima in an effort to address the problem of why, despite the efforts of the Government of Peru (GOP) and civil society partners, these crimes persist, and what steps can be taken to prevent environmental crimes and better address gender and social inequality associated with them.

PREVENT aims to improve enabling conditions for preventing and combating environmental crime, reduce and prevent environmental criminal activity within protected areas, their buffer zones, forest lands management units, and indigenous lands, and build partnerships to mobilize resources to support prevention and reduction of environmental crimes. The applied political economy analysis (APEA) is designed to help ensure effective, adaptive, complexity-aware implementation over the life of the program. PREVENT has committed to using APEA to map interests, incentives, key actors, champions, potential spoilers, and political obstacles in the Peruvian environmental justice system (both administrative and judicial).

PURPOSE OF APEA ON ENVIRONMENTAL CRIMES

This first report will establish a baseline with a focus on the patterns of political economies around resource trafficking in the three Amazonian regions of Ucayali, Loreto, and Madre de Dios. Subsequent PEAs will track ongoing change in the political economies around efforts to prevent environmental crimes over the life of the activity. What makes this activity different from other efforts to address biodiversity loss and environmental crime is that the APEA methodology collects information from a wide range of stakeholders who may or may not be sharing information with each other. The analysis helps to bring together the information with an analysis of the key behaviors that perpetuate the patterns of abuse that support environmental crimes and obstruct the prosecution. The goal of the approach is to identify adaptive steps that can support the prevention of these crimes. The use of APEA is part of an agency-wide goal of USAID to strengthen thinking and working politically (TWP) in developing programming that is adaptive, iterative, and attentive to openings for new efforts to strengthen Peru's capacity to prevent environmental crimes. The research identified the importance of detailed understanding of the labor and power relations that perpetuate crime. The analysis applies a gender lens to specifically capture constraints and interests related to the advancement of Gender Equity and Social Inclusion (GESI) goals, including progress toward implementation of the National Gender Equality Plan, and the positioning of indigenous peoples who have been managing the biological diversity and environmental resources of these regions within their territories for millennia.

METHODOLOGY

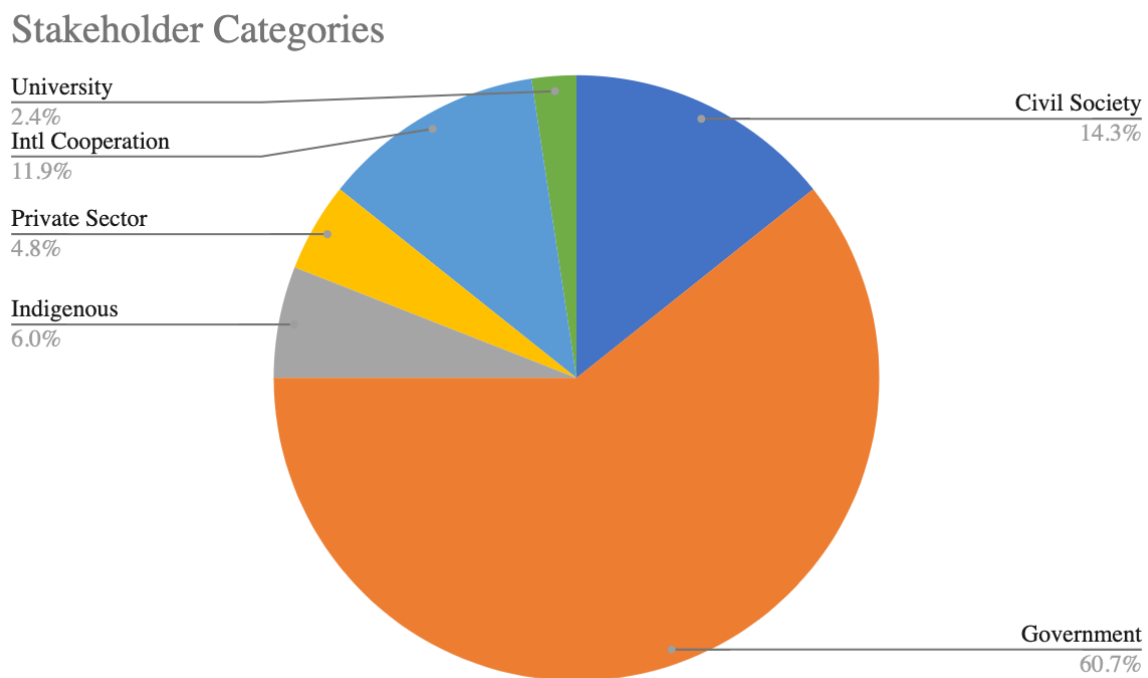
This report draws from a literature review compiled of reported programmatic outcomes, program evaluations, technical reports, and academic works, completed in March and April of 2020. It is intended to be a stand-alone document that complements, but does not reiterate, the content of the literature review. It is based principally on a set of interviews conducted with 96 stakeholders in Lima, Loreto, Ucayali, and Madre de Dios throughout June and July 2020. The evaluation team used USAID's Applied Political Economy Analysis (APEA) 2016 Field Guide framework to inform the methodology for research design.⁶ This approach focuses on a core problem-driven APEA question to support a field-based research inquiry through which the team identifies the areas where actionable recommendations may have traction for political change based on the detailed literature review and qualitative field data. The sections below detail how the political economies around natural resources in Peru fuel criminal activities associated with long-standing political interests and institutions. Environmental crimes impact the country's ability to protect biological diversity and secure the livelihoods and cultural diversity of indigenous and forest-dependent communities. Corruption, rent-seeking, and systems of patronage persist in many forms from the top of the political system to the bottom. The timing of the field research coincided with an unprecedented global health pandemic that offered new insights into the political economies and constraints for action on these issues. While the global health crisis prevented practical face-to-face interviews, the APEA team was able to collect evidence from virtual interviews with a wide cross section of key stakeholders in Peru to gain insights into areas with political space for building coalitions for change.

STAKEHOLDERS

Stakeholders were identified from a wide cross-section simplified into the following categories: 1. *Government* included national and regional level actors from agencies with policy and technical expertise and responsibility for the regulation of forests, wildlife, and mining. 2. *Indigenous stakeholders* included representatives of regional or national indigenous associations. 3. *University stakeholders* included those in regions and in Lima with research and experience in the topic. 4. *Civil society* included a range of non-governmental organizations active in both national and regional research and advocacy and community engagement, and includes media and press with direct experience investigating environmental crimes. 5. *Private sector actors* included firms or associations with direct involvement in mining and forestry. Legal traders in wildlife products were unreachable for this research. Efforts to include a variety of ages and gender views were made to the extent possible given the format of the interviews. Approximately 25% of respondents were female. Efforts were made to include female respondents in every category. Most respondents were between 20 and 50 years of age. Youth and women's focus groups were not feasible given the virtual format of the interviews during the pandemic and should be a priority for inclusion in follow-on APEA research activities for the project. Interviewees were ensured of the confidentiality of their response, and that the information and interpretations that they provided would not be attributed to them by name. Those who gave consent, appear in an Annex to this report in an overall list of informants not linked to specific text in the main body of the report.

⁶ Cammack et al, 2016.

Figure I. Key Informant Interview Distribution



RESEARCH LIMITATIONS

The COVID-19 epidemic prevented travel for fieldwork to the targeted regions, thus limiting the possibility of a more immediate perspective of the reality of environmental crimes in the areas where they occur as well as in-person face-to-face interviews that the consultants would have preferred. The online interviews that were conducted were constrained by connectivity and band width issues that frequently interrupted conversations, particularly in the Loreto and Ucayali Regions. Moreover, many of the key informant interviewees were unaccustomed to online interviews and were inhibited in their responses. Some of those that the consultants had sought to interview were inaccessible or failed to respond to interview requests.

Key indigenous leaders were isolated in their communities without internet or even cell phone access, as a response to the COVID-19 crisis, which has already reached their communities. We suspect that some of the authorities in the regions intentionally avoided our requests for interviews and information, while others, overburdened with their responsibilities, did not find the time or give priority to speaking with us. Many of the targeted interviewees in the regions could not be contacted, since they were not in their offices and attempts to reach them were unsuccessful. A few responded mechanically and provided little useful information. However, most of those interviewed were frank and clear in their expression of the problems they faced and their interpretations of the underlying factors and conditions. Their contributions form the basis for this report. For future APEA updates, we recommend that the researchers actually travel to the regions and devote more time to interviewing the local stakeholder on the scene in the three regions, something we were not allowed to do because of COVID-19 travel restrictions.

GENDER EQUITY AND SOCIAL INCLUSION

Gendered perspectives of indigenous territories offer contextualized understandings of use and within a given terrain. Respondents explained that women's horticultural and foraging work brings them a much richer understanding of the species biodiversity and specific landscape level features of dynamic ecosystems. Indigenous women's understanding of their communal property extends beyond the confines of territory across landscape scale watersheds that are linked to the areas within their ancestral territorial boundaries. In interactions with communities, women's activists argued the focus of many well-intentioned international cooperation and government interventions in demanding women's participation has failed to appreciate the complexity of indigenous gender relations, particularly their cultural dimensions.

Although indigenous women comprise some 24 percent of Peru's population and play a key role in food security, preservation of biodiversity, and governance of ancestral territories, they are often locked out of their communities' leadership and decision-making processes.⁷ While protections for women are included in Peru's constitution, national laws regulating community forests in Peru do not explicitly guarantee women's right to vote in community leadership bodies or access dispute resolution mechanisms decision-making, and fail to establish that women have the same rights and opportunities as men, according to a study conducted by the National Organization of Peruvian Andean and Amazonian Indigenous Women (ONAMIAP) and the Center for International Forestry Research (CIFOR).⁸ Strong traditional norms define gender roles in indigenous communities. The CIFOR study found that just 1 percent of indigenous women interviewed felt that community norms were 'just' as opposed to 34 percent of men interviewed. This perception was linked to the level of participation of women relative to men in defining community norms with some 5 out of 10 men involved in setting norms as compared to 3 out of 10 women, according to the study.⁹

The participation of women is often encouraged, or even required, at community-wide gatherings with outsiders, with the idea that it will better enable women's voices to shape decision-making. These unfamiliar meeting settings run counter to norms that require women to refrain from voicing opinions that might differ from men and prevent all but the boldest women to speak out. Patriarchal and unequal structures in their communities bring swift reprimand for violation of these norms. For example, one respondent recounted that women who do are ridiculed with men complaining loudly that these outspoken women "think they are men." Yet, women play decisive roles in the actual management and use of their resources. 2015 CIFOR study of the role of women in early REDD+ implementation that included data from Peruvian Amazon communities found that women use forests as much or more than men, but they have little active participation in decision-making¹⁰. Participation is a major demand of women in indigenous communities, but more gender-responsive analyses are needed to understand real and perceived gender differences and anticipate risks. Moreover, participation in

⁷ Bigda and Ramirez, 2017.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ Larson et al., 2015.

meetings is not enough. Involving women in the implementation of projects that seek to protect indigenous territorial rights or prevent environmental crimes and ensuring the explicit recognition of women's tenure rights and knowledge of the resources through support of legal statutes at the community level would go a lot further in strengthening women's voices. In 2017, Ketty Marcelo, President of ONAMIAP, at the time, "For indigenous women, our land is a sacred space that cannot be sold or divided up, but without voice and vote, women cannot fully use and protect the lands and forests we all rely on."¹¹ Protecting resources therefore depends on ensuring women's voices are both valued and required.

At the risk of homogenizing the experience of a wide range of cultural variation, respondents painted a bleak picture of indigenous men using the threat of violence to keep indigenous women out of the public eye, out of public debate, and resisting any efforts to change the status of women, who, some activists said, viewed as little more than servants. Most women are relegated to sitting adorned in indigenous jewelry unable to meaningfully contribute in these open mixed-gender settings, according to respondents. Linguistic barriers are also a huge consideration, since fewer indigenous women than men speak the national or colonial language well. This was evident in the latest United Nations climate convention where indigenous leaders were sent to speak about the urgent need to protect the Amazon, respondents explained. Women were a silent presence that helped to provide legitimacy to a Western view of gender participation, according to some critics who pointed out that the women were not given an opportunity to speak, explain their views nor their perspectives which do diverge from men's perspectives. Nonetheless, despite the limitations, and even ethnocentrism, of global development efforts, the international focus on gender rights has helped expose the asymmetries between indigenous men and women and has significantly advanced the ability of indigenous activists to create the space for changing cultural norms and expectations and for developing an approach that works within the context of indigenous cultures to strengthen the voices and rights of women.

Indigenous women activists reported that to meet with women requires time to win trust and requires finding times in the day when they are free of the relentless pace of daily chores. Interlocutors reported that high levels of gender-based violence and child marriages are prevalent in indigenous societies across the Amazon. Limited opportunities for girl-child education outside of indigenous knowledge perpetuate the situation. Strategies employed by indigenous women activists have included providing practical training and capacity building in understanding their human rights to live free of violence and be respected. They establish safe spaces for women to talk openly and there in these women's spaces, women facilitators learn of the rich ecological knowledge and perspectives of women and the importance they place on passing that information down to their daughters. Culturally and historically, indigenous men express the need to protect women. In some societies, stealing girls is a strategy that is or was employed. That cultural survival depends on protecting indigenous women from outsiders is a relevant viewpoint for some indigenous groups.

Women's roles in safeguarding natural resources are played up, but women also have productive roles in gold mining and forestry activities and forcefully argue for the protection of their livelihoods through formalized associations which some argue feed into elite strategies to continue to back formalization processes that misalign the incentives needed to increase legality. Other respondents indicated that

¹¹ Bigda, 2017.

there is such a variety of participants in the small-scale mining sector it is difficult to characterize gender or indigenous women in one way. While there is sex trafficking and exploitation of migrant men and women, there are also legends of *la Reina del Oro* (the Queen of the gold), based on the matriarch of one of the most powerful mining families in Madre de Dios, the Bacas. One researcher wrote, [REDACTED], an illiterate indigenous Quechua-speaker from rural Cusco in the Peruvian highlands, came to Madre de Dios as a young servant and married [REDACTED] in the early 1970s. They mined incessantly and by 2014, the couple and their five children owned over 42,000 hectares of mining claims, a float of machinery and state capital worth millions”¹² Gregoria Casas allegedly controls the gold business in Huepetuhe¹³ the mining town that she and her husband’s family helped found. Some rumors depict her walking with a soda bottle filled with gold nuggets that she shakes in the town parades. She has also been connected with rituals in which young women have disappeared in sacrifices to mother Earth. She has even attracted the attention of Ivy League anthropologists for whom *la Reina del Oro* “represents a most enticing female target” in a male dominated world, a woman who has been instrumental in attacking small miners and diverting attention from other fortunes in Madre de Dios¹⁴.

Women’s roles in forestry are more limited at the smallholder level and harder to delineate than the case of Gregoria Casas. Respondents had very little understanding of the roles women play in wildlife trafficking. Most focused on women who are victims in illegal extractive resources, particularly sex trafficking in mining areas. There is a need to explore a range of questions to improve understanding of gender perspectives and gendered roles. For example, when indigenous communities enter more intensely into the money economy, who receives and benefits from payments for products or labor? When women participate in the cash economy, who does the subsistence economy work and how is that valued? Or is it additional work for women? How does illegality affect women differently than men when they are part of an illegal economy or subjected to the dominion of illegal actors?

Moreover, on the defense and prevention of environmental crimes, interviews indicated growing numbers of women involved in pursuing and tracking environmental crimes (prosecutors, particularly specialized prosecutors, investigative journalists, analysts, researchers, CSO and indigenous activists). Civil society organizations and indigenous organizations have been training young women to support the monitoring of indigenous territories. Yet, these activities are risky in a political context that allows impunity. Environmental defenders have increasingly come under threat from criminal networks, for example, Kakataibo indigenous leader Arbildo Melendez Grandes was murdered in Unipacuyacu, in Huánuco near the border with Ucayali in early April of this year and his murderer with criminal links was released from detention.¹⁵ A very few female defenders exist like Quechua defender Maxima Acuña de Chaupe. For her opposition to the Yanacocha mining company, she was the victim of several attacks, intimidation, attempted evictions, and judicial harassment. She was charged with “illegally occupying land,” until in May 2017, the Supreme Court of Peru acquitted her of all charges and her land rights were recognized. The Special Rapporteur on the rights of Indigenous Peoples, together with other special procedures, have sent several communications relating to Ms. Acuña’s case.¹⁶

¹² Castilla, 2013a, 2013b, 2013c.

¹³ León, 2012.

¹⁴ Cortés-McPherson, 2019

¹⁵ Sierra Praeli, 2020a.

¹⁶ Testimony from the UN Special Rapporteur’s Criminalization Summit in Geneva March 2018.

Social inclusion is addressed more broadly throughout this report with an understanding that specific gender perspectives and those of traditionally marginalized sectors of the population provide insights into the dynamics of power relationships implicit in environmental crime. These dynamics also point to openings and opportunities for leveraging change. Significantly more detailed research is needed on the many ways in which gender intersects with issues of environmental resource management, environmental rights, and prevention of environmental crimes.

USAID’S APEA FRAMEWORK

USAID’s Applied Political Economy Assessment Framework uses four analytical pillars: Foundational Factors, Rules of Game, The Here and Now, and Dynamics. Understanding the Foundational Factors of a given problem helps unpack the underlying causes for certain drivers of the problem that may not be readily changed. The Rules of the Game are the social and institutional norms that maintain the behaviors perpetuating the status quo. There are complex sets of incentives, social, political, and economic, that orient behaviors of individuals and the different sets of institutions within which they operate. Understanding the rules of the game can help identify opportunities for change that may emerge from The Here and Now which refers to current affairs, the pressures and political hot-button issues, the momentum of public opinion, and economic interests. These are brought together to look at the Dynamics, what is shifting, where are the openings for reform and where is pressure or support needed to mobilize coalitions for change.

TABLE 2: OVERVIEW OF APPLIED PEA ANALYTICAL PILLARS

ANALYTICAL PILLARS	EXPLANATION OF PILLARS
Foundational Factors	These are deeply embedded, longer-term national, subnational and international features that shape the character and legitimacy of the state, the political system and socio-economic structures. These tend to be fixed or slow to change, such as geography, longstanding conflicts, class and power structures, and demographics.
Rules of the Game	These are the formal and informal institutions (rules and norms) that shape the quality of governance and influence actors’ behavior, their incentives, relationships, power dynamics and capacity for collective action. This encompasses both the formal constitutional and legal frameworks, as well as informal norms, social and cultural traditions that guide behavior in practice and the extent to which state, civil society and private sector institutions work according to known rules (in predictable ways).
The Here and Now	These refer to how current events and circumstances influence the objectives and behavior of key actors or stakeholders, and how they respond to opportunities for or impediments to change. This could include leadership changes, scandals, or natural disasters, as well as political crises.

Dynamics	These reference the dynamics and interactions between foundational factors, rules of the game and here and now. How do they affect each other, and how do they influence/shape prospects for change? What international or domestic drivers of change are acting on the state, society and markets already? What levels of complexity and uncertainty are there in any potential changes that are identified? What are the incentives and disincentives for change; who are the potential champions and spoilers; and what kinds of alliances and coalitions can be encouraged to overcome resistance to change and promote reform?
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The research team, following USAID’s APEA field guide recommendations, used a multi-step process that started with scoping the APEA questions of inquiry through a pre-fieldwork literature review and consultation with the in-country team in Lima, pre-fieldwork research design, and in-country virtual field-based research. The team drew on these sources to develop recommendations for PREVENT team’s problem solving around trafficking and environmental crimes.

DETAILED FINDINGS AND ANALYSIS

The transnational nature of the drivers of environmental crime are a major obstacle for national level action. Two measures are needed to push prevention of environmental crimes forward. First a change in the narrative about the links between environmental crimes, corruption and economic growth. Second, a recognition that the legal and regulatory framework has limited the professional development of civil servants by restricting and narrowly defining their responsibilities in ways that create perverse incentives to withhold information and avoid accountability. These behaviors have created a fragmented workforce, in which each sector or sub-sector jealously defends its own turf, with little effort toward integrated common policy. The principal obstacle is not the absence of appetite for reform, but rather the ways in which this molded framework paralyzes collaboration, shared vision and transparency, as well as limiting effective action on the prevention of environmental crimes. The government actors cannot solve the problems through better coordination efforts or better communication alone. Significant mobilization from civil society partnerships is critical to effectively confront environmental crimes and provide the space and incentives for changing the culture of impunity around these crimes. The detailed findings in this report are followed by recommendations for ways that PREVENT can use these findings to build awareness of political openings and momentum that can support citizen coalitions in holding government and private sector accountable in efforts to prevent environmental crimes.

FOUNDATIONAL FACTORS

HISTORICAL ROOTS OF STATE CLAIMS ON INDIGENOUS LANDS

Illegal resource extraction in all three regions is rooted in territorial claims of the colonial state on indigenous lands for resource exploitation that respondents indicated still resonate in the state’s approach to land use planning. The post-colonial state enshrined the state’s claims on these resources encouraging the conversion of forests to agriculture and the privatization of rights over land and subsurface minerals through legal conceptions of property that fail to acknowledge the common property resources of indigenous communities and other rural Amazon region residents. Respondents

linked the institutional objectives of SERFOR to this approach within the Ministry of Agriculture, focused on forests for economic production rather than co-management. This has resulted in frustration of indigenous organizations advocating for territorial recognition of community lands.

Authorities are slow at taking action that would give indigenous communities control of their forests while allowing concession owners to log the lands the communities consider to be theirs but are still in the process of being titled. Those lands are targeted by both the forestry industry and authorities precisely because of their desire to access the rich timber, before it is made off limits to them. Reasons stated for delay in recognition of indigenous territorial rights are that the concessions to private sector forest companies were made prior to the start of processes for indigenous community land titling and hence need to be honored to avoid violating private-property like rights of concessions in national laws. Regional authorities, particularly in Loreto and Ucayali, have a history of violating national law on such matters. A July 2020 report from the Environmental Investigation Agency (EIA) highlighted a recent complaint by the Regional Organization of Indigenous Peoples of the East (ORPIO) that 43 concessions were granted in long requested indigenous reserves in Loreto in 2016 and 2017.¹⁷ Repeated requests by the Ministry of Culture and the Ombudsman over the last four years to cancel the illegal forest concessions have been ignored.¹⁸

There are significant differences in the histories of the three administrative regions with regard to indigenous communities. Essentially, respondents indicated that the concession system employed by the Ministry of Agriculture and Irrigation (MINAGRI) and the Ministry of Energy and Mines (MINEM) to delineate use access does not acknowledge that overlapping titles are a major cause of illegality. They take advantage of grey areas of the law, especially when these concessions overlap with indigenous territories. Moreover, it is common practice for non-indigenous timber extractors to work with the communities, do the paperwork needed to obtain extraction permits and report the timber taken from illegal locations as sourced from the indigenous communities. Then, following OSINFOR inspections, which find violations of the law, the indigenous communities, as owners of the forest titles, are left to pay fines. Concessions for forestry and minerals as well as agriculture (oil palm, cacao) are granted at the regional level since decentralization, without national level coordination, clear demarcation or assessments on the ground, according to respondents. The paperwork required creates perverse incentives that favor approving unseen sites and laundering unseen products for local elites, while rural residents, who have historically harvested small amounts of timber are marginalized.

The current Peruvian Constitution refers to these “natural resources, renewable and non-renewable,” as the, “patrimony of the Nation,” with a narrow view of private property rights allocated through concessions as, “real rights” (Article 66). Accordingly, the State promotes the sustainable use of its natural resources, conservation of biological diversity and of natural protected areas, and the sustainable development of Amazonia in the Constitution with this narrow view of property (Articles 67-69). Further, the State guarantees the right to property, both private and communal, within limits specified by law (Article 88), for peasant and native communities, and defines their autonomy to organize, work, and dispose of their lands. Native communities are free to develop their economic activities, administer their communal property, and exercise their cultural identity, within the framework of laws (Article 89). These Constitutional provisions reflect long-standing history and

¹⁷ EIA email alert, July 20, 2020.

¹⁸ ORPIO, 2020.

jurisprudence, and serve as a bulwark against changing views of land use planning that inadequately represent the interests of native communities in exercising their autonomy to define their territories and the economic activities within their lands.

Gendered perspectives of indigenous territories offer another variation according to respondents. Indigenous women's understanding of their communal property extends beyond the confines of their titled lands, across landscape-scale watersheds that are linked to the areas within their territorial boundaries. Historically the conceptions of private property did not expand beyond artifacts and tools that they made and other personal attachments, such as clothing and adornments. Much of the essence of these shared values is present among their descendants in the Amazon regions today, though the understanding of the landscape with government administration and private concessionaires has substantially shifted for the indigenous organizations advocating for the recognition of their territorial rights and engagement in economic activities. Indigenous organizations, respondents stated, do not have the same level of political power as in some Latin American countries such as Ecuador and Bolivia where they have been key players in changes of Government, but they do have substantial authority to represent the views of the communities at the regional and national levels. Civil society organizations and international cooperation reported that they directly work with these organizations to support them in amplifying their voices on indigenous territorial, cultural, and even social and economic issues.

A regional variation in the histories of resource exploitation in the three regions helps explain ways in which indigenous territories have had different degrees of success in defending their territorial claims against superimposed state concessions. Historically, forays into the Amazonian areas for extraction of gold, rosewood, quinine bark, and animal hides, occurred in the 17th through 19th centuries in Loreto and Ucayali, in coordination with the Catholic missions. That was not the case in Madre de Dios, where there was no sustained missionary presence prior to the 20th Century and geographical barriers impeded access. Those sporadic activities did not spark widespread awareness by indigenous peoples of state claims on their territories.

THE LEGACY OF RACIAL AND TERRITORIAL INJUSTICE

During the rubber boom, there was intensive extraction of rubber from two species, *Castilla elastica* and *Hevea brasiliensis*, the former in Loreto and Ucayali and the latter mostly in Madre de Dios, leading to temporary deforestation, but the forests were largely able to recover in the decades following the collapse of the rubber trade. The principal change during the period was in the relations of production, when some indigenous peoples, principally those along the main rivers were subjected to forced unpaid labor in rubber extraction initially in Loreto and Ucayali and later in Madre de Dios¹⁹. This occurred more than 50 years after slavery had been abolished in Peru by President Ramón Castilla in areas where the state had no effective presence to prevent it. In parts of Ucayali and Madre de Dios it lasted until the 1950s. This history of exploitation and subjugation continues to color labor relations, as seen in gold mining and forestry, and in views of indigenous workers.

¹⁹ Casement, 2012 [1912]; Rummenh ller, 2020.

Importantly, the patron client relationships that drive the exploitation of natural resources and indigenous peoples emerged from these unequal labor relations. The organizers of the rubber extraction obtained their concessions from the Peruvian Government and operated with capital provided by British and other European commercial firms. The rubber traders consolidated a system of debt peonage called *habilitación* in Peru and *aviamento* in Brazil that complemented indigenous slavery and provided their labor force with the most basic needs, including rudimentary health care and small plots for subsistence horticulture. Those relationships prevailed, particularly following the collapse of the rubber boom, when some of the former rubber *patrones* remained in the area, organized farms called *fundos* that combined beef cattle raising with sugar cane production for alcohol and marketing of an array of forest products according to the fluctuating market prices of the moment. The remaining labor force stayed on under relations of production that were put in place during the rubber boom, which in Europe would have been called feudal. The *patrones* consolidated roles of political patronage that met the most basic needs of their labor force, while retaining control of the proceeds of their production when there were no alternative means of survival for the rural populations. Although the populations of Loreto, Ucayali, and Madre de Dios have become much more urban in recent decades and slavery no longer exists, the unequal, dependency relationships and the system of political patronage in rural areas of the Peruvian Amazon, particularly in forested areas, still reflect elements of the non-capitalist relations of production that arose during the rubber boom. Labor relations in gold mining areas are particularly exploitative and tend to follow similar patterns.

CONCESSIONS DRIVE CONFLICTING CLAIMS OVER LAND

During the military government of Juan Velasco Alvarado, 1968-1975, the Peruvian Government first granted juridical personality and land rights to Amazon indigenous communities under the first Native Communities Law (DL 20563) of 1974. It was modified by the following military government to open un Amazon area lands to private investment under the current Native Communities Law (DL 22175 of 1978), but that law retained most of the indigenous rights of the original one. Unlike procedures in the other Amazon Basin countries, these laws only recognized native communities, not indigenous peoples as such, and land titles began to be granted only for the immediate areas around the local settlements, which were defined as native communities, subject to land rights, not ancestral territories, which by that time had already been affected by incursions by migrant colonists, loggers, and gold miners, who laid claim to some of the intermediate spaces. The land titling process has been a long, slow, and tedious process that is still incomplete 46 years after the first Native Communities Law was enacted. Frequently, land titles are held up because timber concessions have been granted to others within the communities' lands before community land titles were considered.

During the same Velasco Alvarado government, the Manu National Park and other natural protected areas were set aside for the conservation and protection of biological diversity and unique ecosystems. This movement was led by the Director General for Forestry and Wildlife, Marc Dourojeanni, who also obtained approval for Peru's first Forestry and Wildlife Law (DL 21147) in 1975. That law allowed for sound management of concessions over large areas but also forestry contracts of up to 1,000 hectares that could be granted to small-scale timber producers with fewer requirements. It also strengthened indigenous peoples' territorial rights by allowing for communal reserves to protect traditional hunting grounds of the indigenous communities. There were abuses under that law, when regional *patrones* or sawmill owners obtained control over multiple 1,000-hectare units in the names of their subjects under the *habilitación* system, but technologies were simpler than today, and there was greater harmony among local rural communities, including indigenous communities, most of which found ways to meet their most basic economic needs under it.

The successor Forestry and Wildlife Law (Law 27308) of 2000 with more of a market focus than a conservation one²⁰, called for permanent production forests throughout the Amazon Basin, based on land use classification. These were implemented under Ministerial Resolution No. 1351-2001-AG over 24,586,458 hectares, of which 21,394,369 hectares were in Loreto, Ucayali, and Madre de Dios (14,782,302, 4,089,926 and 2,522,141 hectares respectively)²¹. That law was replaced by the current Forestry and Wildlife Law (Law 29763), approved in 2011, but which went into effect in 2015 following approval of its four implementation regulations. However, most of the existing timber concessions that remain in force were granted in 2002 in the permanent production forests, which do not include flood plain areas or *varzea*, where an important part of the illegally extracted timber is taken from. Moreover, the property-like characteristics of forestry concessions complicate the process of their cancellation and reversion to the State by unilateral administrative act, for lack of compliance, even when the public interest would be served by doing so²².

In 1973, the Velasco Alvarado government installed agencies of the *Banco Minero del Perú* in Madre de Dios to undertake research on the gold mining potential in the area and blocked mining claims there for five years. During that time and until 1991, the *Banco Minero* had a monopsony on the gold market as the only legal buyer or seller of gold. It authorized small-scale placer gold mining to individuals and indigenous communities who sold their gold to the bank. The *Banco Minero* paid the international price of gold to all who brought in the gold that they mined, and there was no competition. It also provided mining equipment and supplies, as well as basic foodstuffs, including processed foods, but no alcohol, to all miners at its cost, subsidizing its own operational costs. In those days, when there were many fewer gold miners than today, there was relative harmony between migrant gold miners and the indigenous communities, since no one had legal claims but all could engage in placer gold mining in the same area.

That situation began to change in 1978 when the subsequent governments admitted new mining claims under DL 22178, and those claims were monopolized by Lima-based and also transnational mining companies who had inside information on the implementation regulations for the law.²³ As a result, the first serious violent conflicts arose between gold miners and both indigenous communities and local farmers whose lands were overlaid by mining claims.²⁴ Such competing rights and claims became fertile ground for corruption and laid the groundwork for environmental crimes, such as those Peru is addressing today (see the Here and Now Section). Key respondents expressed exasperation with the level of illegality that pervades the sector and which is almost indiscernible from small-scale or artisanal miners. In 1992, during the government of President Fujimori, the Mining Bank was dismantled as part of a structural adjustment strategy. The financing and gold trading vacuum left in the wake of the Mining Bank's closure gradually became filled by an array of entrepreneurs discussed below. The current General Mining Law was approved in 1991 authorizing mining concessions that similarly have property-like characteristics, although most applicants only have claims (*petitorios*), not fully formalized concessions. Even with processes in place to absorb informal small-scale, or artisanal, miners into a formalized system with minimum levels of social protection and regulation, respondents argued that

²⁰ See Moore, 1992, for a critique of an early version of this law.

²¹ Galarza y La Serna, 2005, p. 466.

²² Ponce Rivera, 2014.

²³ Moore, 1983.

²⁴ Gray, 1986.

the majority of the so-called artisanal miners are essentially laborers with varying degrees of permanence working for bosses who may hold titles but are often linked to criminal networks.

INCOMPLETE REGIONAL DECENTRALIZATION AND RECENTRALIZATION

Political tensions over Peru's excessively centralized government have been major sources of political tension since at least the early 20th Century and political pressure for regionalization and decentralization have long been prominent demands. Regional politicians sought control over the resources within their territories and much more say in the decisions taken regarding their development. Peru's 24 departments are a colonial legacy, stemming from the territorial demarcations called *intendencias* in Bourbon times, prior to independence. The 1979 Constitution called for a regionalization process to facilitate territorial integration and bring decision-making closer to the issues at hand. This provision was the source of intense debate, and the law establishing it only went into effect in 1990, at the end of first government of Alan García. The 12 regional governments that were established then, following relatively democratic processes, were plagued by lack of experience and serious difficulties in governance that led to accusations that decentralization meant that central government corruption had been transferred to the regional governments. Such charges rang true to much of the country's population. In a 1992 coup, Fujimori closed both the Congress and the regional governments, whose functions were transferred to Transitory Committees for Regional Administration that were appointed by the President, recentralizing them.

Following the resignation of President Fujimori in late 2000 under corruption and human rights violation charges and an interim government until new elections could be held, in a wave of reform the Peruvian Congress elected in 2001 approved the most comprehensive and participatory decentralization reform in the country's history²⁵, the Base Law for Decentralization (Law 27783), in 2002. That law did not define regional demarcations but began with the existing 24 departments and Province of Callao and called for their association with neighboring departments to ultimately define a smaller number of geographically and economically integrated regions. To date, such integration has not occurred, and the former departments still function as *de facto* regions, with administrative responsibilities progressively but slowly transferred to them from the corresponding central government ministries. The different histories of the resources and geographies have resulted in different patterns of resource exploitation and regional government officials with limited authority now define the rules of the game.

Moreover, the transfer of authority and resources to the regional governments is still incomplete. While the regional directions of energy and mines may administer mining claims and work with their owners to formalize them into full-fledged concessions, the ultimate authority, and the only one that can extinguish the claims or concessions is a central government agency, the National Geological, Mining, and Metallurgy Institute (INGEMMET). Similarly, while the newly-established Regional Forestry and Wildlife Agencies (*Gerencias*) in the regional governments now administer forestry and wildlife concessions and can authorize new ones, their control and supervision is still in the hands of the central government agencies, SERFOR and OSINFOR. To an important degree, this shared responsibility is not only a matter of important checks and balances, but also of more effective

²⁵ McNulty and Guerra García, 2019.

management and administration. However, this shared responsibility requires a substantially improved and more timely flow of information and two-way communication that is currently lacking.

Another serious limitation is the lack of a professional civil service at the regional and municipal levels. Peru established its civil service system (SERVIR) in 2013 with Law 30057, but it has never been fully implemented even at the central government level, much less in the subnational governments. Such a system would replace political patronage appointments with merit-based ones for most positions in the regional governments and also facilitate the training and educational advancement of public employees so that they have the skills necessary for their roles. So far, the difficulty of regional government in meeting the necessary education and experience requirements for staff has been an obstacle to long-term professional assignments in the regional governments that needs to be addressed more effectively. Prevention of environmental crimes requires building relationships and trust among investigators, law enforcement agents, civil society, and regional authorities. Another frequently cited frustration of respondents was the high turnover of regional and municipal officers in the civil service who were moved to new positions and locations after less than a year, making sharing information and communication on crime prevention more difficult.

NATURAL PROTECTED AREAS, INDIGENOUS TERRITORIES AND GOLD MINING

Beginning in the late 1980s, Peruvian civil society conservation organizations, led by the Association for the Conservation of the Southern Selva, aligned with nature tourism operators, began promoting the establishment of a national park or other natural protected areas in Madre de Dios. Since access to the Manu National Park, established in 1973, was difficult for tourists, and Puerto Maldonado had a functioning international airport, the Tambopata and Inambari watersheds of Madre de Dios and Puno were targeted, as scientists documented unusually high levels of biological diversity there. In 1990, the Peruvian Government set aside 1,478,972.45 hectares in the Madre de Dios and Puno regions as the Tambopata-Candamo Reserved Zone (ZRTC) under Ministerial Resolution 032-90-AG/DGFF for studies to determine the feasibility and nature of such proposed natural protected area or areas. The northwestern boundary of the ZRTC was the penetration road between Cuzco and Puerto Maldonado, which later became the paved route of the Interoceanic Highway connecting the Atlantic ports in Brazil with Pacific ports in southern Peru.

The United States-based organization, Conservation International (CI) obtained funding and assumed the principal role in those studies in close coordination with Peru's Directorate of Forestry and Wildlife of the Ministry of Agriculture. Those studies included highly participatory forums, as CI engaged local NGOs and grass roots organizations, with particular support to the colonists' representative organization, the Madre de Dios Agrarian Federation (FADEMAD), which was then and remains today a strong advocate of conservation measures and the defense of their land rights against superimposed mining claims.

CI also engaged the Ese Eja indigenous communities in the area and excluded their titled lands from the areas demarcated for the new protected areas, but did not consider the traditional hunting, gathering, and fishing grounds that form an important part of Ese Eja ancestral territory, and which constituted the major portions of the future Bahuaja-Sonene National Park and Tampobata National Reserve. All established use rights, including land titles, timber concessions, Brazil nut concessions, existing nature reserves for tourism, and mining claims were documented, and separate protected areas were proposed, with the Bahuaja-Sonene National Park covering ostensibly unoccupied areas where no land use rights had been granted, and the Tambopata National Reserve, a less strict category,

covering those areas where Brazil nut harvesting and tourism were to be allowed, but not agriculture, nor gold mining nor timber extraction²⁶.

Final approval of these two natural protected areas was delayed until Mobil Oil Company completed exploration in the area and withdrew from its contract area without discovering commercial oil or gas. In 1997, a new Natural Protected Areas Law (Law 23864) was approved, and the two new natural protected areas were created under its aegis. A buffer zone for the Tambopata National Reserve was declared for the area between the national reserve boundary and the Cuzco-Puerto Maldonado road. Thus, gold mining was permitted in areas between the road and the Inambari River, and prohibited on the other side between the road and the Tambopata National Reserve.

ECOLOGICAL, ECONOMIC ZONING AND LAND USE PLANNING

Following recommendations of the Amazon Cooperation Treaty, of which Peru is a founding party, a series of ecological, economic zoning (ZEE) proposals were developed throughout the Amazon Basin countries in an effort to establish priorities and bring order to land use planning and economic development, including the Peruvian departments of Loreto, Ucayali, and Madre de Dios. The macro analyses were completed in 2001 by the Peruvian Amazon Research Institute (IIAP) in coordination with the regional governments, with financial support from USAID. In Madre de Dios, areas were demarcated and prioritized for gold mining, timber extraction, Brazil nut extraction, and tourism, in addition to the existing urban centers, indigenous communities, and natural protected areas in the IIAP proposal, which included a highly participatory planning process.

Central to the discussion was the definition of a mining corridor. The indigenous communities, many of which had experienced the superposition of mining claims over their titled lands, insisted that their lands be excluded from the mining corridor. Some of them had already obtained mining claims and were actively engaged in artisanal gold mining, and they assumed the guarantee of economic autonomy in the Native Communities Law and sought to block new mining claims by outsiders over their titled communal lands. Following much discussion and back and forth negotiations, the Madre de Dios Regional Government Council approved the IIAP proposal for ZEE in 2009 (Regional Ordinance 032-2009-GRMDD-CR), but this approval was rejected by MINEM, which claimed that the Regional Government had no authority to demarcate territories for mining purposes. The Ministry of the Environment (MINAM), with tacit support from MINEM has accepted the mining corridor with an area of 498,296 hectares, as a part of the still unapproved official ZEE, as shown below (See Figure I below).

²⁶ An account of the history of the establishment of the Bahuaja-Sonene National Park and Tambopata National Reserve is provided in Pacheco Medrano, 2017.

Figure 1. Ecological, Economic Zone (ZEE) in Madre de Dios, Peru showing the Mining Corridor, the buffer zone, the natural protected areas, and the neighboring indigenous communities.

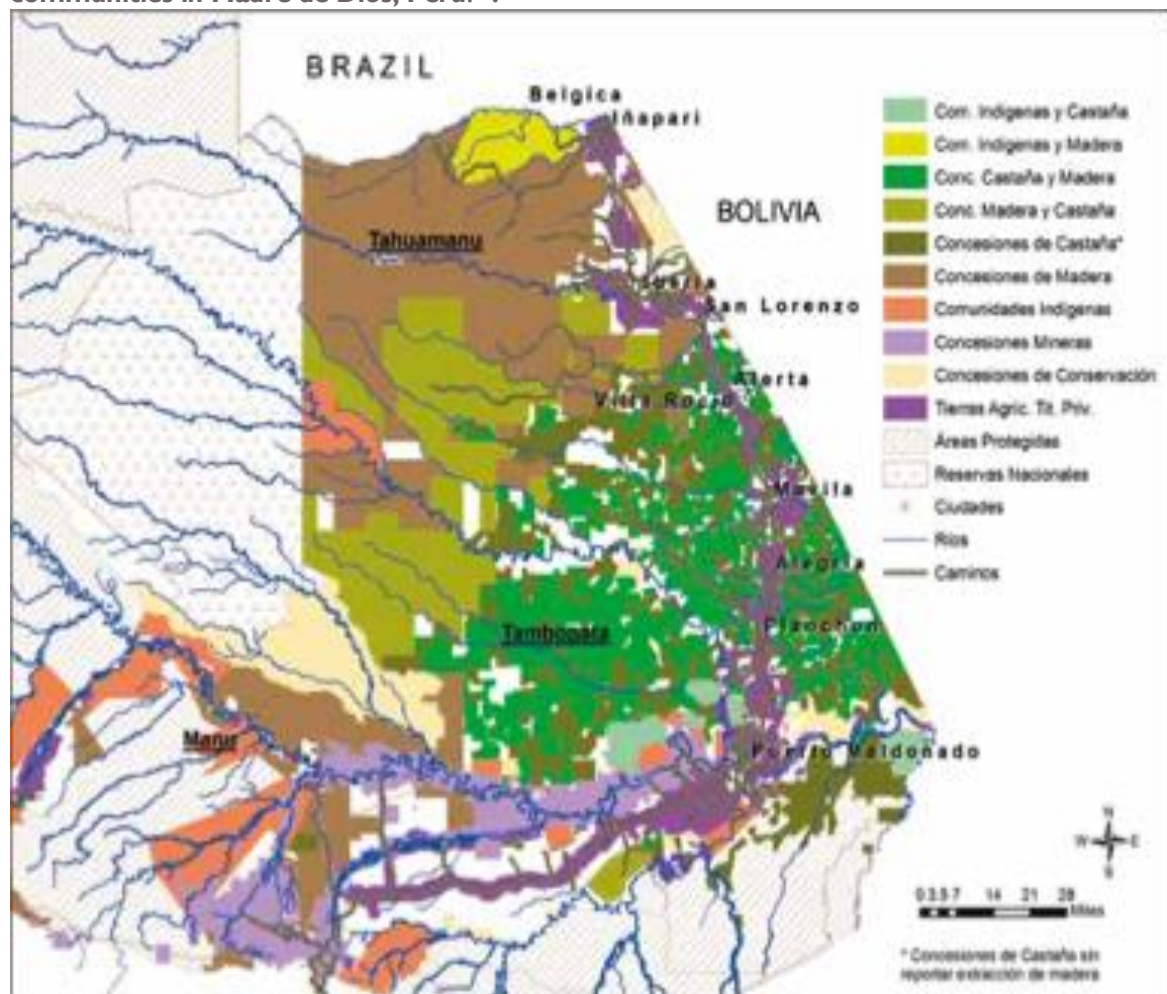


OVERLAPPING LAND USE RIGHTS AND LACK OF INTEGRATED CADASTER

Respondents indicated overwhelmingly the need for a cadaster that recognizes and captures the overlapping land use rights allocated through concessions, titles, and other forms of use rights. Clarifying the pressures on statuses of land, combined with intensive monitoring of indigenous territories and parks through co-management approaches could reduce conflicting land use, pinpoint illegal changes in categorizations of land use and improve the prevention efforts of environmental crimes. Innovations in technology that put the indigenous land holders in a position to monitor and protect their territories are an effective deterrent to environmental crimes. Local resilience requires economic solutions and these will include adjustments to enable small holders to benefit from legal and sustainable forest management. Largely resulting from Peru's historic segregation of administrative functions by economic sector, overlapping land use rights predominate throughout the Peruvian Amazon. Indigenous community land titles, natural protected areas, colonist certificates of possession, timber concessions or extraction permissions, Brazil nut concessions, rubber concessions, mining concessions, and private conservation concessions may be granted over the same territorial base, often to different rights holders. That situation has resulted in abundant litigation and physical violence, including assassinations²⁷, for many decades. Figure 2 below, from a 2012 International Forestry Research Center (CIFOR) study, clearly illustrates the overlapping rights affecting Brazil nut forests in Madre de Dios.

²⁷ Gray, 1986.

Figure 2. Superimposed access rights for Brazil nuts, timber, agriculture, mining, and indigenous communities in Madre de Dios, Peru.²⁸



RULES OF THE GAME

A FRACTURED ECONOMY

Sociologist Francisco Durand describes Peru’s economy as fractured, with formal, informal, and criminal market spaces, and governments that are unwilling to implement the institutional infrastructure necessary to reorder it and overcome the tensions among those spaces²⁹. He sees informality and illegality increasing in rural areas that are being incorporated progressively into a more globalized economy, particularly in the Amazon regions where illegal logging, illegal gold mining, trafficking in wildlife, along with drug trafficking, land trafficking, and trafficking in persons are gaining market space where government response is inadequate or ineffective³⁰.

²⁸ Reproduced from Chávez *et al.*, 2012, p. 5.

²⁹ Durand, 2004.

³⁰ Durand, 2016.

Environmental crimes are spelled out in the Penal Code (Legislative Decree 635) of 1991, as modified by Law 29263 of 2008. Illegal mining, which was incorporated into the Penal Code in 2012 by Legislative Decree 1102 of 2012, is defined as exploration, extraction, exploitation as similar acts with metallic minerals (Article 307-A of the Penal Code). Since 2012, Legislative Decree 1100 classifies as illegal mining such mining activities that conducted in unauthorized areas (including natural protected areas and their buffer zones, as well as indigenous community lands); uses equipment or machinery that is not suitable for small-scale or and artisanal mining, such as dredges in water courses; endangers the life, health, or property of people; affects irrigation systems or water destined for human consumption; or employs minors. Legislative Decree 1105, Article 2, reiterates the principal criterion for legality as the location of the activity, whether or not it occurs within the mining corridor. Informal gold mining refers to that which is done in areas not prohibited for mining by miners who have not complied with all of the regulations necessary to obtain a fully legal concession³¹

Illegal wildlife trafficking (Article 308 of the Penal Code) includes the acquisition, sale, transportation, storage, export, import, or re-export of unauthorized non-timber flora and wildlife without permission of the appropriate authorities, license, or certification. Laws on forestry crimes are described in the Article 310-A of the Penal Code, which establishes that the crimes of illegal traffic of timber forest products include the acquisition, storage, transformation, transport, concealment, custody, selling, shipment, unloading, import, export or re-export of products or timber forest specimens, whose illicit origin is known or can be presumed. According to the Forestry and Wildlife Law (Law 29763), timber may be licitly extracted from natural forest sources that include a) timber concessions within state-owned permanent production forests (Article 51); b) residual or remainder forests adjacent to properties of local residents (Article 64); native community forests (Articles 65-66); and d) forests on private property (Article 69). The law also defines procedures for authorization of transformation centers or sawmills and for the supervision and monitoring of their operations (Article 120), and regulates transportation of forest products (Article 124). Wood may not be legally exported if it was extracted from an illegal source (Article 122).

PERVERSE INCENTIVES FOR ADMINISTRATIVE LAUNDERING

Environmental crimes persist in Peru for two key reasons. Powerful interests operate at both the national and regional levels to enable the administrative laundering and smuggling of timber, gold and wildlife with false and fraudulent permits. The second reason is that those same powerful interests obstruct the efforts of those tasked with investigating and preventing environmental crimes. Officials in charge of preventing the administrative laundering of these products are not prepared to take on the organized criminal networks behind these operations. The investigators lack the numbers of skilled personnel and the resources needed to carry out investigations and more fundamentally, they lack the full political support and legal authorization needed to enable coordination of interagency teams to implement effective strategies, according to respondents.

A recent assessment of illegality in the timber sector broke the process down demonstrating that illegal selective logging (particularly high grading for valuable species) is carried out both by subsistence

³¹ Torres Cuzcano, 2015, pp. 24-25.

extractors and large operators but enters the legal stream by creation of paperwork that administratively launders the timber. A key modality is the complicity of regional governments in changing land uses. Changing the land use categories on paper both enables illegal extraction and presents gaps which can be exploited to generate false documentation for laundering timber, but the demand for illegal timber drives extraction and laundering of assets within the sector. A wide variety of stakeholders is directly involved in the regulation and supervision of the forestry sector, as delineated in Table 2 below.³² Inadequate coordination and collaboration, despite the existence of the National Forestry and Wildlife System (SINAFOR) reduces effectiveness of these institutions.

Table 2. Description of the Role of Public Institutions in the Timber Sector

Stakeholder Name	Role
National Forest and Wildlife Service (SERFOR)	Regulatory technical authority at national level, in charge of setting the norms and establishing the procedures in the forest and wildlife areas (Article of the Forest and Wildlife Law n.° 29763)
Regional Governments	Responsible for the execution of policies and adequate management of forest resources according to the transfer of granted forest functions
Ministry of Environment (MINAM)	Governing body in the environmental sector, with the function of designing, establishing, executing and supervising the national and sectoral environmental policy
National Program for the Conservation of Forests	Responsible for the promotion of the conservation of 54 million hectares of forests, through incentives for the maintenance and management of forests
General Bureau of Climate Change, Desertification and Water Resources	National authority appointed to fulfil the commitments assumed in the United Nations Framework Convention on Climate Change (1992)
OSINFOR	Responsible for the implementation of Nationally Determined Contributions, part of the Paris Agreement on Climate Change ratified by the Peru in 2016. Thus, in charge of supervising and overseeing the management of forest resources, wildlife and environmental services in areas with authorization certificates.
CITE-Madera (PRODUCE)	Technical entity specialized in promoting innovation, competitiveness and quality improvement in different stages of the transformation and industrialization of the timber sector
SUNAT	Responsible for supervising the tax management of the sector

Source: SERFOR, MINAM, OSINFOR, PRODUCE. Prepared by: APOYO Consultoría.

As mentioned, the administrative structure that oversees the forest management in Peru is under the authority of: i) National Forestry and Wildlife Service (SERFOR), in charge of regulatory political functions at national level; ii) Regional Governments and Local Governments, responsible for the execution of forest policy and regulations, including the promotion and control of the use of forests; and iii) Forest Resources Oversight Agency (OSINFOR), in charge of the inspection of forest permits. Forest product transformation responsibilities are supervised by: iv) Regional governments, for control of primary and secondary processing plants; v) The National Superintendency of Customs and Tax Administration (SUNAT), responsible for the administration of taxes generated from economic

³² Reproduced from SBS, 2018, p. 35.

activity; and vi) Centre for Technological Innovation of Wood (CITE Madera), charged with improving productivity and competitive positions of companies as requested.³³

Another structure of coordination created by Law N° 291763 is the National Forestry and Wildlife Commission (CONAFOR),³⁴ which according to Article 17 is integrated “by specialists from Government entities and civil society linked to the forestry and wildlife activity.”³⁵ “It includes representatives of regional governments of the provincial, district, and those located in rural areas; of representative organizations of indigenous peoples; of business institutions; of academic institutions; and from non-governmental organizations.”³⁶

Peru’s well-documented cases of international timber trafficking, like the case of Yacu Kallpa, using fraudulent transport permits are an example where administrative laundering enabled timber to reach Mexico, and the US before investigators could prove the timber was illegally harvested. The Financial Intelligence Unit (UIF) has created a typology that shows how funds obtained from illegal logging flow using front men, facade companies, and falsification of documents (for the export of timber). Respondents explained the ways in which this process works. Tax documents for shell companies in tax haven countries set up by families can be tracked by the UIF. Based on calculations of total products and volumes cut, the Superintendency of Banks, Insurance, and Pension Fund Administrators (SBS), illegal wood production is estimated to have exceeded one million m³ per year, representing about 41% of the total wood production. In monetary values, the illicit flows associated with this illegal production would be approximately US\$ 155 million per year over the last five years.³⁷ Due to the methodology used, the SBS report notes that it is not possible to determine the percentage of illegality by destination of the wood. However, considering that the greater demand for wood comes from the local market, it can be assumed that the illegal wood dominates the local market.

In another well-documented administrative fraud case, the gold smuggler Pedro Pérez Miranda, known as ‘Peter Ferrari’ appears to have controlled a \$3.6 billion-dollar gold smuggling operation to launder cash made from sales of illicit narcotics through NTR Metals, a gold refinery in Miami. When prosecutors in the United States came down on NTR Metals, it was said to be the largest money-laundering prosecution involving precious metals in U.S. history, according to authorities. “The scope of the conspiracy is enormous,” U.S. federal prosecutor Francisco Maderal told a judge during a hearing in Miami in 2019. Federal prosecutors in Miami charged 3 NTR traders with money laundering, saying the three men bought \$3.6 billion of illegal gold from criminal groups in Latin America. The scandal shut down NTR and cost its Dallas-based parent company, Elemetal, the ability to trade gold on bullion and commodity exchanges for a 5-year period. U.S. Prosecutors after strenuous efforts were only able to charge the 3 NTR traders with minor crimes of knowingly accepting illegal gold linked to illicit narcotics which put them in prison for 6 years.³⁸

³³ SBS *et al.*, 2018.

³⁴ Not to be confused with the National Forestry Confederation of Peru (CONAFOR PERU), based in Iquitos.

³⁵ SBS *et al.*, 2018.

³⁶ SBS *et al.*, 2018.

³⁷ SBS *et al.*, 2018.

³⁸ Cruz, 2019.

Over the past two decades, as the U.S. war on drugs undercut the cash flow of narco-traffickers, dealers diversified into Latin America's gold industry. Pérez Miranda, was a leader in diversifying the illicit narcotics into gold and did so just as the price of gold skyrocketed in 2012. Peruvian police cracked down in 2013, raiding his warehouse in Lima, and they found \$18.8 million in gold bullion.³⁹ NTR bought \$400 million from Ferrari in 2013.⁴⁰ In 2014, NTR started smuggling gold across the border to Ecuador and Bolivia. When those countries cracked down, NTR moved the gold to Colombia where in 2015 NTR's imports were \$722 million that year for 64 tons of gold while Colombia's large-scale mining operations only produced 8 tons in 2015.⁴¹

The suspicious amounts of gold were traced to the expansion of small-scale mining of unlicensed and untaxed gold controlled by narco-traffickers and other criminals in the Madre de Dios region of Peru. By using drug profits to mine and sell gold, criminals like 'Ferrari' were allegedly laundering staggering amounts of money. Drug-cartel associates pose as precious metals traders to buy and mine gold by controlling mines and diggers in small operations or franchises that deal in cash, slip across borders, and remain largely undetectable. Cocaine profits seed the purchases to turn dirty money into gold purchases. Pérez Miranda was first arrested for drug trafficking, illegal gold mining and money laundering in 1999. He was arrested again in 2017 and placed in preventive detention while examining the evidence associated with the sale of 13 tons of gold, but was ordered released by the court of organized crime appeals in 2019. The Ministry of Justice has approved his extradition to the United States, pending the resolution of judicial processes in Peru, but it is unclear whether these processes will ever be finished, according to Insight Crime, a Colombian-based watchdog on organized crime. With such high-profile cases, it is easy to imagine that all gold production is part of organized criminal networks. Respondents cautioned against leaping to this conclusion, explaining the complexity of these relationships, and the variety of shapes and sizes and fluidity of criminal networks as they converge or diverge in their strategies and tactics. The focus however remains on trading gold for cash which requires some paperwork and administrative laundering when it is to be exported.

Administrative laundering takes many forms, it is not only through high-profile money laundering linked to illicit narcotics sales. The mixing of illegal alluvial gold with legal gold, is another way that gold is laundered administratively, and the mixing of authorized sales of exotic species with illegal or regulated species trafficked from the Amazon regions is another form of laundering the sale of illegal products. Smuggling timber across a border for sale elsewhere is substantially more difficult, though not impossible. Smuggling of gold for legal sale in Bolivia or Miami, or smuggling birds and jaguar bones is substantially easier. Administrative laundering is the number one rule of the game employed but there are a lot of games in play. Respondents explained that the marketing of these products once reaching the point of export are not questioned or scrutinized if the paperwork looks like it is in order. Indeed, prosecutors have found that organized crime utilizes permits granted to purported gold miners in the process of formalization to launder illegal gold⁴². So, there is an obvious need for that paperwork to be subjected to deeper scrutiny by those who are prepared to hold people accountable. Transparency only works with easy digitization. So, solutions must be designed by those who deeply understand the operations and the field constraints, according to respondents.

³⁹ Cruz, 2019.

⁴⁰ MININTER, 2017.

⁴¹ Weaver, Nehamas, Gurney, 2018.

⁴² Sierra Praeli, 2020b.

REGIONAL GOVERNMENT CONFLICTS OF INTEREST

Informants explained that political administrators/decision-makers have significant conflicts of interest in the extractive resources industries that they are tasked with regulating, and there are no rules against these conflicts. Those who are authorizing illegal activities are in and out of positions of authority like a revolving door to the private sector, according to informants. They are benefiting politically and monetarily from illegal activity, but the prosecution of any crimes is weak due to complicity in the justice system, and small numbers of specialized prosecutors operating with limited authority and reach. Environmental crimes are recognized as related to the organized crime networks, under the law. Yet, timber, gold, and wildlife trafficking continue to have powerful protectors that are able to get bureaucrats to push through fraudulent paperwork and bribe and collude with anyone who might stand in the way of getting products to a market. Administering justice is seldom the endpoint of investigation. Some respondents asked if new rules on conflicts of interest and transparency of financial holdings might help.

The principal driver of deforestation from both illegal gold mining and illegal timber extraction in the Peruvian Amazon is roads, both legal and illegal.⁴³ Most timber extractors, particularly in Ucayali, have close relationships with regional government authorities. Several respondents expressed the belief that they provide illegal funding for the electoral campaigns of the authorities, who are then indebted to them. One way they compensate is by providing road-building equipment from the regional government to open illegal roads that facilitate timber extraction without conducting the legally required feasibility and environmental impact studies.

TIMBER TRANSPARENCY PROCESS ISSUES AND SMALLHOLDERS

Peru's current Forestry and Wildlife Law (Law 29763) and its four implementation regulations have been in force since 2015. Altogether these highly complex technical and legalistic norms include over 1,000 articles total. In order to comply with them, most concession holders need to employ a team of lawyers and accountants, in addition to a forestry expert, known as a *regente*, hired and paid by the concession holder. These requirements essentially exclude most indigenous communities and other rural residents who have historically harvested small amounts of wood for income, unless they associate with a larger-scale corporate operator who manages those details, markets the wood, and keeps most of the proceeds after subtracting costs according to their accounting.

Such arrangements have led many indigenous communities whose land titles include forestry use concessions to submit to classical *habilitación* conditions that offer them minimal returns for their wood, while the community is usually unaware of the details, and is often unable to measure and determine a fair price for the wood that is harvested from their territories, nor assume the cost of hiring a *regente* and meeting the legal and accounting requirements. Moreover, such operators often report wood extracted illegally from other areas as coming from community lands. Then, OSINFOR

⁴³ Moore, 2019; Tuesta, 2019.

conducts its inspections, fines the community, as concession holder, while the operator has disappeared with the profits.

Much of the illegally harvested wood, particularly in Ucayali and Loreto, comes from flood plains areas where concessions are not allowed. Such wood is harvested mainly by small-scale operators who sell it to others, either in the domestic market or to major timber exporters who need to fill containers and accept the source declarations of whoever sells them the wood. They do not consider source verification to be their responsibility. So, the wood goes out to both domestic and export markets often with falsified source declarations. It would be reasonable for SERFOR to authorize special arrangements for the sustainable harvesting of such wood, if the law allowed it, but, since controls are ineffective, there is no incentive for such legal changes and authorization procedures.

While the regional governments have now assumed the authority to grant timber and non-timber forestry concessions, most of those currently in force were granted by SERFOR beginning in 2002, before the transfer of that authority occurred. Once rights are granted, they cannot easily be cancelled by unilateral administrative acts. Most of what the regional governments do now is approvals of long-term management plans and annual operations plans for forestry activities. The operations registries that must occur in the forest and also at the sawmills (the first point of transformation of wood) were only authorized and required by SERFOR in late 2019, and the COVID-19 pandemic has delayed their implementation, since regional government technical staff cannot not get to those locations to inspect them. Even more difficult to implement is the requirement for electronic forestry transportation manifests in areas where internet service is weak or non-existent. These could be done in cell phone applications with wider coverage, but the procedures still need to be put in place. Meanwhile, SERFOR authorities who control outgoing shipments must rely on paperwork than can easily be adulterated or falsified.

GOLD MINING AND INFORMALITY – REGIONAL LEVEL ISSUES

National formalization processes meant to clarify and legalize informal small-scale and artisanal miners not only do not reflect the reality, they also have enabled multiple layers of those with petitions or claims who hire workers with different levels of hierarchy to profit. This rent-seeking does not benefit the workers, but it does serve to hide the trail of gold mined illegally. Organized crime is using permits for gold mining granted to claimants registered with the Government.

Under the General Mining Law of 1991, mining concessions or claims (*petitorios*) leading ultimately to concessions are granted by the MEM. Since decentralization, that responsibility lies with the Regional Directions of Energy, Mines, and Hydrocarbons (DREMEH), but the ultimate authority still lies with INGEMMET in Lima. Those claims and concessions remain in effect as long as the beneficiaries pay the annual tax (*derechos de vigencia*) to keep them in force. Their modification or cancellation for violation of mining, environmental or labor laws is a long tedious process, ultimately resolved by INGEMMET.

In 2012 by Legislative Decree 1105, one of a series of norms handed down by the Ollanta Humala government that year to control illegal and informal gold mining in Peru, the Government of Peru established the conditions for formalization of small-scale and artisanal gold mining rights to ensure their conformity with environmental, labor, and tax laws. Complex procedures were established under that law, which defined illegal gold mining as that using unauthorized equipment, non-compliance with mining, environmental, and similar legal requirements, and mining carried out in unauthorized areas, i.e. outside the mining corridor. It also established an Integrated Registry for the Formalization of Mining Rights (REINFO), so that, in addition to formal claim or concession holders, anyone who

purports to be an informal gold miner may declare his or her intention to comply with the formalization process. That declaration of intention grants the author of the declaration the right to legally mine and sell gold in the meantime. The initial 24-month deadline for completing the procedures has been extended repeatedly; the current expiration date is December 31, 2020. To date, 5,902 such declarations have been filed. Many of those people are opportunists reported to have no role in actual gold mining, but with that declaration they can legally buy and sell gold, including illegally sourced gold. One of our informants expressed the belief that the repeated extensions of that registration are responsive to the interests of the trade of illegally mined gold.

Initial complex procedures for formalization of mining rights were defined in Articles 10-17 of Legislative Decree 1105, including the presentation of a formal Instrument for Corrective Environmental Management (IGAC). Then, in 2017, the government of president Pedro Pablo Kuczynski approved Legislative Decree 1336, which repealed those articles of Legislative Decree 1105 and provided detailed procedures for filing an Instrument for the Environmental Management and Monitoring for the Formalization of Small and Artisanal Gold Mining (IGAFOM), which replaced the IGAC. Until 2019 no mining claims in Madre de Dios had been formalized. The process began in earnest that year under the current Madre de Dios Regional Government administration. As of late June 2020, a total of 243 mining claims had been formalized in Madre de Dios, principally with commitments to comply with all of the requirement within a given time frame. In fact, no mining claim or concession in Madre de Dios has yet fully complied with the law, and those in process are authorized to mine and sell the gold that they produce, legally, in the meantime.

Since 1991, with the elimination of the *Banco Minero*, there has been a “free market” in gold in Peru. Exporters of gold must declare that is legally sourced, but no proof of such source is required. Most small and artisanal gold miners in Madre de Dios sell their gold to merchants in the principal commercial centers close to their mining operations. Those merchants, in turn, sell the gold to the principal buyers operating in the area, who either sell it in Bolivia, where buyers report it as gold produced in Bolivia and then legally export it, or through operations like that of ‘Peter Ferrari’ in Miami. Gold buyers in Peru may export that gold legally if they have documentation that shows it was acquired from one of the 6,798 people enrolled in the Special Registry of Marketers and Processors of Gold (RECPO) established by the Ministry of Energy and Mines under Ministerial Resolution No. 249-2012-MEM/DM in 2012. There is no control on where and how the registered gold marketers obtain the gold that they sell. Most small and artisanal gold miners sell the gold that they produce in the market centers within the mining corridors, not in cities like Puerto Maldonado.

That registration is based on a simple sworn declaration that is not checked nor controlled for potential fraud. So, it is extremely easy to legally sell or export illegally sourced gold. To help control that situation the Ministry of Energy and Mines tasked its own corporation, *Activos Mineros, SAC*, with certification that those gold buyers who contract with them are buying and selling gold legally, essentially an impossible task. *Activos Mineros, SAC*, knows that most of the gold they certify is not legally sourced and would like to be relieved of that responsibility, but the Ministry will not allow them to do so. Gold miners complain that the companies affiliated with *Activos Mineros, SAC*, only buy gold in Puerto Maldonado and other cities, not in the market centers within the mining corridor.

“If the Peruvian tax agency, SUNAT were tasked with seriously documenting all exported gold and tracing its source electronically, they would generate enormous revenues for the Government, including the canon for subnational government development investment, but since nearly all gold transactions are in cash and are not controlled at source, they cannot do that,” said one respondent.

Many of the ‘gold miners’ registered with the REINFO do not actually mine gold, but hope to obtain formal claims; some are presumed by many of our respondents to have ties with drug traffickers or other organized crime. The Specialized Prosecutors for Environmental Matters (FEMA) have been installed in all three regions for several years now. They appear to be seriously pursuing illegal gold miners and bringing them to justice, a daunting task, given all of the legal loopholes. On June 11, 2020, one of the FEMA prosecutors in Madre de Dios obtained the first conviction for illegal gold mining in the first instance, although that sentence has been appealed.⁴⁴

DRUG MONEY LAUNDERING AND GOLD EXPORTS

Several of our respondents, as well as a 2015 report by the Peruvian Society for Environmental Law,⁴⁵ described the route for export of much of the illegally mined gold in Madre de Dios as the porous border that Madre de Dios and Puno share with Bolivia. From Bolivia, the gold is claimed to be of Bolivian origin and exported to Europe and Asia. The same routes are used to export coca paste and cocaine to international markets.

It is difficult to prove drug money laundering, but the case of ‘Peter Ferrari,’ described above, is a good indication. Moreover, there is physical evidence of coca cultivation in the same areas where illegal gold mining occurs, as the photograph below from the United Nations Office on Drugs and Crime report for 2013 clearly reveals for the area of San Gabán, Puno, along the Interoceanic Highway and the Inambari River, on the southern boundary of Madre de Dios.⁴⁶

⁴⁴ Fiestas, 2020.

⁴⁵ Benavides, 2016.

⁴⁶ UNODC, 2014, p. 49.



Imagen SPOT 6, 1.5 m. Fuente: UNODC

WILDLIFE TRAFFICKING

Wildlife trafficking and routes - FEMA is also understaffed and underequipped to track the level of environmental crimes occurring. Currently, we learned that the agency has only around four professional forensic investigators tasked with some 30,000 investigations that are underway in all of Peru. One respondent said, “We have to rely on them, because the regional level authorities lack the expertise--and motivation-- to pursue the crimes. This is an impossible situation. SUNAT needs to be there too, but it has limited capacity.”

Another respondent pointed out, that prevention of trafficking of wild animals requires the same kinds of incentives to pursue these crimes that they encourage the investigation of narco-trafficking, with the police, FEMA, SUNAT, and others. There is no police unit that specializes in animals and the type of crime associated with wildlife trafficking. This respondent explained, “My theory is that 99 percent leave Peru with false documents. There is very little that is actually hidden or smuggled out. They use the administrative processes to launder the animals.”

SERFOR has developed a strategy for control of wildlife trafficking, and both the Wildlife Conservation Society (WCS) and the World Wildlife Fund (WWF) have ongoing programs to strengthen this control. Control of exports is difficult, since SUNAT allows exports of wild animals to continue on their way if they have the proper certifications, which are not investigated. The only legal instrument available to them is the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), and many wild animals are not included in the CITES lists.

Most of the animals confiscated by the police are reportedly taken to private animal shelters in Iquitos, Pucallpa, or Puerto Maldonado, which are under-staffed and under-resourced. Most of these rescue centers charge admission to tourists and other visitors to defray costs for feeding the animals. Their goal is to return the animals to nature, but the animals must be prepared for that process, and it is not easy. Moreover, that process has some regulations attached. One respondent explained that there is also a longstanding tropical fish industry in Iquitos that exports species of tropical fish, with documentation that is not always checked and verified. Respondents pointed to this as another potential form of administrative laundering.

INSTITUTIONAL FRAGMENTATION AND LACK OF COORDINATION

The historical segmentation of administrative functions into sector ministries with little coordination among them has set the standard that prevails today. This problem is linked to incomplete decentralization which has become a “rule of the game” that drives behavior. “Lack of coordination and disarticulation” is the reason most cited for why action is not taken, why corruption continues, why information is not shared. The fragmentation actually does enable the continuation of corruption and impedes action. Inadequate staffing, capacity, and resources do hinder the ability of technicians and investigators to do their jobs. There is a disconnect between the national and regional levels. The interests around the perpetuation of the status quo, however, are too great for the government to take the actions needed to address the fragmentation. Public opinion, civil society, third party independent agencies are needed to change that situation.

A majority of respondents reported the separation and lack of coordination among the diverse governmental institutions as a serious issue that allows environmental crimes to continue and proliferate. There is no systematized or updated information available; and as an aggravating factor, communication is weak among the institutions according to most respondents. For example, in forestry and wildlife matters, the separation of the normative functions of the Forest and Wildlife Service (SERFOR), the administrative functions of the regional government authorities, and the oversight functions of the Forestry Supervision Office (OSINFOR) are important, as is an independent judiciary and a prosecutorial entity for environmental matters (FEMA), but there is a great need for better communication and coordination among them. SERFOR granted the initial timber concessions prior to decentralizing that function, and it regulates forestry activities from the Ministry of Agriculture. Now, the regional government authorities approve operating plans but do not communicate approvals to OSINFOR efficiently, whether intentionally or unintentionally. OSINFOR is not authorized to supervise the concessions until the regional government authorities communicate the authorization to them. Long after the approvals are granted and production is underway, OSINFOR might be informed, but it can only measure tree stumps and conduct forensic investigations that cannot always yield definitive results.

STRENGTHENING THE INSTITUTIONAL FRAMEWORK

The measures cited by respondents typically relate to the need for improvement of the sector's institutional framework. For example, an increase in the presence SERFOR, a central government agency, in the main forest regions such as Loreto, Ucayali and Madre de Dios is proposed, so that there will be closer coordination, but it needs to be supportive of the regional government authorities and help train them in the best and most transparent administrative practices without usurping their roles or second guessing their decisions. SERFOR has established liaison offices in each region. This institutional effort needs to be consolidated and the regions need to maintain permanent interaction with these offices. The principal problem now is that SERFOR does not address the problems at the regional level nor the interests and coordination of political backers from the regional level to the national level.

In practice increased presence at the regional level has not gained traction for SERFOR in the region. Having officers in the region has produced better insights. Solutions that are perhaps more practicable might include closer monitoring, more intelligent analysis of reports and knowledge of the forest in a review of annual forest operation plans and expected production volumes compared against requests for forest product transport permits (GTFs) before the forest is cut. Greater involvement of institutions in the different forums for inter-institutional coordination is suggested. For example, there has been increased coordination of the Financial Intelligence Unit (UIF) in Peru, which now participates in the multi-sectoral commission against illegal logging, under Agreement 007-2018-CONTRALAFT, taken in the third session of the CONTRALAFT-3, according to respondents.⁴⁷ This collaboration helps to problem-solve, but respondents argued that the coordination itself is not sufficient without better knowledge from the field. That knowledge can be collected through increased presence of supervisory agents and open conversations about the inaccuracy of administrative paperwork.

This is a further issue that is true both at the national and regional levels. The issue enables one part of the regional government to be “unaware” of the details of issues that are the responsibility of other parts of the government. Approval by SERFOR of the requirement for operations books at the source of forest products and the first point of transformation, sawmills, is an improvement over previous procedures, but it needs to be fully implemented. Similarly, the use of electronic forestry transportation guides (GTF) to prevent alteration of the information needs to be implemented universally. Lack of internet connectivity has been a factor impeding this process. The GIZ program *Data Bosques*, now more widely used in the industry can facilitate that process. Traceability of the source of wood has long been a major issue. USAID and the US Forest Service invested heavily in the control module (MCSNIFFS) that remains to be implemented for a range of technical reasons, but that process needs to be made operative and universal with alternative simpler but supportive parallel processes that can be more user friendly and that can be used to cross-check information through simple technology. For example, respondents suggested, *DataBosques* uses Excel spread sheets that can be sent by email and WhatsApp on cellular phones with updated actual volumes for transport.

One of the complaints is that national legal norms and policies developed by SERFOR and the Ministry of Energy and Mines (MINEM) in Lima are not responsive to the regional differences and needs, but

⁴⁷ SBS *et al.*, 2018. CONTRALAFT is a German Government-sponsored cooperation initiative to combat money laundering and financing of terrorist activities.

are developed in highly technical terms by staff in Lima who lack extensive knowledge of the political economy and geographical realities that differ among the regions. For example, Loreto has the most intact forests and no legal mining concessions and no land transportation access to the rest of the country. Most of the rural population engaged in forest extraction is of indigenous origin according to the regional government. Most of those involved in forestry activity in both Loreto and Ucayali outside the indigenous communities are *ribereños*, people of indigenous origin who are not recognized as native communities, who lack the land titles that most but not all of the recognized indigenous communities have. Since Ucayali was linked to Lima by the Central Highway in 1943 the migration of colonists of highland origin has grown. Similarly, in Madre de Dios, since the 1980s when gold miners first began to arrive in significant numbers. Madre de Dios has extensive natural protected areas and a thriving tourist industry similar to that in Loreto, and it also has important forestry concessions for Brazil nuts and rubber, as well as for timber and conservation.

There are strong laws for environmental crimes, but without greater judiciary cooperation, there can be no advancement. Respondents indicated that the main modality for penalty is administrative sanctions. Over the past three years investigative reporters, most notably, but not limited to, *IDL Reporteros*' documentation in July 2018 "Lava Judges," case, have obtained documentation from prosecutors in Brazil and the United States implicating high-ranking Peruvian judges and prosecutors, as well as former presidents, ministers of state, and mayors, in bribery and influence peddling scandals.⁴⁸ As a result, the current Peruvian government administration should be making advances, but respondents point out that even the highest cases that make international news are not resulting in definitive arrests or prosecution, such as in the case of Peter Ferrari.

Meanwhile, regional authorities have little ability to operate effectively to supervise, regulate or countermand the orders of the regional government's elected officials even when they have been implicated in corruption scandals. While subnational governments have authority to administer land rights, forestry concessions, and mining concessions within their territories, nearly all of the existing forestry and mining concessions were granted under the Forestry and Wildlife Law of 2000 (Law 27308) in areas declared "permanent production forest" under that law. Since those concessions were granted for 40 year-periods and have property-like characteristics by which they may be bought, sold, leased, mortgaged, etc., it is very difficult to revert them, even when concession holders have been involved in seriously corrupt actions. So, the regional government authorities, now *Gerencias Forestales y de Fauna Silvestre*, have little possibility of granting new concessions in unoccupied areas if use classification is for forestry, because there are not many such unoccupied areas. Their principal role is approving annual operating plans, among other things. These officials lack the technical and financial resources needed for more effective administration, but they are also subjected to regional political pressures that are often not conducive to preventing or controlling illegal timber extraction and trade.

New gold mining concessions are no longer admitted in Madre de Dios, but this does not stop politically sanctioned mining activity. Administration of existing claims is now within the authority of the Regional Directions of Energy, Mines, and Hydrocarbons, but they lack the authority to cancel mining concessions that are not in compliance with the law. When they find cause to cancel a mining concession, they have to submit it to INGEMMET, which has the last word. Respondents confirmed

⁴⁸ IDL Reporteros, 2019.

that numerous concession claims have been submitted to INGEMMET for cancelation, and they are still pending. Meanwhile, miners not registered take advantage of that situation and operate within abandoned claims.

One of the principal limitations of governance at the regional level in Peru is the lack of qualified professional civil service cadres that can assume the responsibilities of newly decentralized functions. Peru's civil service (SERVIR), established under Law 30057 in 2013 calls for merit-based selection of public servants, with long-term employment security, it has not yet been fully implemented even in the central government agencies, much less at the regional government level, evidently for lack of political will. The degree to which regional politics are implicated in environmental crimes indicate the need for decentralization reforms.

REGIONAL POLITICAL PARTY FUNDING

Some political candidates are perceived to be financed by criminal networks trafficking resources, according to respondents and investigators. These political coalitions act to oppose environmental objectives and to impede their opponents from participating in land use governance. Regional level control over land use changes has enabled land and timber trafficking, decisions that are often influenced by interests not actual land status.⁴⁹ Their objectives go beyond rent-seeking.

Resource extraction linked to corruption is a logic that drives efforts to control political offices and their parties at the subnational level, with a focus on the acquisition of wealth and power. This systemic rent-seeking creates perverse incentives for diminishing the effectiveness of regulation and guaranteeing impunity to organized crime networks that support regional political parties.⁵⁰ Collusion with organized crime networks or family cartels support an array of patronage relationships for high ranking officials at the regional level even as they submit all their paperwork to keep the appearance of legality.

A study of regional corruption shows that regional governments have been acquiring greater executive capacity, access to public resources, and power to award public works contracts, with allegations of corruption that involve regional governments sharing certain characteristics: (i) The political authorities allegedly involved come from regional movements, not from national political parties; (ii) those involved are not ordinary public servants, but senior regional political officials headed by a regional president; (iii) they reflect systematic cases of irregularities in the procurement procedures of the state; (iv) the significant public resources available to those regions come from the mining sector.⁵¹ The cases of corruption not only exposed the informal networks that are woven around the use of public resources, but also the infiltration of organizational arrangements of illegal markets into the formal structure of the state. Although it is a little documented phenomenon, in 2017, 68 percent of Peruvians perceived high levels of infiltration of organized crime into politics.⁵² Financing of electoral

⁴⁹ SBS, 2018.

⁵⁰ Dammert and Sarmiento, 2019.

⁵¹ Dammert and Sarmiento, 2019.

⁵² ProÉtica, 2017.

campaigns appears to be a particular infiltration modality. In Durand's interpretation, the illegal economy requires investing in politics even more than the formal corporate economy, as illegality needs corruption to paralyze the regulatory action of the state or to make it an accomplice. In this strategy electoral campaigns become key and highly adaptable for the exchange of favors.

An example of this regional level infiltration can be seen in Loreto where three political actors with no national standing successfully founded regional political parties to gain power over the resources of regional governments and have gone on to leadership as regional president of Loreto and to the Peruvian Congress; they were also investigated for multiple illicit activities (money laundering, corruption, trafficking): Yván Vasquez Valera⁵³ founded *Fuerza Loretana* in 1997 and later led Loreto (2006-2014); Robinson Rivadeneyra Reátegui founded UNIPOL in 2002 and served as Loreto's regional president (2002-2005) and previously in the Peruvian Congress; Fernando Meléndez Celis founded *Movimiento Integración Loretana* (MIL) in 2006 and was elected regional president of Loreto (2015-2018), then to Congress in January 2020.⁵⁴ Each party has controlled significant provincial and district level political offices, with MIL including as many as ten district mayorships and appeared to have active links with drug traffickers. In Madre de Dios, the former regional president Luis Otsuka Salazar (2015-2018) responsible for popularizing artisanal goldmining despite health and environmental concerns has been investigated for his links to illegal mining and environmental crimes with his concessions including an area of some 300 hectares inside the highly biodiverse Tambopata Reserve.⁵⁵

The infiltration of organized crime is clear at the regional level and up. There is evidence to suggest that the infiltration linked to illegal activities (illicit drug trafficking, illegal logging, illegal mining, and human trafficking) into the formal structure of the state is a widespread reality, the precise details of which remain obscured. The critical point here is that these actors do not primarily seek to take advantage of fiscal resources, but they want to make use of the potential that access gives them to represent interests related to their criminal organizations, to gain permits for the development of their activities, or to obtain impunity.⁵⁶ Addressing environmental crimes therefore may require taking on campaign finance reform to reduce electoral control by criminal networks.

THE HERE AND NOW

SOCIO-ECONOMIC STATISTICS BY REGION

⁵³ Vásquez Valera was convicted of money laundering and collusion against the public interest in 2016 and sentenced to six years in prison, but that sentence was reversed on appeal in October 2019. <http://proycontra.com.pe/sala-de-apelaciones-absolvio-a-yvan-vasquez-en-alcantarillado-i/>. Accessed September 4, 2020.

⁵⁴ Dammert and Sarmiento, 2019. Robinson Rivadeneyra was convicted of collusion in 2018 and sentenced to six years in prison, but he was acquitted on appeal to the Supreme Court in October 2019. <http://proycontra.com.pe/robinson-rivadeneyra-recupera-libertad/>,

⁵⁵ Dammert and Sarmiento, 2019.

⁵⁶ Dammert and Sarmiento, 2019.

The current economic situation is different for each of the three Amazon regions analyzed. The following data provide the most current statistical information for each.

LORETO

Loreto, con 368,852 km² is the largest region in Peru, 28.7% of the national territory. The 2017 census recorded 883,510 inhabitants, with an average rate of decline of 0.1% since the 2007 census. In 2017 the total population of Loreto was 68.7% urban and 31.3% rural, compared with 62.6% in the 2017 census.⁵⁷ In Loreto, 51,733 individuals self-identified as Amazonian indigenous.⁵⁸ In Loreto the economically active population (PEA) in 2017 totaled 427,126, of which 222,970, were men (52.2%) and 204,206 were women (47.8%). By type of activity, 38.4% of the PEA in Loreto was engaged in agriculture (including forestry), fishing, or mining; 4.6% in manufacturing; 4.4% in construction; 19.2% in trade; 6.3% in transportation and communications; and 27.2% in services.⁵⁹

The estimated gross domestic product of the region in 2017 was 8,019'487,000 soles. Of the total population, in 2017, 36.8% were deemed poor and 10.4% in extreme poverty.⁶⁰ According to the 2018 Homes Survey, 55.6% of the population in Loreto had at least one basic unsatisfied need.

Currently, Loreto, Ucayali, and Madre de Dios hold about 80 percent of Peru's Amazon forests combined and are the source of some 86% of all thick wood in Peru.⁶¹ Loreto possesses a vast and biodiverse forest, including varzea forest. Illegal timber trafficking is the predominant environmental crime, followed by wildlife trafficking both across the borders with Ecuador, Colombia, and Brazil and domestically. The newest threat of "pequedragas" or small dredge mining floats has increased during the pandemic along the Alto Nanay. The high price of gold and the crackdown on gold mining activities in Madre de Dios have resulted in this new form of mobile illegality that has the potential to poison the main water supply for Iquitos with mercury. FEMA reported that with the help of the Navy in early April, it stopped a boat with 12 square meters of wood heading from Lagunas District.⁶² Meanwhile, some thirty-six communities are monitoring their territories with drones and satellites with information being compiled in Iquitos by the Center for Information and Territorial Planning (CIPTO).

MADRE DE DIOS

Madre de Dios has a total area of 85,300.84 km², the third largest region in Perú, after Loreto and Ucayali, or 6.7% of the national territory. The 2017 census recorded 141,070 inhabitants, with an average annual rate of increase of 2.6%. In 2017 the population of Madre de Dios was 82.8% urban and 17.2% rural, compared with 69.1% and 30.9%, respectively in 2007. Of the total censused population in Madre de Dios, 3,494 people self-identified as Amazonian indigenous⁶³. The PEA in Madre de Dios in 2017 was 85,340, of which 50,848 (59.6%) were men and 34,492 (40.4%) were women. By

⁵⁷ INEI, 2018a

⁵⁸ INEI, 2018c, p. 77.

⁵⁹ INEI, 2019.

⁶⁰ Congreso de la República, 2019a, pp. 5-8.

⁶¹ SBS *et al.*, 2018, p.30.

⁶² Sierra Praeli, 2020a

⁶³ INEI, 2018c.

type of activity, 23.6% was engaged in agriculture (including forestry), fishing, and mining; 5.3% in manufacturing; 7.6% in construction; 21.2% in trade; 9.2% in transportation and communications; and 33.1% in services.⁶⁴

The estimated gross domestic product for the region in 2017 was 3,295'026,000 soles. Of the total population, in 2017, 4.40% were deemed poor, and 0.70% in extreme poverty⁶⁵. According to the 2018 Homes Survey, 22.8% of the population in Madre de Dios had at least one basic unsatisfied need.⁶⁶

Madre de Dios is one of the largest sources for large scale timber production, but it is best known for the high levels of illegal gold mining activity and cross border trade with Brazil and Bolivia of smuggled gold, timber, and Brazil nuts. Wildlife trafficking is also prevalent. FEMA reported that it has conducted 40 operations since the start of the pandemic in La Pampa to disrupt illegal gold mining. In a single day in March, FEMA found 37 small-scale mining rafts. On August 25, 2020, an organized crime network was uncovered linking 14 people including including the ex-directors of the regional forestry and wildlife department and 12 others for alleged environmental crimes related to timber trafficking and falsification of documents among others. The special prosecutors for organized crime, rather than FEMA, have been monitoring their activities over previous months and made the arrests.⁶⁷

UCAYALI

The total area of the Ucayali Region is 102,199.28 km², which at 7.97% of the total area of Peru is its second largest region. Its total population, according to the 2017 census, was 496,459, with an average annual rate of increase over the 2007 population of 2.6%.⁶⁸ Of the total censused population in 2017, 318,295, or 81.0% was urban and 19.9% rural, compared with 73.7% and 26.3%, respectively in 2007. In 2017, 36,774 censused individuals self-identified as Amazon indigenous.⁶⁹ The PEA in Ucayali in 2017 was estimated at 266,723, of which 147,789 (55.4%) were men and 118,934 (44.6%) were women.⁷⁰ They were engaged in agriculture (including forestry), fishing, and mining (27.6%); manufacturing (7.1%); construction (5.11%); trade (22.9%); transportation and communications (8.7%); and services (28.6%).⁷¹

The estimated gross domestic product in Ucayali in 2017 was 4,256'122,000 soles. Of the total population 14.6% is classified as in poverty and 4.4% in extreme poverty.⁷²

As is evident, Ucayali's population growth is in slight decline, while those of Ucayali and, particularly, Madre de Dios show dynamic increases. Poverty and basic unsatisfied needs rates are lower in Madre

⁶⁴ INEI, 2019.

⁶⁵ Congreso de la República, 2019b, pp. 6-8.

⁶⁶ INEI, 2018b, pp. 86, 110.

⁶⁷ Personal communication.

⁶⁸ INEI, 2018a.

⁶⁹ INEI, 2018c, p. 77.

⁷⁰ INEI, 2019, p. 70.

⁷¹ INEI, 2018b, pp. 86, 110.

⁷² Congreso de la República, 2019c, pp. 6-9.

de Dios and Ucayali and higher in Ucayali. Regretably, the PEA data do not distinguish between agricultural, forestry, fishing, and mining activities.

Ucayali has a very active illegal timber problem that is linked to high level collusion of regional government officials with shady companies. In operations around March 28, 2020, FEMA seized 100 board feet of timber on the Manantay River in Colonel Portillo worth USD\$37,000.⁷³ Four people were arrested and sawmills were searched with evidence of fraudulent and missing paperwork. FEMA reported that meanwhile, Shipibo communities have reduced illegal deforestation to zero in their territories with the effective use of drones.

CORONAVIRUS PANDEMIC EFFECTS ON THE RESEARCH

At the outset of the research, prior to the pandemic, new movements supporting efforts to combat corruption and crime held some promise for change. The results of Congressional elections in January 2020 and prospects of presidential elections in 2021 to push for change in addressing systemic corruption and defining the potential limits of reform movements pointed to pathways for change around timber trafficking and illegal mining. Political economies shifted under the pressure of the pandemic in three main ways: Gold mining pressures increased in response to the rise of the international gold price. New modalities for illegal mining operations, including mobile river dredges, are now expanding throughout the Amazon Basin, including areas of Ucayali and Loreto. Those new conditions are increasing deforestation,⁷⁴ as well as mercury contamination of soils and rivers at a time when the resources to detect and apprehend illegal miners have been compromised by the pandemic. Respondents were gravely concerned about the mobile dredges in key rivers of Loreto. Indigenous communities have faced new health and economic crises, and these impacts are likely to be felt for years from the coronavirus pandemic, but the looming threat of mercury poisoning and the impact this toxicity will have not only on men, women and children but also on the ecosystems is unmeasurable. Respondents in both Madre de Dios and Loreto described mercury toxicity as a time bomb. The government has meanwhile taken advantage of the economic pressures of the global crisis during the pandemic to encourage new large-scale agricultural investments in oil palm and other agroindustry with policies that encourage deforestation.

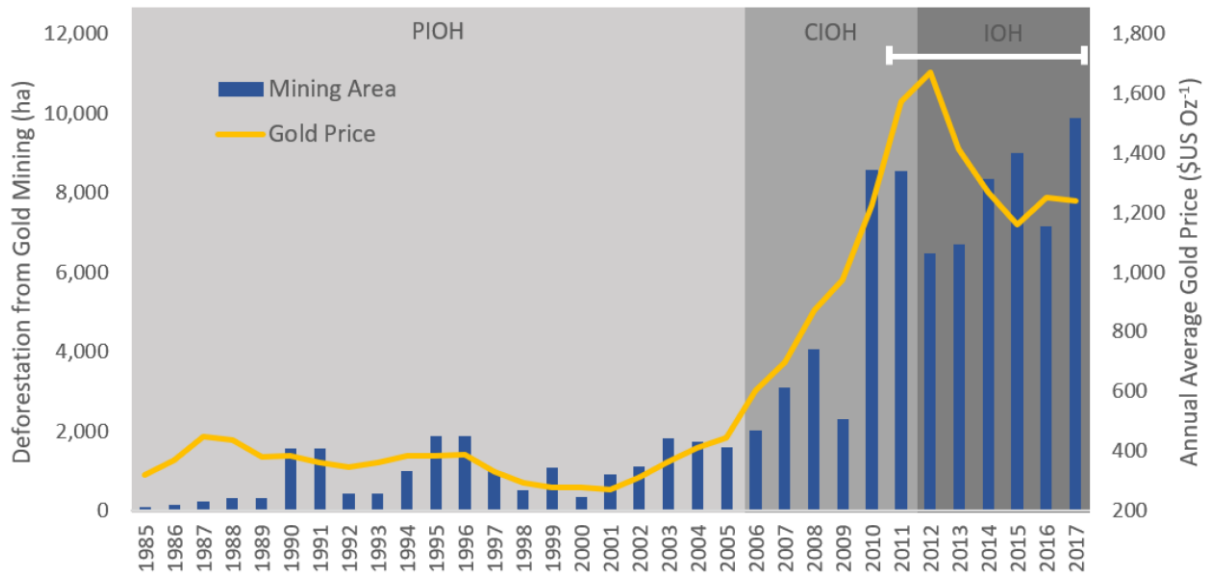
Mining and deforestation are linked to the price of gold. Figure 2 below shows the historical annual rate of deforestation over 34 years in the southeastern Peruvian Amazon in relation to the historical spike beginning in 2010 in Madre de Dios that correlated with the sharp increase in mining when gold prices rose. High levels of gold mining have continued in the area in the years since, even while gold prices fluctuated, as a result of the opening to traffic of the Interoceanic Highway in Madre de Dios

⁷³ Sierra Praeli, 2020a.

⁷⁴ The most recent MAAP report on deforestation from gold mining in Madre de Dios (ACCA, 2020) is misleading. It reports a reduction in deforestation from illegal gold mining, when that reduction is of the rate of deforestation in areas where military intervention in the mapped areas had disbursed the illegal gold miners to other areas. The deforestation continues, but the rate has been reduced in those areas of military intervention where there should have been no further deforestation.

that facilitated access for miners and the dump trucks and heavy earth moving equipment used in gold mining in Madre de Dios.⁷⁵ Shading in Figure 2 refers to stages of infrastructure construction.

FIGURE 2. INCREASING DEFORESTATION CORRELATED WITH PRICE OF GOLD AND INTER-OCEANIC HIGHWAY BUILT IN MADRE DE DIOS.



Source: Caballero Espejo et al. 2018.

The stages of infrastructure development in the Figure 2 include the Pre-Interoceanic Highway (PIOH), Construction phase of the interoceanic highway (CIOH), and operational phase (IOH). The white horizontal line from 2011 through the present indicates the phase of interdictions against illegal mining by the Peruvian National Police (PNP) and military.⁷⁶

If Figure 2. (above) were updated to include the pandemic era expansion, the upward trend of deforestation would likely be linked to three factors: first, the rise in the price of gold to 2012 levels, second, the dispersal of mining efforts to new areas following the February 2019 Operation *Mercurio*, a military assault on the mining areas to eradicate miners from protected areas, led by a joint commission of MINAM, MINAGRI, the Peruvian armed forces, prosecutors, and others; and third, the inability of authorities to enforce mining regulations of during the lockdowns.

Meanwhile, as all communities have been suffering extreme hardship throughout the Amazon regions, indigenous communities have been disproportionately impacted by the pandemic health-wise leading to the closing of access to those communities. Outsiders, including teachers and public health officers have been unable to provide services to some of these communities. Meanwhile, timber extractors and gold miners seeking to work in these areas have been officially unable to enter. Respondents

⁷⁵ Caballero Espejo, et al., 2018.

⁷⁶ *Op. cit.*, Caballero Espejo et al., 2018.

indicated that illegal gold mining and timber felling have continue unabated and have no reason to believe that the indigenous communities have been able to keep them out of their territories. Local government officials and others in all three areas reported that active illegal logging and mining have continued. This has had unknown impacts on the territories and the communities.

Gender-based violence has been correlated with economic hardship in Peru, and is a major concern of indigenous gender activists at present. The limited access of indigenous communities to health services and outside support throughout the pandemic during this period of economic crisis has increased the vulnerability of indigenous communities and of women and girls within these communities in particular.

In the name of economic reactivation, the government encouraged new large-scale agricultural investments in oil palm and other agroindustry and also responded to pressure from the timber industry against new regulations introduced by SERFOR for increased timber transparency measures. Respondents indicated that the removal of Alberto González Zuñiga, SERFOR's head, in May 2020, only one year and a half into his five-year term, appeared highly irregular. Respondents expressed much suspicion about the motives of this removal.

CORRUPTION AND POWERFUL INTERESTS

The ex-governor of Loreto is one of the prominent examples of politicians with family connections that influenced his interests in obstructing pursuit of environmental crimes. With one brother in private sector forestry and the other in the Peruvian Congress, they were alleged by multiple sources to have conspired with other associates in the illegal timber industry to secure the removal in 2016 of Rolando Navarro, the President of Peru's Forestry Supervision Office (OSINFOR) who led investigations into timber laundering operations that documented massive exports of illegally exported wood. Similarly, the change in SERFOR leadership came soon after SERFOR put in motion requirements that all concession holders and communities, as well as sawmills must now progressively implement operations registries (*libros de operaciones*) and electronic transportation manifests to help ensure the traceability of the source of the wood that is marketed. The regulations were meant to improve control over the prevention of forest crimes. The industry has objections.

Crimes and connections of influential players is in many cases are common knowledge, but the burden of proof is high and difficult to achieve and prosecutions seldom stick because judges, prosecutors are frequently pressured (or enticed) to reject cases or lighten sentences, according to respondents. There is no concerted effort to distinguish between "organized crime" and regular crime because, the organized crime networks are small and agile, not necessarily linked to singular bosses. Moreover, many of the authorities are indebted to them for campaign support and reciprocate by making forestry road building equipment available to them to facilitate access to timber. It is not easy to charge them or apprehend them in forestry where the product is large and visible, let alone in illegal mining, or wildlife trafficking. The ones who get arrested are usually the ones hired to transport or traffic the goods. Seldom are these arrests traced back to prosecute the financial backers. Respondents explained that while there are links of these operators with human trafficking and narco-trafficking, not all criminal networks in forestry, goldmining, or wildlife trafficking were part of organized crime networks.

The regulations both for artisan and small-scale gold mining and small-scale forestry are so complex that seldom are small-scale operators (indigenous or campesinos) able to comply. In fact, respondents explained that for gold mining some 80 percent of the applicants for formalization are not concessionaires or petitioners (for mining rights), but informal miners that work on someone else's

mine. These miners, or diggers, seek protection. The formalization process is intended for those who own their mining claim and can guarantee to follow standards for environmental remediation, health, safety, social, and other regulations, but they have no authority or ability to make those guarantees. Formal, as opposed to informal, amounts to filing correct paperwork and possibly paying taxes versus not filing any paperwork and having no obligations or protections under the law. Around 90 percent of the logging and mining is illegal but not necessarily with true criminal intent. This is the rule of the game, the authorities chase those easiest to catch, clean up the supply chain by laundering the paperwork, and wait for their rotation to a new region.

Estimates for the extent of illegally harvested, traded and exported Peruvian timber range from 60% to over 90%.⁷⁷ USAID and the US Forest Service have supported the development of the current forestry and wildlife legislation and policy development, as well as institutional strengthening of SERFOR and OSINFOR with major investments, including the development of a control module for the National System of Forestry and Wildlife (MCSNIFFS), which is still substantially inoperative, but some slow progress is being made. Most respondents do not see consistent policy and procedures as sectors of the forestry industry are not on board and political intrigue is playing out in the interactions of national-level forestry institutions like SERFOR and OSINFOR and the new regional government management units for this sector to which the administration functions have been transferred.

On the national level, major corruption scandals plagued Peru's Judiciary and the National Prosecutors Office at the highest levels in 2018. Following repeated revelations by investigative reporters and the social media, President Vizcarra demanded that the Congress reform the text of the Constitution regarding the National Council of Magistrates (CNM), which had authority to name, ratify, and remove judges and prosecutors throughout Peru. That measure was intended to prevent the naming of corrupt judges and to facilitate removal of those demonstrated to be corrupt. Following major confrontation with the President, the Congress reluctantly made the changes in two separate sessions of the Congress and established a new agency, the National Judiciary Board (JNJ), along lines similar to those proposed by the President. The JNJ finally assumed its role in 2019.

Efforts to remove corrupt members of the national prosecutor's office took longer. Finally, after complex proceedings, two of the supreme prosecutors for whom evidence of corruption was widely disseminated in the press and social media, were suspended from their positions while the investigations continue leading to their definitive removal. These changes on the national level bode well for justice in cases of environmental crime.

ILLEGAL GOLD MINING AND TRADE

Since the beginning of the COVID-19 pandemic in Peru and worldwide and gold prices have increased, and illegal gold miners remain active in Madre de Dios, while legal economic activities have been suspended. While there is illegal gold mining in Loreto and Ucayali, that proportion is quite small when compared to gold mining activity in Madre de Dios and neighboring areas of Puno and Cusco. There are now an estimated 10,000 informal or illegal gold miners in approximately 800 gold mining

⁷⁷ Urrunaga, 2019, p. 73.

operations in Madre de Dios, and an additional 20,000 people providing technical and commercial services to them.

While gold mining has been the mainstay of the economy in Madre De Dios since the 1980s, that region is a unique in that it is the last of Peru's departments to have been populated by non-indigenous people and linked to the national government and economy. Most of its population arrived after the gold rush that began in the 1980s. It is an area of unusually high levels of biological diversity, as well as cultural diversity. Five natural protected areas occupy more than 40 % of the department's territory. The Madre de Dios Native Federation (FENAMAD) represents settled and recognized indigenous peoples in 37 communities of which 28 have titles to their lands, while the Madre de Dios Territorial Reserve, 829,941 hectares formally protects bands of isolated indigenous peoples. The remaining 50% of the regional territory in Madre de Dios is in forestry concessions, agricultural lands, and the gold mining corridor.

The administrative bureaucracy, at both national and regional levels is focused on formalization of existing or purported rights to mining concessions for artisan and small-scale gold mining operations, while the prosecutors and the judiciary are chasing those responsible for actual illegal mining activities. There is insufficient attention to the marketing and export of illegally sourced gold, most of which crosses the border informally to Bolivia and is legally exported from there. Also, there are few effective controls on the acquisition and transport into Madre de Dios of the heavy equipment used in illegal gold mining (front end loaders, earth moving tractors, dredges, suction pumps, etc.), and little control of the mercury imported illegally from Bolivia to amalgamate the gold. Many informants believe that the capital used for the acquiring much this equipment and materials is laundered drug money. Nearly all of the gold transactions in Madre de Dios are in cash, outside the banking system.

Key respondents expressed exasperation with the level of illegality that pervades the sector and which is almost indiscernible from small-scale or artisanal miners. The current General Mining Law (TUO, DS 014-92-EM) was approved in 1991 and modified in 1992 to address conflicts with the Environmental Code (Legislative Decree No. 613) of 1990, in a manner that eliminated some of the environmental restrictions on mining activities. That mining law provided for mining concessions with property-like characteristics over 100-hectare plots, where long-term operations can be conducted in the same location over many years. This arrangement is reasonable for large-scale shaft or open pit mining is done in the highlands, but placer gold mining in tropical forest areas like Madre de Dios is highly mobile and long-term concessions are less appropriate. In Madre de Dios, most applicants only have claims (*petitorios*), not fully formalized concessions, none of which had been formalized as such before 2019. Even with processes in place to absorb informal small-scale or artisanal miners into a formalized system with minimum levels of environmental and social protection and regulation, respondents argued that the majority of the so-called artisanal and small-scale miners are essentially laborers with varying degrees of permanence working for bosses who may or may not hold titles but are linked to small-scale criminal networks. This is so, because many of the titular concession holders are not active gold miners but rather speculators in mining rights that allow them to collect rents from investors who organize the mining work, many of whom, in turn bring in *invitados* who do the actual mining work and contribute a portion of their production to the operators and/or concession holders.

The General Mining Law is a one-size-fits-all law, lumping large-scale underground or open pit mining in the highlands with placer gold mining in tropical forests like those in Madre de Dios, where gold mining activity is highly mobile, as runs of profitably minable gold are depleted and the miners move elsewhere. So, property-like concessions are unstable and miners work wherever they find gold, often outside their claims or in areas where mining claims are not permitted such as natural protected areas and their buffer zones. As the gold rush expanded in the 1980s with the discovery of gold in ancient

courses of the rivers under forest cover and an overburden of two or more meters depth, miners began using heavy earth moving equipment resulting in the progressive devastation of the landscape. Since the miners have no rights to the land itself or the forests they had cleared to get to the gold, they have no incentive to restore the areas mined for follow-on agricultural or forestry production. That situation was exacerbated in the years 2006-2011 with the opening to traffic of the Interoceanic Highway through the Madre de Dios mining corridor and access by highland migrants and for bringing in heavy equipment became easier.

The crackdown on illegal gold mining began in 2010, after Antonio Brack became Peru's first Minister of the Environment, with military interventions, initially to destroy illegal dredges used in gold mining in the principal rivers and streams where they undermine river banks with fruit bearing trees that provide the principal source of food for Amazon fish species. These interventions were continued by subsequent governments with variation in focus, but consistently involving the use of military force with bombing of the heavy equipment used in the illegal mining and with little dialogue. Dialogue with the gold miners is a challenge, since they are divided among rival organizations.

The center of gold mining by organized crime in Madre de Dios for more than a decade has been the area called La Pampa, within the buffer zone of the Tambopata National Reserve between the Reserve boundary and the Interoceanic Highway. Graphic descriptions of conditions in La Pampa are reported in a recent book by Gabriel Arriarán⁷⁸. La Pampa has been the target of Operation *Mercurio*, a coordinated intervention by Peruvian Government, involving the Ministry of the Environment and Ministry of the interior with prosecutors, the police, and military forces. which began in February of 2019 and continues to date. For as long as military forces are present, the criminal elements have dispersed to other areas of gold mining in Madre de Dios, Cusco and Puno and to urban areas, including Puerto Maldonado, as a result, deforestation in the immediate area has slowed, but not been eliminated. Meanwhile, illegal gold mining continues in neighboring gold mining areas.

WILDLIFE TRAFFICKING

Respondents noted the rise of the global coronavirus pandemic has brought attention to the dangers of zoonotic diseases spreading from trafficked wildlife, but were less optimistic about controlling it. Iquitos, in Loreto, is the center of the wildlife trade; there have long been traders in ornamental fish for aquariums there, as well as a wet market in the Belén neighborhood, where illegal bush meat is sold openly, as well as live animals. Wild pets are also available in Pucallpa and Puerto Maldonado. Police take illegal wildlife species that they confiscate to privately operated, but under-resourced animal shelters.

Wildlife traffickers have continued despite the temporary closures of airports and smuggling routes, with air transport the leading pathway for high-end, high-value live birds, reptiles, fish and mammals for purchase as exotic pets. While Asia, and China in particular, is considered the main consumer of these exotic pets, Mexico, USA, France and Germany have substantial numbers of airport seizures of trafficked exotic pets. The global illegal trade in wildlife is valued at US\$19 billion annually, the fourth largest illicit market after drugs, counterfeit currency, and human trafficking. In June 2020, a man was

⁷⁸ Arriarán, 2020.

arrested in India with live macaws and parrots from South America, smuggled through Bangladesh. Consumers of wildlife products such as leopard and jaguar teeth and bones have filled a demand for consumers who think they are purchasing tiger parts primarily in Asia. Many products are smuggled through other routes.

In Peru, from 2000 to 2018, more than 90,000 individual specimens were confiscated, according to the official database of the Forestry and Wildlife Service (SERFOR). Customs and border patrols are the main enforcement entity to prevent these illicit exports, but their main legal tool, CITES, limits the ability to legally enforce international regulations on wildlife trade because there are many species that CITES does not include, and even for those it includes, the permitting system is open to fraud, from reuse of permits to false permits. The majority of wildlife trafficked legally from Peru is suspected to fall in this category of fraud. In light of the coronavirus, the interest in closer regulation of wildlife trade has never been higher, globally. Peru's customs agents need significantly more support and collaboration to dismantle the networks facilitating legal trade of illegal wildlife and wildlife products. Political interest is not high.

Respondents argued that when highly prescriptive one-size-fits-all national legal norms and regulations are approved, they often fail to take into account the specific peculiarities of each region. Loreto has long had a wildlife exporting industry, including tropical ornamental fish and, previously, pelts and laboratory monkeys. Such activities, interlocutors argued, need to be regulated in terms suited to the reality of that region.

DYNAMICS

Complexity and division of responsibilities in monitoring/pursuing crimes is changing with increased international cooperation on preventing and pursuing environmental crimes in Peru.

The establishment of a specialized coordinating prosecutor who can orchestrate and share information among the specialized prosecutors for environmental matters, and financial intelligence unit, the ombudsman, regional government actors, SUNAT, and other investigative teams is an important step forward. Those prosecutors are real champions that take the jobs seriously and are committed to protecting the environment, but they are severely under-staffed and under-resourced and depend on regional authorities and the military or police for their logistical needs, while not all of those authorities are reliable. Those constraints are exacerbated by the COVID-19 state of emergency, which grants priority to public health and social services and to economic reactivation.

The knowledge of the crimes and connections is under the surface, the burden of proof is high and difficult to achieve, and prosecutions seldom stick because judges are constantly pressured or bribed to reject cases or lighten sentences. Moreover, enforcement is often directed at the “low hanging fruit” such as the indigenous community who did not file the paperwork correctly, the rural small-scale loggers who cut the wrong species. There is no concerted effort to distinguish between “organized crime” and routine violations of legal procedures, because, the crime networks are small and agile, not necessarily linked to singular bosses. It is not easy to charge them or apprehend them in forestry where the product is large and visible, let alone in illegal mining or trafficking in wildlife species or gold. The ones who get arrested are usually those hired to transport or traffic the goods. Seldom are these arrests traced back to prosecute the financial backers. Respondents explained that while there are links of these operators with human trafficking and narco-trafficking, not all criminal networks in forestry, goldmining, or wildlife trafficking is part of organized crime networks. The laws

and regulations both for artisanal and small-scale mining and small-scale forestry are so complex that seldom are small-scale operators (indigenous or other long-term rural residents) able to comply without subjecting themselves and their forests to agreements that favor third parties over local communities.

Platforms established to share information and communicate around issue of environmental crimes, while including international cooperation partners and UN agencies are making progress and PREVENT could play a key role in providing stronger coordination among national partners.

The lack of timely communication and among the dispersed and fragmented institutions having authority in these matters also establishes administrative cocoons, where creativity and broader vision and perspectives are stifled and sidelined, while the status quo in which illegality is easier and much more profitable gains the upper hand. An effective answer to this problem lies in incentives for more open and better coordinated governance in the forestry and mining sectors of both public administration and the economy. Implementing a career civil service at the regional level will help address these problems. PREVENT has begun to participate in these platforms and a commitment to existing processes will be a more efficient way to make headway on the many institutional weaknesses across the sectors that need coordination on environmental crime.

Transparency, accountability, and access to information are critical to the prevention of environmental crime and SERFOR has put some promising new regulations in place.

SERFOR's timid first steps to implement operations registries in the forest and at the sawmills as well as electronic forestry transport manifests (GTF) are moves in the right direction, if they are allowed and required to be applied everywhere. The removal of the SERFOR Director by the Minister of Agriculture and the President raises questions about the political will to make that happen. The delayed implementation of the US Forest Service and USAID-sponsored control modules for the forestry and wildlife information system (MCSNIFFS) has also allowed those who prefer to dodge the controls to do so.

One of the problems repeated by several respondents is that OSINFOR does not receive information on the concessions, management plans, and annual operating plans for timber concessions in a timely manner from the regional government authorities. By the time OSINFOR has the documentation months have gone by and the timber extraction and processing have proceeded without supervision, often covering up illegal or inappropriate timber cutting and processing. The regional government authorities respond that they lack the staff and resources to process this documentation timely. There is a clear need for more streamlined, transparent, and useful relay of information among the institutions involved.

Military operations have been somewhat effective in disrupting but not ending the interests in illegal mining in Madre de Dios. Respondents are aware of the complex social dynamics inherent in the networks supporting illegal mining operations.

Operation *Mercurio* has effectively disrupted the activity of the criminal organizations at La Pampa, but these activities continue in other locations of the region and violent crime has increased in Puerto Maldonado and the commercial towns of the mining corridor like Delta I, Boca Colorado, and Mazuko. Clearly, it will not be possible to sustain 1,400 soldiers in La Pampa for much longer. Informants from the Pukiri River area report that the bombing of heavy equipment in that area on October 29, 2019, has destroyed more than a dozen machines, including dump trucks, front end loaders, Bobcats, suction

pumps and dredges. However, the same miners returned with new equipment a week after the bombing. That situation leads to suspicion that organized crime is financing the heavy equipment and participating actively in the illegal gold production there.

The area where that intervention occurred includes the San José de Karene and Puerto Luz communities of Arakbut Indians, which have taken advantage of the COVID-19 crisis to expel the working gold miners from their community territories. Some, but not all, of the purported concession owners filed their claims prior to the exclusion of indigenous community territories from the mining corridor; that exclusion was not retroactive. Those territories are now closed to all outsiders, including gold miners who actually do the mining work but do not own the claims. The communities organized brigades to demand the miners' withdrawal and confiscate the mining equipment and deposit it with the police. Once the concession owners or operators are able to return to the area, violent confrontations with the communities are likely.

With the continued high price of gold and the explosion of illegality associated with pandemic, the difficulties in controlling the damage from mining or formalizing miners will persist. The incentives are completely misaligned for reducing mining. Unless the government is prepared to step in and offer financing and offers of higher prices for gold along with other benefits through a greatly simplified program of formalization, the prospects of reducing or controlling the expansion of gold mining will not succeed. Problem-solving will need to come from intensive efforts at the local level driving solutions.

CHAMPIONS AND SPOILERS

Civil society organizations and investigative journalists continue to play a critical role in helping to link the fragmented institutions and investigate and monitor and support environmental crimes. Where we do find successful initiatives to reduce deforestation and benefit local people, effective coordination between well-informed actors is often present, but it does not occur spontaneously, and is instead driven by political organizing over time by activists, local people, nongovernmental organizations, and international donors. Building on these existing relationships of organizations with long term interests is central to solving problems. Improvements in internet coverage and capacity in the regions will help expand the dissemination of information on environmental crime developed by such social media outlets as *Ojo Público*, *Mongabay LATAM*, *IDL Reporteros*, and *Insight Crime*.

The Specialized Prosecutors for Environmental Matters (FEMA) are doing impressive work given their very modest resources and the complexities, constraints and biases of the judicial system. They require more support for operational logistics, and they need additional training on technical and forensic aspects of their responsibilities, including the nature and options for bringing money laundering charges where they are appropriate.

The current Madre de Dios Regional Government is making serious effort to formalize artisanal and small-scale gold mining and address environmental issues. Similarly, improvements are noted in their administration of forestry and wildlife activities. They should be encouraged to continue and expand those efforts.

In Lima, the UIF is uncovering critical linkages in transnational environmental crime by following the money. They need additional support from prosecutors who could raise money laundering issues in association with environmental crimes when they present their charges.

Spoilers of reform efforts are many. They include some traditional politicians in the regional governments and also in some sectors of the central government, who are beholden to the lobbies of those who do illegal logging, illegal gold mining, and trafficking in wildlife species. Progress on preventing environmental crimes will require identifying modalities to get cooperation from those with interests in perpetuating the status quo. This process of changing behaviors and perceptions will take concerted effort from champions at all levels. There is a need to demonstrate that sound business strategies with long-term visions that respect the environment, labor, women, and indigenous peoples and include their interests in their business plans will work in the 21st Century.

KEY RECOMMENDATIONS

I. FOUNDATIONAL FACTORS

While the overlapping titles is a long-standing historical problem with political, cultural and economic reasons that block its resolution, there is an urgent need for multisectoral efforts to address the problem through the creation of comprehensive, integrated, and publicly accessible forest and mining cadasters that include all titles and rights holders. The principal obstacle to formalization of mining claims is the existence of land titles or forestry concessions in the same space. Similarly, the principal obstacle to the titling of indigenous community lands is that somebody else has obtained a timber concession over the same area. Often the holders of these titles are not producers of wood or gold, but drug traffickers or other illegal actors who use those titles for legal cover of their presence in the area. This is not a task contemplated in PREVENT's contract or theory of change, but somebody needs to address this critical need, and USAID would do well to take this problem into account in future program planning.

Political resistance to resolving problems of native community titles hinders progress in achieving many of Peru's obligations under national and international law. Recognition and genuine collaboration with indigenous communities is critical to political goals of social, cultural, and economic justice and to biodiversity conservation. Indigenous territorial recognition requires more government support for efficacious direct management of forests by the title holders. PREVENT should work with SERFOR and the regional government authorities to develop comprehensive support to small-scale logging in indigenous territories and simplify transparent private-sector oriented production of forest products along with investments in monitoring and capacity-building by joint government and civil society actors. Mining rights in indigenous territories need to be protected and reserved to the communities themselves, with training for community members on technology for mining gold with minimal environmental impact. Similarly, forestry authorities, including OSINFOR, need to work with indigenous communities and provide training on measuring and managing commercial wood production independently of the timber merchants that take advantage of them.

Resources and expertise are needed to prevent environmental crimes in Peru. PREVENT should work with regional government actors and civil society to ensure adequate resources, training, and communications that could improve transparency in resource governance and strengthen public understanding and perception of the problems of environmental crime.

2. RULES OF THE GAME

Political acknowledgement remains limited on the degree to which illegal gold mining, illegal timber extraction, and the marketing of gold, illegally harvested wood, and wildlife species are tied to

corruption of regional government officials with political ties and activities closely linked to organized criminal networks in areas that include drug trafficking, trafficking in persons, land trafficking, among others. PREVENT should push for multisectoral groups to identify practical steps that can be taken to improve coordination and communication and access to information through iterative and adaptive steps that can publicly address problems that respondents overwhelmingly pointed out as a major underlying cause of inaction: poor coordination and open communication of the problems.

Corruption at both regional and national levels is built on these environmental crimes due to the ease of administrative laundering of illegally sourced gold and wood. Political campaigns at the regional level are built on patronage relationships with criminal networks backing candidates in return for a blind eye to profitable illicit resource extraction. PREVENT should promote investigative journalism to measure the scope of the problem and support existing multi-sector platforms designed to coordinate communications and information on crimes across levels and prosecutorial mandates to publicize the scope of the problem in a fashion that engages youth.

Resources and capacity building are needed at multiple levels to enable better coordination on crimes. PREVENT can work with civil society organizations, and international cooperation partners to get government to invest in monitoring the supply chain for forestry and gold mining and to focus on the transnational aspects of timber, gold and wildlife trafficking through significantly increased investments in prosecutorial and judicial processes and expanded control of exports.

Civil society organizations and investigative journalists continue to play a critical role in helping to link the fragmented institutions and investigate and monitor and support environmental crimes. Where we do find successful initiatives to reduce deforestation and benefit local people, effective coordination between well-informed actors is often present, but it does not occur spontaneously; it is instead driven by political organizing over time by activists, local people, nongovernmental organizations, and international donors. PREVENT needs to keep building on the existing relationships with organizations with long term interests which is central to solving problems.

3. HERE AND NOW

The impact of the COVID-19 pandemic has seen rising gold prices and expansion of illegal mining. Changing the incentives around gold mining presents tremendous challenge, but increased enforcement and decreased barriers to legality can change human behavior. PREVENT will want to encourage building enforcement and support from bottom up and top down and filling in the middle with increased transparency, cooperation and coordination through civil society-government involved task forces that focus on putting environmental crimes on the map as “serious crimes” to ensure adequate attention and resources are paid to links with organized crime.

One huge obstacle to preventing environmental crimes is the segmented and stove-piped approach to regulating the forest and mining sectors. Encouraging transdisciplinary thinking, lateral coordination, autonomy of investigators to draw on government expertise and resources is necessary to dismantle criminal rings. Regional government staffs need to be trained to prevent and control environmental crime and to benefit from incentives to work across sectors efficiently and transparently. They also need protection from sanctions by corrupt superiors who are complicit in the crimes.

The Environmental Crimes Intelligence Unit contemplated in the PREVENT work plan should help with information sharing among the government agencies involved, at least at the national level. There is a risk, however, that actors within the government with ties to organized crime will block access to this unit of important information. It will be a challenge to overcome institutional jealousies and ensure

that the necessary information is effectively shared where it needs to be. PREVENT must work iteratively and adaptively to problem solve with champions and allies around these problems.

Similarly, the proposed National Policy Framework on Environmental Crimes is a laudable initiative to provide lateral movement needed across agencies and levels to solve crimes. While the framework needs to be put in place, ensuring that the existing loopholes on environmental crime prevention and enforcement are addressed within this framework is critical. PREVENT should also encourage partners to focus on adaptive and iterative actions through existing processes or platforms that may be more realistic and feasible in the time frame of the activity than a new policy framework but which may also provide feed learning into the new framework.

4. DYNAMICS

The coronavirus pandemic has been a crisis but it is also an opportunity to raise public awareness about both health risks and corruption. The economic stress of the pandemic has heightened attention to the gaps in funding to public institutions and the need to eradicate corruption. Public domestic campaigns on the dangers of zoonotic disease associated with the marketing and consumption of wildlife may amplify the understanding of the fraudulent documentation that drives wildlife exports from Peru and threatens biodiversity and health.

PREVENT should follow the same logic regarding public campaigns on the forest sector. A focus on domestic transparency in timber may be a way to change the dynamics and incentives around the transport of timber with fraudulent paperwork by increasing public understanding of the need for timber transparency and creating consumer demand to reject violence and crime associated with timber exports and build a model for practical functional digitization of a chain of custody.

The 2021 national elections cycle would be a good time to sponsor high-level public forums to raise public awareness around the need for prevention and control of environmental crimes and commit candidates to support measures to combat them.

Regional cooperation on transnational crimes is needed to protect biodiversity and forest habitats. The current debate around ratification of the Escazú Accord is an opportunity to provide accurate public information to counter the misinformation now coming from sector of the Congress and producers' organizations. That agreement will be an important support for new domestic legislation and policies, particularly related to money laundering and conditions that provide opportunities for environmental crimes. PREVENT should help build a domestic constituency demanding action, support, resources, and trained personnel.

Building partnerships at the regional level where regional government officials are open to championing engagement on environmental crimes, such as in Madre de Dios, is critical. Such partnerships will have to engage civil society, indigenous federations, and producers' organizations to be effective.

Finally, the knowledge and modalities already exist for Peru to begin to take action through an existing platform of UNODC, for example. PREVENT should support existing processes and build on the actions of the multisectoral approach to sharing information and communicating across agencies and within agencies to strengthen action on prevention of environmental crimes. An adaptive approach is needed to support a variety of responses at multiple levels.

SUMMARY OF KEY PEA FINDINGS AND RECOMMENDATIONS

Research findings are organized below under USAID's key analytical pillars, summarized below:

TABLE OF KEY FINDINGS AND RECOMMENDATIONS

FOUNDATIONAL FACTORS	RECOMMENDATIONS
<p>Disjointed land use planning resulting in the superimposition of titles is a major enabling factor in environmental crimes.</p>	<p>PREVENT should support and encourage multisectoral efforts to implement comprehensive and public access forest and mining cadasters that include all titles and rights holders.</p>
<p>Political resistance to resolving problems of native community titles hinders progress in achieving many of Peru’s state obligations under national and international law. Recognition and genuine collaboration with indigenous communities is critical to biodiversity conservation.</p>	<p>Indigenous territorial recognition requires a pivot of government toward support to indigenous communities for the management of their forests without the need to rely on outside interests. PREVENT should develop comprehensive support to small-scale logging in indigenous territories and simplify monitoring and capacity-building by joint government and civil society actors. Indigenous community territories need to be protected from outside mining rights, with cancellation of existing mining claims in them, as well as training and support to the communities themselves on techniques for low impact artisanal mining practices and restoration of affected areas.</p>
<p>Investigators, prosecutors, and supervisory bodies are under resourced and struggle to play their roles.</p>	<p>PREVENT should work with regional government actors and civil society to build adequate resources, training, and communications that could improve transparency in resource governance.</p>
RULES OF THE GAME	RECOMMENDATIONS
<p>Political acknowledgement of corruption remains limited for the degree to environmental crime is tied to political ties to organized criminal networks.</p>	<p>PREVENT should push for multisectoral groups to identify practical steps that can be taken to publicly address problems and build a domestic constituency for transparency is critical.</p>
<p>Corruption at both regional and national levels is built administrative laundering of dirty gold and illegal logs. Regional politicians are supported profitable illicit resource extraction.</p>	<p>PREVENT should promote investigative journalism to measure the scope of the problem and support existing multi-sector platforms designed to coordinate communications and information on crimes across levels and jurisdictions to engage youth and shape public opinion.</p>
<p>Resources and capacity building are needed at multiple levels to enable better coordination on crimes</p>	<p>PREVENT can work with other civil society organizations, international cooperation partners to invest in monitoring the transnational supply chains for forestry and gold mining</p>

	through significant increased investments in prosecutorial and judicial processes and expanded control of exports.
Civil society organizations and investigative journalists continue to play a critical role in information and communication.	PREVENT needs to keep building on these existing relationships of organizations with long term interests which is central to building a domestic constituency for transparency.
HERE AND NOW	RECOMMENDATIONS
The coronavirus pandemic and price spike for gold have spurred more goldmining presenting tremendous challenge.	PREVENT should focus on understanding the internal dynamics in goldmining to better understand the motivations of different actors within these communities.
Transparency lacks a political domestic constituency for preventing environmental crimes.	Task forces need to focus on putting environmental crimes on the map as “serious crimes” to ensure adequate attention and resources are paid to links with organized crime.
One huge obstacle to preventing environmental crimes is the segmented and stove-piped approach to regulating the forest and mining sectors.	Encouraging transdisciplinary thinking, lateral coordination, autonomy of investigators to draw on government expertise and resources to dismantle criminal rings.
The disarticulation of institutions and agencies cannot be simply solved by better coordination. There are complex political economies and interests in information not being shared and coordinated to counteract.	The Environmental Crimes Intelligence Unit contemplated in the PREVENT work plan should help with information sharing among the government agencies involved, at least at the national level. There is a risk, however, that important information will continue to be blocked from access to this unit by actors within the government who have ties to organized crime. It will be a challenge to overcome institutional jealousies and ensure that the necessary information is effectively shared where it needs to be.
The proposed National Policy Framework on Environmental Crimes is a laudable initiative to provide lateral movement needed across agencies and levels to solve crimes.	PREVENT should ensure that existing loopholes on environmental crime prevention and enforcement are addressed within this framework and encourage partners to focus on existing processes for feasible adaptive actions that fit the time frame of the activity.
SERFOR’s recent requirement for progressive implementation of operations registries in timber concessions and sawmills and digitized forest products transportation manifests provides an important opening for PREVENT support.	PREVENT could provide technical assistance and training to regional government agencies and to concessionaires and sawmill operators in the three regions, in coordination with SERFOR and OSINFOR to facilitate implementation of this requirement.

DYNAMICS	RECOMMENDATIONS
Public understanding of the problem remains unclear with regard to preventing environmental crimes, especially for wildlife trafficking.	PREVENT should partner with civil society to build public domestic campaigns on the dangers of zoonotic disease associated wildlife trafficking to strengthen understanding about the laundering drives wildlife exports from Peru.
The 2021 national elections campaigns provide an excellent opportunity for public debate on policies to prevent and control environmental crimes.	PREVENT should sponsor high-level public forums, preferable televised and/or with social media access to raise public awareness of the issues around illegal gold mining, illegal timber extraction and trafficking in wildlife species and commit candidate to policies for their prevention and control.
Protection of biodiversity is a low priority (wildlife and timber trafficking-case in point). Protection of markets is a higher priority (timber, gold) from the political perspective.	<p>A focus on domestic transparency in timber may also be a way to change the dynamics and incentives around the transport of timber with fraudulent paperwork and the public understanding around violence and crime associated with timber exports and create a model for practical functional digitization of a chain of custody.</p> <p>PREVENT should support a public information campaign support regional cooperation on transnational crimes to protect biodiversity with ratification of the Escazú Accord, and once ratified, building domestic support demanding action, resources, and trained personnel, and follow-up implementing legislation.</p>
Formalization of mining has failed to accommodate the heterogeneity of actors and interests in the sector.	PREVENT should build partnerships with regional and municipal government officials who are open to championing engagement on environmental crimes.
Recognition of regional cooperation in transnational crime prevention to protect biodiversity.	PREVENT should support existing processes like the UNODC platform and build on the actions of the multisectoral approach to sharing information and communicating across agencies and within agencies to strengthen action on prevention of environmental crimes. An adaptive approach is needed to support a variety of responses at multiple levels

CONCLUSIONS

This research used an applied political economy analysis framework to examine why despite the efforts of the GoP regarding environmental crimes in Peru's Amazon regions of Madre de Dios, Ucayali, and Loreto persist. Institutional coordination is a major problem deriving from deficiencies in the regulatory framework, weak management capacity, poor allocation of resources, lack of leadership from regional authorities, corruption and informality. Shared understanding of the territorial conflicts could be created with an integrated cadaster and a commitment to transparency that considers the international dimensions of environmental crimes encouraging collaboration with all viable partners while committing to focusing on building domestic constituencies for preventing and controlling environmental crimes.

Due partially to the incomplete decentralization process, regulatory and control presence and authority in the regions is low. With the transfer of forest and wildlife functions such as the management, handling, control and supervision of forest resources, forest product supervision is delayed. Regional government officials frequently serve the interests of the criminal networks allowing administrative laundering of products to cover illegal logging activity.

Coordination and sharing of information even within a given region are hampered by interests, some political, in maintaining control of extractive resource flows. Regional governments have little incentive to share information with central government institutions. Even among those fighting crime, information sharing is problematic. Moreover, budget allocations for tracking and supervising forestry and land use, or investigating possible crimes, are never adequate to carry out their work.

In the forest sector, forestry authorities have options and systems. Implementation of digitization of key documents to ensure traceability in the timber sector remains elusive partly because the impetus for traceability has been to enable Peru to access the export market and its demand for traceable timber. Building a domestic constituency for traceable timber is needed. Implementation of a traceability system is needed to guarantee legality, and phase out the generation of the illicit assets. Rather than trying to repair the existing MCSNIFFS that has lost credibility as a timber tracing tool, PREVENT could consider promoting problem solving in the domestic timber market with a simpler system and also support SERFOR's requirements for digitization of operations registries and forest products transportation manifests with training and technical assistance in coordination with SERFOR, OSINFOR, the Regional Government Management Units for Forestry and Wildlife, as well as producers organizations.

Digitization of transactions and permitting associated with gold mining is a critical step needed for PREVENT to advocate for shining the light on the money laundering and the loss of Peruvian export revenue that could be coming from gold. Digitization and transparency need simpler verification approaches not devised in Lima, but devised in the field that can work on e.g. cellular phones. Conflicting views need to be resolved about how to make it work better have to be pushed at the regional levels with indigenous organizations, civil society, and government stakeholders to solve problems together to take on the larger crime problems and resolve petty administrative fines and infractions not of criminal intent.

Efforts need to be made to level the playing field for indigenous communities to manage forestry operations and monitor and protect their territories. Expediting recognition of indigenous territories and land titling in process should be prioritized by the regional directions of agriculture over new forest concessions. Reversing or canceling concessions that have been granted within these territories should be a top priority. Supporting the surveillance of indigenous territories is a huge need for

safeguarding biodiversity, and some are already using sophisticated technology like GIS imagery and mapping, and surveillance with drones for early alerts. Some of the same tools can be used to detect environmental crime. Most indigenous communities and their organizations will be willing allies.

Gender and social inclusion are critical to creating opportunities to leverage change in cultural views through addressing environmental crimes. The heterogeneity of actors in the mining sector, in particular, indicate that women and vulnerable communities play active roles in monitoring their territories and potentially detecting and reporting on environmental crime. This is a dangerous matter, however, and indigenous communities need protection against environmental criminals to prevent the recurrence of situations like the assassination of four Asháninka leaders at Alto Tamaya-Saweto in Ucayali in 2015 and numerous cases of murders of indigenous territory defenders in Ucayali and Loreto in recent years.

The tasks to be assumed by PREVENT over the next four years are enormous challenges. We recommend devoting more attention to developing the domestic constituency for transparency initiatives that may prevent environmental crimes and to working with both local and national press outlets and social media to help disseminate information on environmental crime and demand effective responses from the appropriate government agencies. The producers' organizations (Forestry Chamber, CONAFOR, FEDEMÍN) need to be engaged and common ground found. In the short term, information campaigns around the Escazu Accord and during the 2021 national elections can raise public awareness and stimulate the domestic constituency. Additionally, early support to the regional government authorities, in coordination with SERFOR, to help implement the digitization of operations registries and forest product transportation manifests (GTF) would be an important step toward improving traceability of wood and transparency overall. Moreover, early support to the DREMEH in Madre de Dios to help improve mining formalization processes would help move that process along.

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