

High-Level Working Group on
Climate Change in the Caribbean

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Climate Change and Illicit Economic Activities



HIGH-LEVEL WORKING GROUP ON CLIMATE CHANGE IN THE CARIBBEAN

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INTRODUCTION

Illicit economic activities linked to the environment, also known as environmental crimes, represent a significant challenge to Caribbean countries and complicate their ability to address climate change. The Financial Action Task Force (FATF) notes, “The ‘low risk, high reward’ nature of environmental crime makes for a lucrative and safe source of revenue for criminals.”¹ There is an important international dimension that links environmental crimes in the Caribbean to a globalized system of corruption used by transnational criminal organizations (TCOs) and structured around large illegal flows of money. Advances in technology, such as digitalization and cryptocurrencies, have increased these linkages and augmented the anonymity of final beneficiaries.

For Caribbean countries with substantial forest coverage, environmental crimes are heavily focused on illegal logging, illicit gold mining, and wildlife trafficking. The risks posed by these activities encompass deforestation, land erosion, the destruction of local ecosystems, and the hindrance of global and regional efforts to advance sustainable development goals (SDGs), especially those related to conserving biodiversity and limiting climate change.² Illegal, unreported, and unregulated (IUU) fishing off Caribbean shores reduce what can be harvested from the sea, thereby diminishing local prospects for employment, food security, and economic diversification. The effects of these illicit economic activities can also seep into local financial systems due to the laundering of ill-gotten financial gains.

Environmental crimes can bear dire consequences for those who live in the Caribbean and the broader global ecosystem. To guarantee the Caribbean’s push for greater resiliency and sustainability, holistic responses are needed to address the root causes of environmental crimes. However, for many countries, the scope of illicit economic activity outweighs their enforcement capacity. Since the repercussions of these crimes pertain to the national interests of states in the wider international community, including the United States, the Caribbean can look to expand existing programmatic responses with international support. In this context, this paper will serve as the substance material for a continued dialogue between policymakers, business leaders, and scholars from both the Caribbean and the United States on a shared concern.

¹ Financial Action Task Force, Money Laundering from Environmental Crime, July 2021. <https://www.fatf-gafi.org/media/fatf/documents/reports/Money-Laundering-from-Environmental-Crime.pdf>.

² There are a total of 17 Sustainable Development Goals advanced by the United Nations. These include no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and strong institutions, and partnerships for the goals. <https://sdgs.un.org/goals>.

EXECUTIVE SUMMARY

This report is intended to inform policymakers, non-governmental actors, and the public of the broad scope of environmental crimes in the region and suggest substantive actions to curb these activities.

The Caribbean remains a unique and diverse environmental biome replete with valuable living and non-living resources in its waters, reefs, and forests. Central to this paper is the idea that transparent government regulation aided by responsible non-profit and private-sector organizations is the best way forward to protect these resources' future health.

Chapter 1 details who commit environmental crimes, where these crimes happen, and how much these activities are worth. This section makes an important observation differentiating between environmental criminals and actors who facilitate profitmaking through natural resource exploitation in regulated sectors. These actors consist of legal professionals, company formation agents, notaries, bankers, and accountants who help launder illicit funds through licit institutions. Though this paper points to the methods used to identify gatekeepers and the frameworks outlawing their activities, a considerable gap in the literature exists on the efficiency of enforcement efforts by regional and extra-regional institutions.

Chapters 2, 3, and 4 explore the specific dynamics of illicit activities concerning gold mining, logging, and wildlife poaching. These activities largely occur in terrestrial forests, far from government oversight capability. As such, Belize, Guyana, and Suriname represent the countries where the bulk of these activities are concentrated. TCOs and smaller-scale criminals take advantage of porous borders and a lack of government-to-government collaboration. In some instances, like the case of Venezuela for Guyana, neighboring countries willingly turn a blind eye to illicit economic activities. International collaboration between regional and extra-regional actors remains the best way to confront these activities on the ground because, ultimately, they carry environmental, human, and monetary costs for the world at large. Chapter 5 lays out the realities of IUU fishing, which affects the broadest spectrum of Caribbean countries. Similar enforcement capacity challenges exist for governments, but because this is a broadly shared challenge, regional collaboration is more widespread and robust.

Chapter 6 offers recommendations for policymakers and NGOs looking to curb the scope of these activities. Given the limited reach of individual governments, the theme of increased collaboration between regional and extra-regional actors remains. Though the U.S. can help extensively with respect to IUU fishing, on other fronts, it will be content to offer funds and know-how in a supporting role. National governments, intergovernmental organizations, and NGOs will have to pick up the pieces on illicit mining, logging, and wildlife exploitation. This section recognizes these conditions and offers policy recommendations with them in mind.

INDEX

Introduction	3
Executive Summary	4
Index	5
1. The Scope of Illicit Economic Activities in the Caribbean	6
2. Illicit Gold Mining	9
3. Illegal Logging	15
4. Wildlife Poaching	18
5. Illegal Fishing	20
7. Recommendations	24

1. The Scope of Illicit Economic Activities in the Caribbean

Illicit economic activities are well-entrenched in the Caribbean. Location plays an important role since the region sits between North and South America at a critical transit zone for trade entering and exiting the Panama Canal. The region is also connected to Europe and Africa by extensive airline and shipping networks. These

geographic characteristics have contributed to the Caribbean's role as a staging point for South American narcotics headed for North American and European markets. Other illicit activities conducted around the Caribbean's location include human trafficking, gun smuggling, and money laundering.³ The focus of this paper will be on illicit activities that are closely linked to climate change and include illicit gold mining, illegal logging, poaching, and IUU fishing.

Table 1: The Global Retail Value of Transnational Crime

Transnational Crime	Estimated Annual Value (USD \$)
Counterfeiting	\$923 billion to \$1.13 trillion
Drug Trafficking	\$426 billion to \$652 billion
Human Trafficking	\$150.2 billion
Illegal Logging	\$52 billion to \$157 billion
Illegal, Unreported, and Unregulated Fishing	\$15.5 billion to \$36.4 billion
Illegal Mining	\$12 billion to \$48 billion
Crude Oil Theft	\$5.2 billion to \$11.9 billion
Illegal Wildlife Trade	\$5 billion to \$23 billion
Small Arms & Light Weapons Trafficking	\$1.7 billion to \$3.5 billion
Trafficking in Cultural Property	\$1.2 billion to \$1.6 billion
Organ Trafficking	\$840 million to \$1.7 billion
Total	\$1.6 trillion to \$2.2 trillion

Source: Channing May, Transnational Crime and the Developing World, Global Financial Integrity, March 2017. https://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf.

The attraction of engaging in illicit economic activities is driven by the

considerable financial motives for large, well-organized TCOs and smaller

³ Another factor that has driven criminal activities in the Caribbean has been the breakdown of state function in Venezuela, especially since the 2014 collapse in oil prices. Venezuela's collapse has led to the illicit flow of goods across the region, especially to Trinidad, Aruba, and Curacao, as well as Hispaniola and Puerto Rico. Migrant outflows from Venezuela have added to the movement of people, with an estimated 6 million people fleeing the country. As of 2018, there were an estimated 98,500 Venezuelans living in the southern Caribbean, concentrated in Trinidad, Aruba, and Guyana. UNHCR, "Venezuela Situation:

Responding to the needs of people displaced from Venezuela, Supplementary Appeal January-December 2018". <https://reliefweb.int/report/colombia/venezuela-situation-responding-needs-people-displaced-venezuela-supplementary-appeal>. It should also be added that gang activity is present throughout the region, with Jamaica and Trinidad most hit by this. Haiti represents another problem of lawlessness and transnational crime in the Caribbean, partially due to the tenuous nature of central authority in the country and the power of the country's gangs.

operations. TCOs have found environmental crimes as another area to launder money. According to Global Financial Integrity, the retail value of global, transnational crime is estimated to be USD \$1.6 trillion to \$2.2 trillion. Environmental crimes such as illegal logging, illegal and unreported fishing, illegal mining, crude oil theft, and wildlife trafficking, total around \$275 billion annually in global transnational crime.⁴ There are no accessible estimates of the total costs of environmental crimes in the Caribbean, but the impact is evident in areas stripped of forestry cover, dying coral reef systems, and the risk of mercury poisoning in local communities and ecosystems. Additionally, environmental crimes result in tax revenue losses of millions of dollars for national governments.

Environmental crimes also amount to a major opportunity for corruption and money laundering. The link between environmental crime and financing is important since fraud helps move illicit natural resources into the legal supply chain. An example of this is when logging companies falsely inflate legal

timber quantities on transport permits in order to introduce illegally-logged timber, but then falsely deflate the total amount of timber ordered to be able to harvest more without scrutiny.⁵ Other significant mechanisms used to reduce transparency and disclosure include the use of complicated corporate structures, shell companies, and networks of front companies to combine legitimate and illegitimate funds, obscure supply chains, and conceal beneficial ownership.⁶

The network of illicit economic activities also encompasses what experts term “gatekeepers,” or the legal professionals, company formation agents, notaries, bankers, and accountants that enable corruption and criminal actors to facilitate the exploitation of natural resources. In the Caribbean, the web of illicit commodity trading, especially gold, has extended to Aruba, the Cayman Islands, and Curacao before reaching the United States, Europe, and the Middle East.⁷ While regional

⁴ Channing May, *Transnational Crime and the Developing World* (Washington, D.C.: Global Financial Integrity, 2017), xi.
<https://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational-Crime-final.pdf>.

⁵ For a comprehensive discussion of how to launder illegally logged wood, see: Christian Nellemann, editor, INTERPOL Environmental Crime Programme, *Green Carbon, Black Trade: A Rapid Response Assessment*, 2012.
https://www.researchgate.net/profile/Christian-Nellemann/publication/304215746_Green_carbon_black_trade_A_UNEP-INTERPOL_rapid_response_assessment/links/5769a4f608ae2d7145ba851b/Green-carbon-black-trade-A-UNEP-INTERPOL-rapid-response-assessment.pdf?origin=publication_detail.

According to the *World Bank's Illegal Logging, Fishing and Wildlife Trade: The Costs and How to Combat Them*, the annual cost of these three illegal activities is between \$1 and \$2 trillion, with more than 90 percent of the losses coming from ecosystem services that forests, wildlife and coastal resources provide.

⁶ Organization of American States, *Typologies and Red Flags Associated with Money Laundering from Illegal Mining in Latin America and the Caribbean*. February 2022.
<https://www.oas.org/en/sms/dtoc/docs/DOC-TYPOLOGIES-AND-RED-FLAGS-ILLEGAL-MINING-ENG.pdf>.

⁷ According to Katie Jones, “Caribbean islands like Curaçao and the Cayman Islands, as well as Aruba, have become convenient transit points for illicitly

authorities and organizations such as the Caribbean Financial Action Task Force (CFATF), Caribbean Development Bank (CDB), Inter-American Development Bank (IADB), and Organization of American States (OAS) have done much work to identify and curb money laundering throughout the region, it remains a challenge, especially in remote areas.

Caribbean jurisdictions are associated, often unfairly, with high levels of money laundering, even though most Caribbean jurisdictions have carved out a role in international finance that is largely legitimate. Despite considerable efforts to upgrade rules and regulations throughout the region, Caribbean nations face ongoing external pressure from the Organization for Economic Cooperation and Development (OECD) and the European Union (EU) to meet what is considered international, and some would argue Western, norms of financial behavior. The accusation has been a sore point for many Caribbean countries which point to the extensive money laundering that occurs in many advanced economies as well as the damage to local economies due to de-risking of European, U.S., and Canadian banks.

A 2017 UN Economic Commission for Latin America and the Caribbean (ECLAC) study provides further context for the challenges that Caribbean international financial centers (IFCs) face. The study points to the considerable effort needed to balance and manage multiple reporting interactions between: the three main global standard setters—the OECD, the Financial Action Task Force (FATF), and the International Monetary Fund (IMF); the main regional authority—the Eastern Caribbean Central Bank (ECCB); and individual governments—like the U.S. through its Foreign Account Tax Compliance Act (FATCA) and the U.K. through its Public Registry of Beneficial Ownership (PRBO). It found that “the problem in the countries of interest does not appear to be limited legislation or inadequate supervisory regimes, but transparency, based on the measures of the global rule-making bodies and developed nations, and proving compliance in a global system where compliance appears to be measured by enforcement numbers.”⁸ Thus, concerns over money laundering reflect the challenge related to environmental crimes in the region, in particular, the use of some local institutions to launder ill-gotten profits from

sourced gold, bound for the United States and elsewhere. Strategically located between gold-producing countries in South America and the lucrative gold markets in the United States and Europe, these islands serve as a practical through routes for aerial and maritime illicit gold shipments destined for foreign consumers. But there are other benefits. Perhaps most importantly, routing illicitly-sourced gold through an array of brokers and islands in the Caribbean provides smuggling networks with a means of disguising the metal's illicit origins.” US-

Curacao Gold Smuggling Highlights Strategic Caribbean Passage, *Insight Crime*, June 29, 2021. <https://insightcrime.org/news/us-curacao-gold-smuggling-highlights-strategic-caribbean-passage/>.

⁸ “An assessment of challenges to Caribbean offshore financial centres,” UN ECLAC. https://repositorio.cepal.org/bitstream/handle/11362/42726/1/LCCAR2017_19_en.pdf

illicit economic activities and the lack of public capacity to police such crimes.⁹

Efforts to contend with environmental crimes are international. The UN, G7, G20, and other international bodies have recognized the need to address environmental crimes and related criminal activities, including money laundering and corruption. Significantly, in December 2019, the UN General Assembly Resolution 74/177 of 18 called on all Member States to criminalize illicit trafficking of protected species of wild fauna and flora and other crimes that affect the environment (i.e., trafficking in timber, precious metals, stones, and other minerals) involving organized criminal groups as serious offenses. Technically speaking, this ruling criminalized the laundering of such crimes as well. Caribbean countries are ready participants in such international efforts, but the scope of crime outweighs regional enforcement capacity. Though there are sufficient regulatory frameworks in place to supervise and account for environmental crimes, robust enforcement funding on the extra-regional level remains the elusive thread missing from the equation.

2. Illicit Gold Mining

Global illicit mining is massive and estimated to have a value of between \$12 billion to \$48 billion. In Latin America and the Caribbean, TCOs are active in the illegal

mining of gold, silver, copper, coltan, iron, coal, emeralds, and uranium. For many cash-strapped countries, there is the hope that illicit mining and trade may help generate growth, sustain livelihoods, and foster local development. However, there is often also the reality that such activities contribute to serious human rights violations, conflict, and environmental degradation.

It should be noted that there are serious environmental risks even for larger legal mining companies. One of the worst mining disasters occurred in Brazil in 2019 when a tailings dam at the Vale-owned Córrego do Feijão iron mine broke, releasing a massive, deadly mudflow that killed 270 people. Guyana has seen its own share of environmental challenges with mining, the most infamous taking place in 1995 when Omai Gold Mines spilled more than 800 million gallons of cyanide-laced water from a holding pond into major river systems before the leak could be sealed. As one report noted, “At the peak of the spill, over a million gallons of toxic waste were released per hour into the Essequibo River and its tributary, the Omai River. Huge quantities of dead fish and a thick slick of waste on the rivers caused the Guyana government to prohibit the use of water for drinking and household use immediately after the spill. The fallout extended to the country’s export economy, since Barbados and Jamaica suspended imports of Guyanese fish and shrimp following the spill.”¹⁰

⁹ For a look into de-risking, see: Scott B. MacDonald, *Is There a “New Normal” for De-Risking in the Caribbean?*, Center for Strategic and International Studies, October 16, 2019. <https://www.csis.org/analysis/there-new-normal-de-risking-caribbean>.

¹⁰ “2020 State of the Artisanal and Small-Scale Mining Sector,” Delve. <https://delvedatabase.org/uploads/resources/Delve-2020-State-of-the-Sector-Report-0504.pdf>.

While large multinational companies are involved in legal gold mining, the world's largest mining force is represented by those working in what is called artisanal and small-scale mining (ASM). According to the World Bank, ASM is the primary source of employment for at least 44.75 million people across 80 countries worldwide. The same report notes that ASM mineral production accounts for 20 percent of the world's gold supply. In Suriname, it is estimated that over two-thirds of gold extraction come from ASM operations, with 30,000 to 40,000 illegal gold miners active in the country's interior, many of them from Brazil.¹¹ Guyana, too, has a similar problem. Due to the scale and more informal operations by ASM's, they are even more prone to environmental hazards and accidents than their legal, larger counterparts, who can afford more modern technology, machinery and enforced operating safety measures.

The illicit gold trade in the Caribbean is built around the natural wealth found in the Guiana tectonic plate, which stretches from Venezuela through Guyana, Suriname, and French Guyana on towards Brazil. According to the OAS, the combined

production of key South American gold producers in Colombia, Ecuador, Peru, Guyana, and Suriname (excluding Venezuela), place them as the second largest gold-producing region in the world.¹²

Guyana, Suriname, and French Guyana's illicit mining and trafficking in gold has been bolstered in recent years by external factors such as higher international prices and the breakdown of state control in neighboring Venezuela. Venezuela's Arco Minero, or Orinoco Mining Arc, is controlled by criminally inclined and armed Venezuelan syndicates and Colombian leftist groups (i.e., the National Liberation Army, Ejército de Liberación Nacional, ELN) that are reported to work with government acquiescence and, in some cases, government engagement.¹³ These illegal mining operations pose a significant threat to the surrounding environment and health of local populations. Communities must deal with harsh working conditions, the risk of mercury poisoning, poor sanitation, rising levels of diseases such as malaria, and higher levels of violence and prostitution.

Since most of the illicit mining conducted by ASM operations is undertaken in their

¹¹ <https://www.pactworld.org/state%20of%20asm>.

¹² "Illegal Mining," Organization of American States. <https://www.oas.org/en/sms/dtoc/prog-illegal-mining.asp>. Although illegal gold mining is a known, [critical component](#) of the Venezuelan economy under Nicolás Maduro, since 2019 the OAS has stopped recognizing his government meaning accurate statistics from inside the country are elusive. Pervasive corruption within the country also allows environmental criminals to use its borders as a haven and staging point.

¹³ https://www.hrw.org/news/2020/02/04/venezuela-violent-abuses-illegal-gold-mines?gclid=CjwKCAjwoduRBhA4EiwACL5RP4vPwDoTvKBAjYOUTjsiHA9ifSCiOtXEtSmwt3JK1BLv20sJSbzOWxoCjOMQAvD_BwE#. Also, see: Moises Rendon, *Illegal Mining in Venezuela: Death and Devastation in the Amazonas and Orinoco Regions*. Center for Strategic and International Studies, April 16, 2020. <https://www.csis.org/analysis/illegal-mining-venezuela-death-and-devastation-amazonas-and-orinoco-regions>.

states' remote, vast hinterland, government resources are stretched to meet the challenge. In the U.S. government's 2022 International Narcotics Control Strategy Report (INCSR), it was noted that "Drug traffickers [in Guyana] exploit the country's poorly monitored ports, remote airstrips, intricate river networks, porous land borders, and the permissive environment resulting from corruption and the under-resourced security sector."¹⁴ These assertions hold true for illicit gold mining as well.

The language in the 2022 INCSR is similar for Suriname, emphasizing the country's "sparsely populated coastal region and isolated jungle interior, compounded by weak border controls and a lack of infrastructure."¹⁵ With equal application to illicit mining, the INCSR also notes that: "The Government of Suriname is officially opposed to illicit drug trafficking, but its practical ability to apprehend and prosecute drug traffickers is inhibited by drug-related corruption, bureaucratic hurdles, and the lack of financial and material resources."¹⁶

Illicit gold mining and illegal logging tend to generate a higher degree of criminality. The

brutal nature of this was revealed in a study by the OAS:

In French Guyana and Suriname, extensive networks of forced labor have been found, along with child labor tied to domestic illegal gold markets. Sexual slavery is also commonplace in the illegal mining towns. Slaves in illegal mining regions are very often migrant workers or poor residents, working to pay off debt, or lured by promises of higher pay and benefits for their families and communities; many often do not return.¹⁷

In French Guyana, illegal gold mining has often been accompanied by violence as the authorities have sought to curtail illicit gold mining and the related risk of mercury poisoning. France outlawed the use of mercury in 2006 to reduce the risk of mercury poisoning. However, concerns remain that the estimated 8,000-9,000 illegal miners (many from neighboring Brazil and known as *garimpeiros*) will continue to cut down parts of the department's tropical woodlands and pollute the rivers.¹⁸ Over the past two decades, there have been clashes

¹⁴ "International Narcotics Control Strategy Report," Volume 1, United States Department of State Bureau of International Narcotics and Law Enforcement Affairs. <https://www.state.gov/wp-content/uploads/2022/03/22-00767-INCSR-2022-Vol-1.pdf>.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ "On the Trail of Illicit Gold Proceeds: Strengthening the Fight against Illegal Mining Finances." Organization of American States, Department of Transnational Organized Crime. November 2021.

<https://www.oas.org/en/sms/dtoc/docs/On-the-trail-of-illicit-gold-proceeds-Peru-case.pdf>.

¹⁸ "French Army Hunts Illegal Gold Miners Wrecking Amazon Region," France 24, November 18, 2021. <https://www.france24.com/en/live-news/20211118-french-army-hunts-illegal-gold-miners-wrecking-amazon-region>.

between French troops and illegal miners, some resulting in fatalities.

The greater Caribbean plays a role in the illicit gold trade. Guyana and Suriname function as both sources of illicitly mined gold and transit points for illicit Venezuelan gold. Island jurisdictions, such as Aruba, Curacao, and the Cayman Islands, function as smuggling points for illicit Venezuelan gold in transit to either the United States, UAE, Switzerland, or Turkey, with final buyers in China and India.

The process of illicit gold production is typically not environmentally friendly. The mines are often at secret locations in the interior, usually reachable only by boat or aircraft. When a suitable place is found, the surrounding rainforest is burnt and cleared, then hosed down with water to create a giant crater. The muddy waters are then run through sluices to screen out gold. Mercury is often used to separate gold from other elements. After gold is extracted, it is taken to nearby towns where it is melted down and bought as it becomes part of the global supply chain. Once in the global supply chain, it can be mixed in with other pieces of gold, making it difficult to ascertain its origin. After a mining site is exhausted, the land is left to form abandoned pits that accumulate water, becoming vector points for diseases such as malaria and dengue.

A problematic ecological issue tied to illicit mining is the use of mercury. Mercury is a

known toxic substance that has a detrimental effect on both the environment and human health. The U.S. Environmental Protection Agency (EPA) states, “Once [mercury is] deposited, certain microorganisms can change it into methylmercury, a highly toxic form that builds up in fish, shellfish and animals that eat fish. Most human exposure to mercury is from eating fish and shellfish contaminated by mercury, both in the United States and worldwide.”¹⁹ Extensive use of mercury in illicit gold mining can result in damage to the brain, heart, kidneys, lungs, and immune system, and high levels of exposure can lead to kidney failure, respiratory failure, and death.

Mercury pollution is a major issue in Guyana and Suriname and is overwhelmingly linked to illicit gold mining. According to PlanetGold, a program supported by the Global Environment Facility and led by the United Nations Industrial Development Organization, United Nations Development Program, and Conservation International, around 94 percent of all mercury emissions from Guyana originate from gold mining activities. While the Guyanese government has recognized that there is a problem with mercury poisoning among its indigenous population in the country’s interior, its response to the issue has lagged. In 2017, the World Wildlife Fund (WWF) collaborated with the South Rupununi District Council (SRDC) to test samples of hair from women in southern Guyana for mercury (Parabara, Aishalton, Karaudarnau, and Shulinab).²⁰

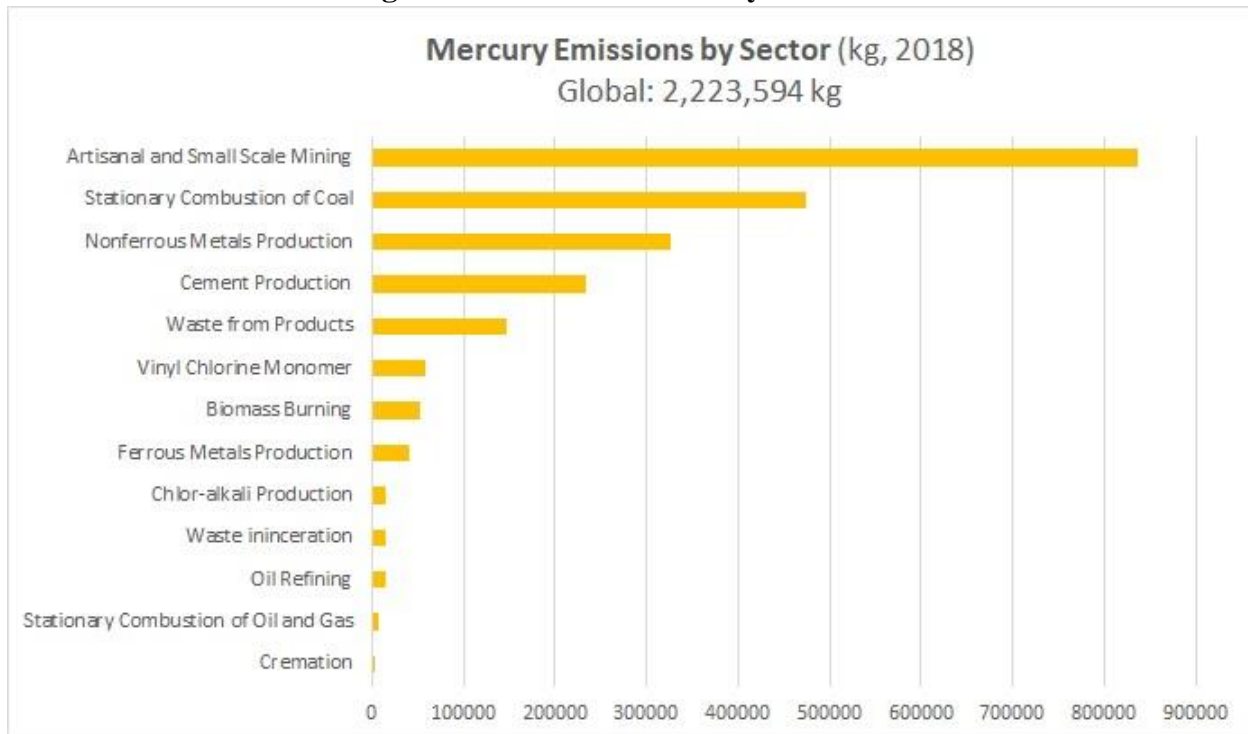
¹⁹ <https://www.epa.gov/international-cooperation/mercury-emissions-global-context>.

²⁰ “Parabara still in the dark on high mercury exposure,” Stabroek News, May 30, 2021. [https://www.stabroeknews.com/2021/05/30/news/gu-yana/parabara-still-in-the-dark-on-high-mercury-exposure/#:~:text=Illegal%20mining%20activities%](https://www.stabroeknews.com/2021/05/30/news/gu-yana/parabara-still-in-the-dark-on-high-mercury-exposure/#:~:text=Illegal%20mining%20activities%20)

The samples exhibited worryingly high levels of mercury, revealing the extent of mercury ingestion by indigenous communities. Another study in the Journal of Health and Pollution found that although gold mining activities in forested areas of Guyana have been a common practice for more than a century, the intensification of ASM in recent decades caused by greater global demand has contributed to the increased mobilization of mercury into aquatic systems.²¹

The study's conclusions also emphasized that indigenous populations who consume high levels of locally-sourced fish are at a greater risk of methylmercury poisoning, "Hair mercury levels were found to be above the World Health Organization (WHO) reference value for residents who live close to ASM activities and consume high quantities of locally sourced fish. Our results are not only consistent with those obtained in previous studies, but also evident that mercury poisoning has become a generalized problem for indigenous communities in Guyana."

Figure 1: Net Global Mercury Emissions



Source: U.S. E.P.A. <https://www.epa.gov/international-cooperation/mercury-emissions-global-context>.

[20were%20the,of%20the%20creeks%20and%20rivers.](#)

²¹ L. Cynthia Watson, Jorge L. Hurtado-Gonzales, Christopher Chin and Juliana Persaud, "Survey of Methylmercury Exposures and Risk Factors Among

Indigenous Communities in Guyana, South America," Journal of Health and Pollution, June 1, 2020. <https://meridian.allenpress.com/jhp/article/10/26/200604/445410/Survey-of-Methylmercury-Exposures-and-Risk-Factors>.

Guyana and Suriname have both recognized the need to deal with mercury poisoning since mercury remains a major pollutant in the hinterlands of both countries and negatively impacts the health and ecosystems of local populations. In 2013, Guyana signed the Minamata Convention on Mercury, a global treaty designed to reduce mercury emissions to protect human health and the environment. The convention is named after the bay in Japan where mercury-tainted industrial wastewater poisoned thousands of people in the mid-twentieth century and led to severe health damages,

later referred to as the “Minamata disease.”

The convention calls for a ban on new mercury mines, the phase-out of existing ones, the phase-out and phase-down of mercury use in a number of products and processes, control measures on emissions to air and releases to land and water, and the regulation of the informal sector of artisanal and small-scale gold mining. Guyana ratified the convention in 2014 and has committed to reducing mercury use to 75 percent of baseline levels by 2027.

Table 2: Caribbean Members of the Minamata Convention

Country	Year of Accession; Ratification
Antigua and Barbuda	09/23/2016
Bahamas	02/12/2020
Cuba	01/30/2018
Dominican Republic	10/10/2013; 03/20/2018
Guyana	010/10/2013; 09/24/2014
Jamaica	10/10/2013; 07/19/2017
Saint Kitts and Nevis	05/25/2017
Saint Lucia	01/23/2019
Suriname	08/02/2018

Source:

https://www.mercuryconvention.org/en/parties/profiles?field_geographical_region_value=Latin%20America%20and%20the%20Caribbean

While Guyana has ratified the Minamata Convention, Suriname and a number of other Caribbean countries have not done so. Considering the size and scope of Suriname’s illicit gold mining operations, the government’s failure to ratify the convention is seemingly striking but is understandable given that it delayed ratification until a road map to comply with the treaty’s commitments could be

developed.²² For other Caribbean countries, joining the convention is not as pressing, considering the lack of mining operations in their jurisdictions.

The OAS has been active in helping countries deal with illegal gold mining. The organization assists in strengthening the capacities of the national agencies mandated to fight the financings of illegal mining

²² “The Amazon Biome in the Face of Mercury Contamination,” World Wildlife Fund and Gaia Amazonas.

https://wwflac.awsassets.panda.org/downloads/report_eng_1.pdf

throughout the illicit gold mining's production chain. The program directly focuses on assisting Colombia, Ecuador, Peru, Guyana, and Suriname authorities. The OAS also provides assistance in dealing with illegal activities that range from the irregular importation of precursors and machinery to the commercialization of illegally extracted resources, including the laundering of profits that are used again in other illegal activities or expanding operations of illegal mining to other parts of the region. Mercury is an important focus of the program.

3. Illegal Logging

The Caribbean countries of Belize, Guyana, and Suriname contain some of the most extensive forest covers in the world as a percentage of land area. However, their forests are under pressure from illegal logging, which has an estimated global value of \$52 billion to \$157 billion annually.²³ Illegal logging has a well-defined supply chain—from harvesting and processing to transporting, buying, and selling—and is

conducted in a variety of manners similar to illicit gold mining. Organized criminal groups are known to make use of fraudulent salvage permits, misdeclare timber species (an issue with precious wood trafficking), bribe officials as escorts to navigate control points, forge official documents, and make retrospective issuance of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) permits.

While illegal logging and forestry crimes have emerged as a major problem around the world, it is primarily concentrated in rainforests in Central and South America (including Belize, Guyana, and Suriname); Central and Southern Africa; Southeast Asia; and parts of Eastern Europe. Illegally logged wood is also transported through these regions to destinations in East Asia, North America, and Western Europe. The U.S., European Union, and Australia have passed laws recently to prohibit importing illegally sourced and traded wood products. The world's largest importer of illegal timber is China, which lacks legislation on the matter.

Table 3: Forested Area as a Percent of Total Land Area

Country	1990	2000	2010	2015	2020
Belize	70.1%	64.0%	61.0%	58.4%	56.8%
Cuba	19.2%	22.7%	27.5%	30.6%	31.2%
Dominica	67.1%	63.8%	63.8%	63.8%	63.8%
Dominican Republic	33.0%	40.8%	42.9%	43.5%	44.4%
Haiti	13.9%	13.8%	13.7%	13.2%	12.6%
Guyana	94.5%	94.3	94.1%	93.8%	93.6%

²³ “Transnational Crime and the Developing World,” Global Financial Integrity. <https://www.gfintegrity.org/wp->

[content/uploads/2017/03/Transnational_Crime-final.pdf](https://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf).

Suriname	98.6%	98.3%	98.1%	97.8%	97.4%
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Source: World Bank. <https://data.worldbank.org/indicator/AG.LND.FRST.ZS?locations=SR-GY-HT-DO-CU-DM-BZ-1W>.

The world's forests are one of the most significant forces in countering climate change; however, only one-tenth of primary forest cover remains on the globe. Heavy demand for wood products has driven deforestation, especially in tropical woodland areas. Deforestation is a huge concern since forests promote biodiversity, generate water supplies, assist in the discovery of new pharmaceuticals, recycle nutrients for agriculture, and act as flood prevention. Forests are central to the transition toward a green economy for sustainable development. Illegal logging threatens this balance since it exacerbates land-use change by giving value to standing trees that are otherwise illegal to harvest. Likewise, illegally logged timber increases timber supply and depresses prices, which has an overall negative effect since lower prices can make conservation less profitable and more difficult.²⁴

Beyond the ecological drawbacks of forest mismanagement and deforestation, the World Bank estimates that governments lose between \$6 billion to \$9 billion globally in annual tax revenue from illegal logging.²⁵ Illegal logging operations have also been known to engage in violent methods, including murder, threats, and atrocities against indigenous peoples.

Belize, Guyana, and Suriname are the most heavily involved in illegal logging and trafficking in the Caribbean. All three countries have extensive forest coverage, and Guyana and Suriname both contain forests that are a part of the Amazon biome. As a result of their tropical climates, all three house precious woods, which are rarer types of wood (i.e., rosewood, mahogany, and sandalwood) in heavy demand. Unfortunately, these natural resources have attracted criminal organizations willing to cross borders to extract timber coveted in international markets, and this has been a problem in Belize, where timber traffickers have crossed into the country from Guatemala.

Enforcement in each case remains complicated due to the fact criminal organizations generally do not observe boundaries, but especially so in the Belizean case—given the history of border disputes between Belize and Guatemala.

Caribbean countries have realized that illegal logging is an issue and have committed to maintaining their forests. Some countries, such as Dominica, the Dominican Republic, and Cuba, have worked to regrow their forestry cover and

²⁴ Brent Sohngen, "Chapter 3. Forest Management and Trade for Forest Products," in Inter-American Development Bank's Latin America and Caribbean Forests in the 2020s: Trends, Challenges and Opportunities. <https://publications.iadb.org/publications/english/document/Latin-American-and-Caribbean-Forests-in-the-2020s-Trends-Challenges-and-Opportunities.pdf>, 139.

²⁵ Benoit Blarel, "The Real Costs of Illegal Logging, Fishing and Wildlife Trade: \$1 trillion - \$2 trillion Per Year," World Bank Blogs, October 29, 2019. <https://blogs.worldbank.org/voices/real-costs-illegal-logging-fishing-and-wildlife-trade-1-trillion-2-trillion-year>.

have benefited from government support in these efforts.

Guyana is notable for its efforts to promote sound forest management, a policy assisted by a 2009 agreement between the Caribbean country and Norway (which has been active in green initiatives in the developing world). The five-year deal, since extended, was built around Norway agreeing to pay \$250 million for Guyana's performance on limiting future greenhouse gas emissions from deforestation and forest degradation, as well as progress made on government-related indicators. The government used the money for projects in areas such as renewable energy, green tourism, biodiversity, strengthening of indigenous mechanisms, and facilitation of Guyana's involvement in the European Union's Forest Law Enforcement Governance and Trade Voluntary Partnership Agreement (a legally binding trade agreement between the EU and timber-producing nations outside the regional organization's borders).

Suriname developed a nationally determined contribution under the Paris Agreement for 2020-2030. The country has committed to maintaining 93 percent of its forest cover and is working to implement a national REDD+ (Reducing Emissions from Deforestation and Forest Degradation) strategy.²⁶ Several of the challenges faced in Suriname include limited resources, environmental fragility, the high cost of transportation and energy, and vulnerability

to impacts from climate change and natural disasters. Suriname's project focuses on securing equitable management of protected and productive landscapes through integrated approaches that deliver mutually supportive conservation and sustainable livelihood benefits.

²⁶ The United Nations REDD Programme is a collaborative program of the Food and Agriculture Organizations. It was established in 2008 and has 65

partner countries. Belize, Guyana and Suriname are members.

4. Wildlife Poaching



Photo: Two Scarlet Macaws chicks sit in their nest in the cavity of a quamwood tree in Belize's Chiquibul Forest. Source: Camilla Cerea / Audubon.

Wildlife poaching constitutes a destruction of the general environment and is driven by demand for exotic animals or animal parts. The global annual value of the wildlife trade is estimated between \$5 billion to \$23 billion.²⁷

Suriname and Guyana are the most active in exporting large numbers of legal wildlife. Export quotas for Suriname in 2016 included 3,600 orange-winged Amazon parrots, 100

scarlet macaws, 1866 dyeing dart frogs, 1,010 boa constrictors, and 1,000 squirrel monkeys. Conservation International Suriname noted the challenge of legal export of wildlife: “Legal export often facilitates wildlife trafficking. Other threats to wildlife in Suriname are bush meat consumption, sports hunting, and habitat destruction and degradation due to logging and gold mining activities.”²⁸ Conservation International

²⁷ “Transnational Crime and the Developing World,” Global Financial Integrity. <https://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational-Crime-final.pdf>.

²⁸ “Suriname’s Priority Species,” National Wildlife Management Improvement Program, Conservation International. <https://www.conservation.org/docs/default->

Suriname's list of priority species for enhanced preservation efforts includes jaguars, ocelots, pumas, tapirs, giant otters, black spider monkeys, and blue-cheeked Amazon parrots.

Jaguars are particularly threatened by wildlife trafficking. These large cats are indigenous to the southwestern U.S., Central America, and South America, and have confronted numerous complications ranging from migration difficulty to human-wildlife conflict and habitat destruction. They are classified as a near-threatened species.

Traditionally, jaguar fangs, skulls, and hides were considered trophies and held religious value in Latin America and the Caribbean. In recent years, however, a trafficking route has emerged to China, where jaguar parts are used in traditional Chinese medicine to ease arthritis pain, enhance general health, and increase sexual potency.^{29,30} Demand for the product comes from the local Chinese population in Suriname and abroad. There are concerns that as demand for jaguar parts increases, their populations in the Americas, including those in Belize, Guyana, and Suriname, will fall further.

Poaching actions are reported to occur predominantly around logging operations, mining sites, and within close range to farming areas in the interior. These activities reduce and intrude onto jaguar and other animal habitats, increasing human-jaguar

interactions and granting greater access to hunters with new roads.

[source/miscellaneous/wildlife-program-factsheets-revised-21102020.pdf?sfvrsn=2dec980f_0.](https://www.nature.com/articles/d41586-018-02314-5)

²⁹ [https://www.nature.com/articles/d41586-018-02314-5.](https://www.nature.com/articles/d41586-018-02314-5)

³⁰ [https://crimesciencejournal.biomedcentral.com/tracking/pdf/10.1186/s40163-019-0101-4.pdf.](https://crimesciencejournal.biomedcentral.com/tracking/pdf/10.1186/s40163-019-0101-4.pdf)

5. Illegal Fishing



Photo: A vessel from the Dominican Republic was interdicted in the Bahamas for illegal fishing in a joint operation between the Royal Bahamas Defence Force (RBDF) and U.S. Coast Guard in September 2020. Source: RBDF.

It is estimated that global, annual illegal and unreported marine fishing generates between \$15.5 billion to \$36 billion in illicit profits. These figures represent 14 to 33 percent of global marine capture value.³¹ Illegal fishing is an especially important issue for the Caribbean since it is largely a

group of island nations where fishing is a way of life, critical to local diets, and a sought-after tourist activity.

In the Caribbean, IUU fishing is largely conducted by small-scale, local fishers. Deep Water Fleets (DWFs)—a highly

³¹ “Transnational Crime and the Developing World,” Global Financial Integrity. <https://www.gfintegrity.org/wp->

[content/uploads/2017/03/Transnational_Crime-final.pdf](https://www.gfintegrity.org/wp-content/uploads/2017/03/Transnational_Crime-final.pdf).

problematic issue in the Pacific waters off Ecuador and Peru or parts of the Indian Ocean—are not a major factor. Nonetheless, the Caribbean is clearly overfished. According to the Food and Agriculture Organization (FAO), IUU fishing represents between 20 and 30 percent of legitimate landings of fish in the Western Central Atlantic region, with an estimated value of \$700 to \$930 million a year.³² The FAO study noted that “The high demand for fish, the substantial economic benefits derived from IUU fishing, the Exclusive Economic Zones (EEZs) of many Caribbean states and inadequate monitoring, control and surveillance (MCS) systems make the region particularly vulnerable to IUU fishing.”

Overfishing has left many Caribbean countries “fish dependent,” with IUU fishing significantly impacting regional fishing stocks and food security. In Belize, fish stocks have declined due to illegal foreign commercial fishers from neighboring countries. In Belize, fish stocks have shown a decline due to illegal foreign commercial fishers from neighboring countries.

Although Belize has designated marine protected areas, Belizean monitoring is inadequate for fishing groups from Honduras and Guatemala.³³ This is a problem throughout the Caribbean. As one report noted, “...as local fishers’ catches have decreased because of overfishing from IUU actors, the Dominican Republic has had to increase imports of fish and seafood to meet domestic consumption demands, and Jamaica has had to limit queen conch allowable catch quotas to make up for overfishing by IUU actors.”³⁴

IUU fishing in the Caribbean is detrimental to regional food security and is also marked by violence. For example, the waters between Guyana, Suriname, and Venezuela have a long history of attacks on local fishermen by “pirates,” with a major recent incident occurring in 2018 off the coast of Suriname that left more than 12 Guyanese fishermen dead. The attackers were armed with guns and cutlasses and brutally beat the fishermen before robbing the ship.³⁵ Guyanese media later reported that the attack was related to a turf war between

³² Food and Agriculture Organization of the United Nations, Workshop on Illegal, Unreported and Unregulated Fishing in the Caribbean. 2019. <https://www.fao.org/3/ca4790en/CA4790EN.pdf>.

³³ Daniela Tello Toral, “Challenges in Marine Fisheries in Latin America and the Caribbean: Illegal, Unreported and Unregulated Fishing Practices Leads to Overfishing. Florida International University. 2021. <https://digitalcommons.fiu.edu/srhreports/iuufishing/iuufishing/96/>.

³⁴ Margarita R. Seminario, “Development Solutions to Address Illegal, Unreported, and Unregulated Fishing in Latin America and the Caribbean,” Center for Strategic & International Studies, July 19, 2021.

<https://www.csis.org/analysis/development-solutions-address-illegal-unreported-and-unregulated-fishing-latin-america-and#:~:text=IUU%20fishing%20in%20the%20Caribbean,fundamental%20part%20of%20their%20economies>.

³⁵ “Piracy Attack that Killed 12 Guyanese Linked to Turf War – Inquiry,” Stabroek News, February 21, 2020. <https://www.stabroeknews.com/2020/02/21/news/guyana/piracy-attack-that-killed-12-guyanese-linked-to-turf-war-inquiry/#:~:text=On%20April%2027th%2C%202018%2C%20four,the%20fishermen%20before%20robbing%20them>

different fishing groups. Another major attack was reported in 2021, when Guyanese fishermen were attacked and robbed of food, fuel, cellular phones, and around \$100,000 in fish.³⁶ Fishermen in the waters around Trinidad, notably the Gulf of Paria separating the island and Venezuela, Belize, St. Lucia, and St. Vincent also experience periodic pirate attacks.

Considering the size and scope of IUU fishing, regional governments have formed organizations to tackle the issue, such as the Caribbean Regional Fisheries Mechanism (CRFM), which is part of the Caribbean Community (CARICOM). The Belize-headquartered organization defines its mission as: “To promote and facilitate the responsible utilization of the region’s fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region.”³⁷ The CRFM’s responsibilities also include the Castries Declaration, which recognized IUU fishing as a problem and pledged to deal with it on a regional basis, and the Caribbean Community Common Fisheries Policy, which holds countries accountable for pursuing anti-IUU fishing practices.

Another body established by Caribbean countries to deal with IUU fishing is the Western Central Atlantic Fishery

Commission (WCAFC), which is part of the FAO. The WCAFC has a membership that includes the independent countries of CARICOM as well as Brazil, Colombia, Costa Rica, Cuba, the Dominican Republic, European Union, France, Guatemala, Guinea, Honduras, Japan, Mexico, Netherlands, Nicaragua, Republic of Korea, Spain, United Kingdom, United States, and Venezuela. Its mission is to “promote the effective conservation, management and development of the living marine resources of the area of competence of the Commission, in accordance with the FAO Code of Conduct for Responsible Fisheries, and address common problems of fisheries management and development faced by members of the Commission.”³⁸

Cooperation between the Caribbean and Norway has also played a role in dealing with IUU fishing. The European country launched the Blue Justice Initiative in 2019 in support of the Copenhagen Declaration. Both the Blue Justice Initiative and the Copenhagen Declaration provide a non-binding international framework for cooperation to prevent, combat, and eliminate transnational crime in the global fishing industry.

Belize has been one of the Caribbean countries most active in dealing with IUU

³⁶ “Guyanese Fishermen Robbed in Alleged Piracy Attack”, News Guyana, March 13, 2021. <https://www.inewsguyana.com/guyanese-fishermen-robbed-in-alleged-piracy-attack/>.

³⁷ The CRFM was inaugurated in 2003; has three bodies (the ministerial Council, the Caribbean Fisheries Forum and CRFM Secretariat); and has a membership of the following countries: Anguilla, Antigua and Barbuda, The Bahamas, Barbados,

Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the Turks and Caicos Islands. https://www.crfm.int/index.php?option=com_k2&view=item&layout=item&id=1.

³⁸ “Western Central Atlantic Fishery Commission,” UN FAO. <https://www.fao.org/wcafc/about/en/>.

fishing regulations. It signed an agreement with Oceana and Global Fishing Watch (GFW) to make Belizean vessel tracking data publicly available on the GFW platform. The significance of the agreement was announced by Oceana as a “victory for transparency” due to “Oceana’s collaboration with the government to enhance its monitoring capacity of Belizean-flagged fishing vessels on the high seas and the waters of other countries.”³⁹ Belize had originally provided a “flag of convenience” that allowed non-local fishermen to create an industrial fleet. This development led to an economic penalty by the European Union in 2012 and 2013 that banned Belizean exports to the EU, which prompted regulatory changes in Belize.⁴⁰

Caribbean countries are actively engaged with the IUU fishing challenge. However, a number of issues hinder more effective policing, such as a lack of naval capacity for many countries in patrolling their own waters and a lack of maritime domain awareness. This dynamic is complicated by the ill-defined nature of maritime borders and related EEZs. Center for Strategic and International Studies (CSIS) analyst Margarita Seminario highlighted the political realities of enforcement in the region, “Even where the enforcement capacity exists, governments may feel it is not politically expedient to enforce measures due to corruption or special interests from

the fishing industry. Finally, cooperation is hindered simply by the tension between countries aggravated with their neighbors’ fleets fishing illegally in their waters.”

Regional organizations and governments must do considerable work to deal with IUU fishing in the Caribbean. Although the tensions of overfishing and EEZs have not reached the levels that sometimes occur in European waters, there is a level of friction between some countries on the matter.

Within territorial waters, there is also a related issue of coral reef degradation. Coral reefs are a particularly valuable part of the marine ecosystem because they act as nurseries for younger fish, providing sources of and protection from predators until the fish have matured. Coral reef degradation occurs due to local and global human activities. On the local level, overfishing, destructive fishing practices (dynamite, uncontrolled use of spear guns, fish traps, and grill-nets) as well as coastal construction, erosion, careless tourism, sewage discharge, and coral mining threaten the continued viability of specific sites.⁴¹ Though significant, the danger of these illicit and unregulated activities is small relative compared to the looming threat of rising ocean temperatures and acidification

³⁹ “CEO Note: Belize makes strides for transparent oceans,” Oceana.org. <https://oceana.org/blog/ceo-note-belize-makes-strides-transparent-oceans/>.

⁴⁰ Among the changes in Belizean fishing regulations was the adoption and revision of the High Seas Fishing Act of 2013 and the creation of

the Belize High Seas Fisheries Unit to manage and control the country’s high-seas fishing fleet.

⁴¹ “Coral Reefs,” Research Station Carmabi. <http://www.researchstationcarmabi.org/research-station-carmabi/ecosystems/coral-reefs/>

stemming from greenhouse gas emissions, which threaten more widespread effects.⁴²

6. RECOMMENDATIONS

For both Caribbean and U.S. governments it is of critical importance to continue to look for solutions to illicit activities necessary to provide prudent stewardship of local ecosystems. A continued, collaborative partnership is essential in tackling other challenges related to poverty reduction, climate mitigation and adaptation, and other key aspects of sustainable development. The following recommendations seek to benefit stakeholders in both areas.

General Policy Options

- Increased use of technological advancements in all aspects of environmental crime would be a solid investment for countries in the region. Local governments can look to rely on programmatic and technical assistance from internationalist initiatives like the UN Office on Drugs and Crime, Interpol, the OAS Department Against Transnational Crime, and Interpol. Additionally, environmental NGOs offer another route to assistance, notable actors in the region include the Environmental Investigation Agency, The Nature Conservancy, World Wildlife Fund, Conservation International, and Instituto Escolhas. In tackling the flow of illicit trade in gold and wood, it is important to strengthen traceability systems. This goal can be accomplished by enhancing export document requirements to help ensure the legal origin of gold and timber from the point of gold mining and timber harvest to export. This would make a difference for countries such as Belize, Guyana, and Suriname, which have considerable hinterlands, porous borders, and limited resources.
- Caricom's Implementing Agency for Crime and Security (IMPACS) should add an environmental crimes program to their list of frameworks. IMPACS currently runs ten major programs, but none concern the environment—a critical area for tourism, the blue economy, and food security. The new program should rely on NGOs like the Basel Institute of Governance to contribute funding, know-how, and technology to develop environmental enforcement programs and units. In addition, CARICOM should ascertain whether the EU, the U.S., and Canada would contribute to such a program since each have prioritized sustainable environment and climate policy.

⁴² For more on the relative levels of danger the world's coral reefs face, see: "Comparative Analysis of the Risks Faced by the World's Coral Reefs," UNAM-The Nature Conservancy.

<https://reefresilience.org/wp-content/uploads/Comparative-analysis-of-risks-faced-by-the-worlds-coral-reefs.pdf>

- For all areas of environmental crimes, national governments need to improve the timeliness, application, and publication of effective sanctions and other deterrents for all actors involved in these activities and associated actions. Countries should review their criminal statutes to ensure that they have up-to-date criminal laws covering environmental crimes and that they increase the penalties, especially the financial penalties for wrongdoing.
- Civil society and environmental NGOs, in particular, have an important role to play in the investigation and exposure of apparent illegal conduct and in persuading prosecutors to act. Environmental NGOs work with data analytics and customs and trade documentation review. Using their data and resources, environmental NGOs can assist law enforcement agencies and prosecutors to investigate and prosecute illegal gold, timber, and wildlife trade. The deepening of regional collaborative networks can further these efforts.
- Financing of enforcement efforts continues to be an issue throughout the Caribbean due to fiscal stresses related to the COVID-19 pandemic. One potential option to scale up funding is using public-private partnerships to tackle the illegal natural resource trade, especially in areas with substantial IUU fishing and illegal logging. The U.S. Development Finance Corporation (DFC) represents a pertinent example and operates in Belize, Dominica, the Dominican Republic, Guyana, Haiti, St. Lucia, St. Vincent and the Grenadines, and Suriname. Countries should look to the DFC's commitment to invest 33 percent of its overall commitments on climate-linked projects beginning in FY 2023 as an opportunity to expand collaboration.
- Local communities, notably indigenous peoples, must be at the center of the design and implementation of solutions to share the benefits from managing natural assets and combating illegal activities. Increased engagement between indigenous groups and external organizations can help maintain local habitats in a healthy and equitable fashion. This includes activities such as pursuing legal action, mapping territories, developing community-based visions and plans for the management and sustainable development of sensitive areas, and strengthening the resilience of communities.
- The international community needs to adopt rigorous screening methods with respect to global supply chains, specifically in gold and timber. Adopting national strategies for dealing with illegal activities across supply chains will be paramount.
- Greater urgency and action by international financial organizations to collaborate with local governments to go after trade-based fraud, shell and front companies, as well as gatekeepers that play a significant role in the facilitation and laundering of environmental crimes. If international organizations want to see less money laundering, they need commit greater conditional resources in personnel, know-how, and funding toward collaborating and supporting regional government enforcement capabilities.

Illicit Logging

- Transparency and disclosure are highly important in combating illegal logging. Other measures to be taken in the timber sector include implementing electronic timber tracking systems; enhancing transparency in the enforcement of forestry laws by posting online

public forest operating plans, inspection reports, and sanctioning resolutions; and improving the timing of post-harvest inspections so that authorities can detect illegally harvested timber before export.

- The U.S. and Caribbean countries should consider adding an Environment Chapter and Forest Annex to any new trade agreements going forward. Currently, the U.S. has trade preferences with most of the Caribbean, not Free Trade Agreements. Thought should be given to structuring an FTA between the Caribbean and the United States with a similar structure as the U.S.-Peru Free Trade Agreement (PFTA). The PFTA has an environment chapter and forest annex. The latter requires Peru to conduct audits of specific timber producers and exports upon request from the U.S. and verify specific shipments of wood products from Peru. Moreover, the PFTA has an illustrative list of actions the U.S. may take with respect to the shipment or entity that is the subject of the verification—which was the case in 2017 with a U.S. Trade Representative that denied entry of timber products and exports by Inversiones Oroza, a Peruvian company that could not verify that the shipment subject to investigation under the PTPA complied with all applicable Peruvian laws and regulations. The United States-Mexico-Canada Agreement (USMCA) also has an environment chapter that includes the control of environmentally hazardous or toxic chemicals, substances, materials, or wastes as well as “the protection or conservation of wild flora or fauna, including endangered species, their habitat, and specially protected natural areas.”⁴³

IUU Fishing

- In tackling the challenge of IUU fishing there are a number of options. Technical assistance, both for port inspection measures as well as at-sea enforcement, can be provided by the United States. Most governments in the region want to deal with IUU perpetrators but simply lack the capacity to do so. Specific measures should include trainings for port inspectors and customs officials, the transparent construction of port infrastructure with better weighing and tracking capabilities, and naval funding to promote policing and deterrence. On an international level, the FAO's Fisheries and Aquaculture Capacity Building Programme focuses largely on Deep Water Fleet (DWF) vessels; it should be expanded to engage with small-scale fleets, which are the main perpetrators of IUU fishing in much of the Caribbean.
- Caribbean countries should look to emulate the "Americas for the Protection of the Ocean" coalition, announced at the IX Summit of the Americas.⁴⁴ The coalition comprises of nine countries who agreed to establish a network of ecologically interconnected marine protected areas (MPAs) along the Pacific coast of the Americas, from Alaska to Patagonia. The framework enlarges existing conservation projects in the

⁴³ https://ustr.gov/sites/default/files/IssueAreas/Environment/USMCA_Environment_Chapter_24.pdf.

⁴⁴ <https://www.dfo-mpo.gc.ca/oceans/collaboration/declaration-eng.html>

region, including the Eastern Tropical Pacific Marine Corridor (CMAR)—an initiative declared by Panama, Ecuador, Colombia, and Costa Rica in 2004 to establish a fishing-free network of interconnected national MPAs—protecting more than 500,000 kilometers of sensitive habitats. In addition, it has a coordination mechanism that will be administered by two countries every two years, starting with Chile and Canada, and followed by other countries of the coalition in alphabetical order. The goal is to coordinate actions between countries to contribute to the protection and sustainability of ecosystems, as well as improve governance in marine protected areas.