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IUU Fishing Crimes in Latin America and the Caribbean

By American University Center for Latin American & Latino Studies and InSight Crime

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Executive Summary

This report details the causes, consequences, and responses to IUU fishing crimes in nine countries of Latin America and the Caribbean: Argentina, Chile, Costa Rica, Ecuador, Guyana, Jamaica, Panama, Suriname, and Uruguay. Our analysis draws on academic research; press reports; interviews with fishers, experts and government officials conducted in 2021 and 2022; and comments by participants in off-the-record workshops hosted virtually at American University.

The report first details the adverse consequences of IUU fishing in Latin America and the Caribbean, including its direct and indirect economic costs, environmental consequences, contributions to food insecurity and potential conflict.

The second section analyzes the scope of crimes associated with IUU fishing in the nine countries, describing three distinct dynamics of IUU fishing at work in the hemisphere.

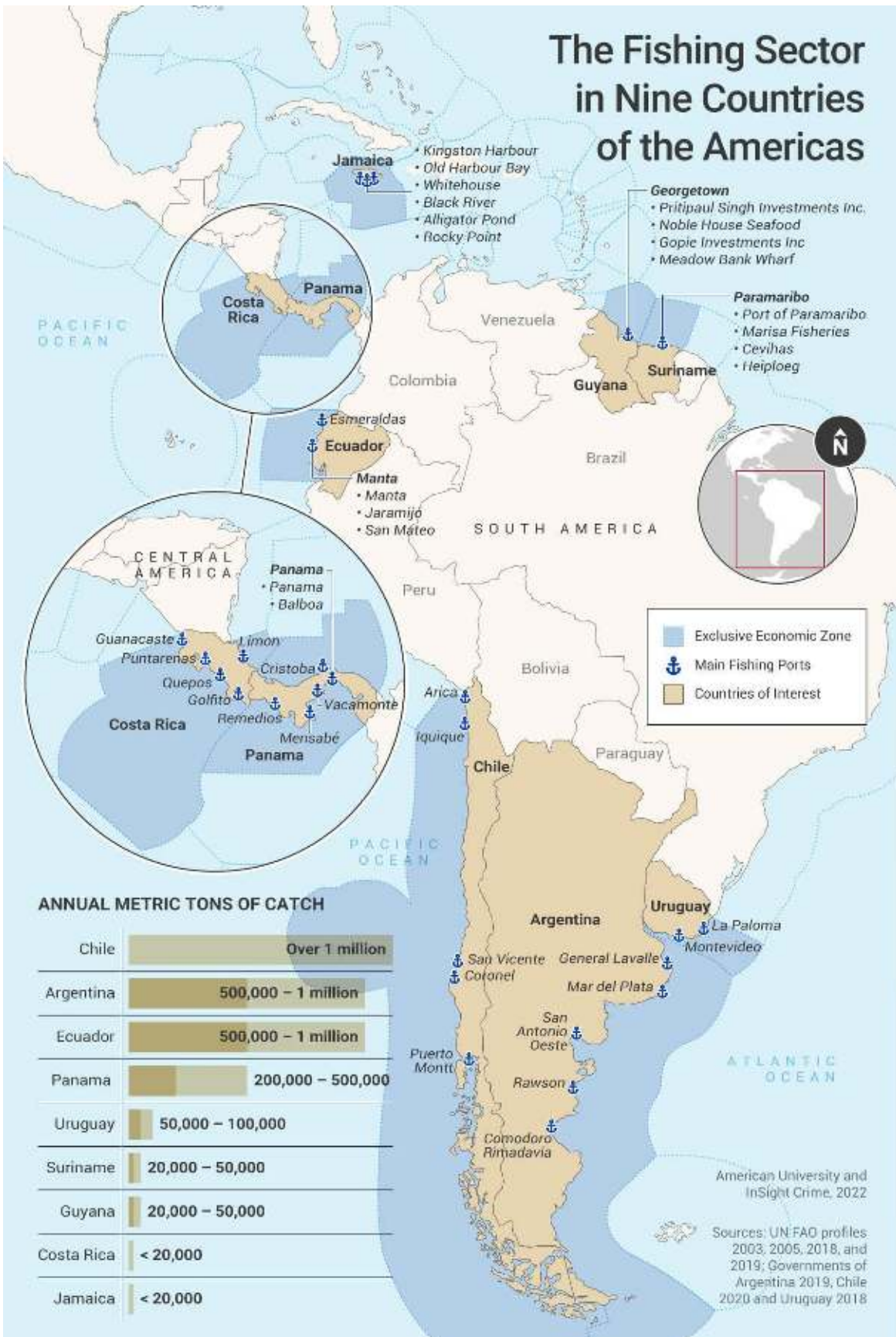
The third section analyzes the legislative sources of the weak government response to IUU fishing in the nine countries of Latin America and the Caribbean, discussing the gaps in existing legislation, patchwork international agreements, and a web of bilateral agreements with a variety of international actors.

The fourth section evaluates the considerable variation in three significant measures of regional law enforcement capacity: physical capacity, surveillance capabilities, and prosecutorial-judicial capacity.

Finally, the report concludes by recommending areas in which policies against IUU fishing could be strengthened to deter fishing-related crime across Latin America and the Caribbean. These include efforts to:

- Build regulatory, legislative, and law enforcement capacity
- Build whole of government networks
- Establish more effective controls over transshipment
- Assess and control ports
- Increase beneficial ownership and Flag State transparency
- Ensure that all fishers bear fishing's true economic cost
- Target high offenders
- Expand and safeguard protected zones

The Fishing Sector in Nine Countries of the Americas



After Asia and Africa, South America is the region that suffers the biggest losses globally due to IUU fishing.

The Adverse Consequences of IUU Fishing

Illegal, unreported, and unregulated (IUU) fishing, particularly by malign foreign actors, poses a potentially enduring threat to the security and well-being of the Western Hemisphere. IUU fishing threatens national economic well-being, harms delicate and globally interwoven fishery ecosystems, endangers local food security, impinges on national sovereignty, and is closely associated with a number of transnational criminal activities, including labor abuses, drug smuggling, and corruption.

The **direct adverse economic consequences** of IUU fishing are multiple, including tax revenue losses for governments, declining revenues for legal fishers, and loss of livelihood and even food security for artisanal fishers and fishing communities. Estimates of the cost of IUU fishing in South America suggest economic losses as high as US\$2.3 billion, income losses as high as \$600 million, and tax revenue losses of as much as \$500 million.¹ Together, these figures suggest that, after Asia and Africa, South America is the region that suffers the biggest losses globally due to IUU fishing.²

- In Jamaica, one of the nations that has already seen dramatic declines in local catch due to the confluence of IUU fishing with a number of other environmental stressors, interviews repeatedly pointed to the decline in conch populations. In an effort to recover depleting stocks, Jamaica has set a quota on how much queen conch can be caught to make up for overfishing by IUU fishers.³ These quotas impose a direct economic cost on local Jamaican fishers.⁴
- Many of the malign actors present in the region are subsidized by their home governments, allowing them to fish offshore for extended periods, with larger scale and more efficient equipment that enable large catches that undermine the viability of fishing as a livelihood for local fishers. Evidence from Panama, for example, suggests that because these foreign vessels do not put into the ports of the fisheries they exploit, the regulations that are imposed on fishing in those jurisdictions disproportionately fall on local fishers. Rising industrial scale fishing has driven increased regulatory oversight of quotas and fishing practices, but this burden falls most heavily on local artisanal fishers.⁵
- Similarly, in Argentina, IUU fishing has a relevant impact on Argentina's fishing industry, which is the country's fifth largest export.⁶ Argentina's squid fisheries have been illegally depredated by fishing vessels that "go dark," turning off their tracking beacons near national waters so as to illicitly fish inside Argentina's Exclusive Economic Zone (EEZ).⁷ Further, it is difficult for Argentine fishers to compete with subsidized foreign fleets, whose ships may have operating costs only half as high as their Argentinian counterparts, given that they do not comply with health or navigation standards.⁸

In the nine countries covered by this report, estimates suggest that between 8 and 15% of the annual catch is lost to IUU fishing, accounting for as much as 815,000

tons of seafood harvested irregularly or illegally each year.⁹ One result is food insecurity, which falls particularly heavily on fishing communities with few alternative livelihoods and nutritional sources: in Jamaica, for example, overexploitation of fish stocks has meant that the country is almost entirely dependent on imported fish for domestic consumption.¹⁰



There are also multiple **indirect economic costs** to IUU fishing. Secondary effects may include the loss of local fishing or fish-related industries, such as ship provisioning services or tourism.

- One workshop participant noted that in Uruguay, the decline in the domestic fishing fleet has contributed directly to the government’s willingness to open up the port of Montevideo to foreign vessels.
- Workshop participants from the Caribbean and Ecuador, also separately warned that it will be impossible to attract tourists to swim or scuba dive with turtles, sharks, or reef fish, if they have been devastated by IUU fishing in tandem with other stressors, such as global warming and ocean acidification.

The **environmental consequences** are also devastating, including overharvesting, declining stocks, collapse of fisheries, movement of fishing activity to deeper and deeper waters, illegal practices that overkill protected populations and cause “incidental” losses to other sea life or devastate local ecosystems, and the harvesting of spawning or juvenile populations at times that harm precarious populations.

The incentives for illicit fishing are heavily skewed toward immediate predation, with little concern for the long-term economic impacts and environmental costs of overfishing.

The incentives for illicit fishing are heavily skewed toward immediate predation, with little concern for the long-term economic impacts and environmental costs of overfishing. IUU fishing harms the ability of national authorities to effectively plan fishery sustainability programs.¹¹ Illegal fishing vessels are unconcerned with damaging and unsustainable practices such as deep sea netting, bottom trawling, or the harvest of by-catch. In fragile marine ecosystems – 93% of major marine fish stocks worldwide are “fully exploited, overexploited, or significantly depleted”¹² – such practices may be devastating.

- In Guyana, failure to implement bycatch provisions such as turtle excluding devices may have led to the accidental death of protected species, such as sea turtles.¹³
- Experts from a variety of countries, including Suriname, Costa Rica, and Ecuador, noted how the practice of shark finning, often characterized as “incidental” catch, has led to a decline in the size of average sharks caught.
- One workshop participant noted that lower-skilled, low capital fishers in Chile have taken to harvesting seaweed for export, with all the attendant consequences in terms of unsustainable ecosystem destruction.
- In several countries, such as Guyana, authorities told of “ghost traps” made of non-degradable nets that remain at sea where they trap and kill fish for extended periods.¹⁴
- Costa Rica has seen extensive use of illegal fishing methods, such as dynamiting. Such methods in the Gulf of Nicoya, for example, have led to a reduction in snapper and corvina populations, leaving little for those who rely on fishing to feed themselves. The high capture volumes made possible by illegal methods allow illegal fishers to sell their loads at prices which undercut legal fishers.¹⁵
- Another issue is underreporting, coupled with the lack of data about fishing and marine habitats in Costa Rica’s EEZ, which make it difficult for lawmakers and regulators to plan rational stock management strategies.¹⁶
- Reports from Panama suggest fishing is taking place during spawning season, and that the capture of juveniles has shifted patterns of reproduction and regeneration.¹⁷
- IUU fishing in Ecuador is having a major effect on the sustainability of the Galapagos Islands, a fragile and biodiverse ecosystem that is already at risk due to high numbers of tourists putting pressure on the geography of the island and polluting the area. IUU fishing is also leading to food insecurity in Ecuador as food chains are upset.¹⁸ These changes are exacerbated by overfishing, climate change, and pollution (including from a recent oil spill) which are leading to the depletion of resources.

Organized Crimes and Impacts Associated with IUU Fishing



- Discard of unwanted incidental catches is prohibited in Argentina by federal fishing law, yet the government finds it difficult to enforce this prohibition even within its own waters. The damage is multiplied due to the fact foreign ships are not subject to enforcement. Trawler boats, after collecting large amounts of unwanted fish or locating more valuable new catch, dispose of dead or dying fish in the ocean, depleting stocks unnecessarily.¹⁹
- Uruguay has seen IUU fishing of protected species, of spawning and juvenile fish, and the use of prohibited practices, such as bottom trawling, that have enormous impacts on marine ecosystems.²⁰

There are also the consequences of IUU fishing in terms of **food insecurity, as well as potential conflict over fisheries**. In the nine countries covered by this report, estimates suggest that between 8 and 15% of the annual catch is directly lost to IUU fishing, accounting for as much as 815,000 tons of seafood harvested irregularly or illegally each year.²¹ One result is food insecurity, which falls particularly heavily on fishing communities with few alternative livelihoods and nutritional sources.

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Particularly pernicious is the combined economic and environmental cycle of overfishing: as stocks decline, catch becomes more valuable; and as catch becomes more valuable, overfishing and illegal fishing become more likely.

- In Jamaica, overexploitation of fish stocks has meant that the country – where seafood has an important role in culinary traditions – is almost entirely dependent on imported fish for domestic consumption.²²
- In Ecuador, artisanal fishers complain that they no longer have viable stocks to fish because they must venture out too far for catch, where they must compete with more efficient industrial fleets.
- Depleted seafood stocks in Jamaican waters have also pushed local fishers into deeper waters, where there is a risk of collision with IUU fishers from around Central American and Caribbean who are searching for diminishing sources of conch and lobster.
- In Uruguay, a \$200 million project for construction of a Chinese port facility led to widespread demonstrations by citizens concerned with the threat the port posed to the marine ecosystem. The public uproar forced the incumbent government to reverse course and withdraw from the agreement.²³

A final issue is that IUU fishing is often closely associated with a variety of crimes, as the next section describes. In light of these many adverse consequences, it is not surprising that the commandant of the U.S. Coast Guard has argued that “IUU fishing has replaced piracy as the leading global maritime security threat.”²⁴

The scope of crimes associated with IUU fishing activities in Latin America and the Caribbean

A number of crimes are associated with IUU fishing activities. Some are directly related to the fisheries supply chain, such as environmental crimes, document fraud, corruption, tax evasion, forced labor, illicit trade, or food fraud. Other crimes not directly related to fishing — which we refer to here as “crimes associated with IUU fishing” — may be committed by fishers and fishing vessels.²⁵ The fishing industry has long been known for ties to human trafficking, especially forced labor by migrant workers in abusive conditions, with abuses such as exorbitant recruitment and repatriation fees, onerous and unsafe living and working conditions, and verbal and mental abuse.²⁶ The United Nations Food and Agriculture Organization (FAO) notes IUU fishing’s connection to trafficking of narcotics, weapons and people, all of which may be transported by under-policed fishing fleets.²⁷ Criminal actors involved in IUU fishing often commit economic crimes such as money laundering, fraud, forgery, tax evasion, and corruption.²⁸ In most cases, given the realities of the fishing industry and shipboard life, these crimes will be “organized crime,” understood as crimes committed by a structured group of three or more persons.²⁹

There is ample evidence of organized fishing crimes committed in the nine countries analyzed for this report. Before turning to the features of specific countries, however, it is worth recognizing that at least three broad but distinct sets of dynamics are typically present across the hemisphere, each involving distinct actors and regulatory issues.

1. The first set of dynamics relates to littoral, artisanal fishers, often from marginalized populations, operating in coastal waters. Their behavior may vary significantly depending on the regulatory environment, but by virtue of their small scale, their catch often falls in the unreported or unregulated category. By virtue of their marginal economic situation, fishers in this population may individually engage in practices, such as seaweed harvesting, pursuit of endangered species, or off-season fishing, that are small-scale but can be quite damaging in the aggregate. By virtue of their maritime skills and equipment, these populations may also be witting or unwitting accomplices to a variety of coastal crimes, such as smuggling of contraband, fuel, or narcotics.³⁰
2. The second set of dynamics relates to domestic industrial fishers operating within national EEZ boundaries. In some cases, particularly in South America, these domestic industrial fishing fleets may not be all that different from foreign fleets in the same waters, engaging in sophisticated fishing practices using modern equipment. They will compete for resources between the coastline and the outer limits of the EEZ. The major difference is that they are likely to come under national regulation, especially as they offload catch in home ports. IUU fishing in this segment is likely to include more “sophisticated” crimes than in the first segment, such as misreporting of catch, food and document fraud.
3. The third set of dynamics relates to international distant water fleets operating offshore, often at the border of national EEZs. These fleets are in practice largely unpoliced, with loose supervision by either their flag state or their port state while they are offshore. They may use flags of convenience that lessen the regulatory burden they face. They may benefit from significant government subsidies³¹ and may engage in practices such as transshipment to reefer ships that permit them to remain at sea for years on end. Fishing-related crimes in this segment may include misreporting catch, upgrading (dumping less valuable stored catch in favor of newer, more valuable catch), failure to abide by local laws, fishing in protected areas, fishing within the EEZ, exceeding quotas, etc. Distant water fishing fleets introduce a host of issues, such as flags of convenience, ownership transparency, and other aspects of international law, that greatly complicate any single national government’s ability to police IUU fishing.

With these dynamics in mind, let us turn to each of the countries in turn.

The dynamics of IUU fishing-related crimes vary by the location of these crimes.

IUU fishing is conducted by domestic artisanal fishers operating without permits, as well as “large scale illegal harvesting of high-value species” by foreign vessels.

Jamaica

Jamaica suffers from the effects of a largely unregulated domestic artisanal fishing fleet, as well as incursions by fishing vessels from nearby countries such as the Dominican Republic and Honduras.³² IUU fishing is conducted by domestic artisanal fishers operating without permits,³³ as well as “large scale illegal harvesting of high-value species” by foreign vessels, including species such as queen conch, spiny lobster, and, increasingly, sea cucumbers.³⁴

As in other countries of the Caribbean, one of the most significant challenges in Jamaica is the combination of poor regulation and very sparse data collection. At present, conch and lobsters are the only two regulated species, but even with these species, monitoring, control and surveillance capacity is insufficient to serve as a significant deterrent.³⁵ As an archipelagic nation, Jamaica has a marine space 24 times larger than its landmass, which makes it difficult to monitor (Table 1).

Crimes associated with IUU fishing in Jamaica may include cash sales of fish in ports that contribute to evasion and laundering.³⁶ Human trafficking for forced labor has been observed on board some foreign vessels operating in Jamaican waters.³⁷ In one 2012 case, twenty minors were found working on a Honduran vessel illegally fishing, and in another case in 2018, undocumented Nicaraguans were found working on a ship in Jamaican waters.³⁸ Other crimes, not directly related to fishing, have also been reported. Jamaica’s geographic position, large maritime domain, and craggy coastline have made it a transit point for drugs and weapons on their way to and from South America and North America and Europe.³⁹ For example, fishing canoes have been found transporting marijuana to Haiti from Jamaica, where it is traded for illegal weapons.⁴⁰ Skilled Jamaican crews are in demand for smuggling of guns, cocaine, marijuana, and other contraband throughout the Caribbean.⁴¹

[Read more:](#) “Jamaica: Overharvesting and Poaching Devastate Fisheries”

Table 1: Ratio of EEZ to Land Mass

| | EEZ Area (in square km) | Land mass (in square km) | EEZ/Land Mass Ratio |
|------------|----------------------------|-----------------------------|------------------------|
| Jamaica | 263,284 | 10,830 | 24.3 |
| Costa Rica | 572,131 | 51,060 | 11.2 |
| Chile | 3,648,534 | 743,532 | 4.9 |
| Panama | 330,783 | 74,177 | 4.5 |
| Ecuador | 1,072,097 | 248,360 | 4.3 |
| Suriname | 127,817 | 156,000 | 0.8 |
| Uruguay | 133,014 | 175,020 | 0.8 |
| Guyana | 140,369 | 196,850 | 0.7 |
| Argentina | 1,082,467 | 2,736,690 | 0.4 |

Source: Sea Around Us database (<https://www.seararoundus.org/data/#/eez>) for EEZ data; World Bank (<https://data.worldbank.org/indicator/AG.LND.TOTL.K2>) for land mass data.

Guyana

IUU fishing in Guyana hews most closely to the first set of dynamics described in the introduction, related to artisanal fishers, but in part this may be because there is little national data available on fishing further offshore. Recent satellite data shows moderate volumes of larger vessels fishing along the boundary of the EEZs of Guyana, Suriname, French Guiana and Brazil, and foreign vessels are present both within Guyanese waters and outside its EEZ, including vessels from Venezuela, Suriname, China, the United States and the Dominican Republic.⁴²

Within its domestic waters, Guyana suffers from significant IUU fishing, impacting populations of finfish, red snapper, prawns, seabob, whitebelly and tuna.⁴³ However, Guyana does not have the resources to fully patrol its waters, and licensing of domestic fishers is non-systematic. A lack of data and poor data collection methods means that there are few reliable national estimates of the number of vessels engaged in fishing, legally or otherwise.⁴⁴ To a considerable extent, Guyana relies on private vessels to spot suspected illegal fishing and floating fish factories further offshore.

Among the crimes noted by sources in Guyana are poaching and piracy.⁴⁵ In 2018 Suriname convicted nine Guyanese men for the murder of twelve rival fishers in Suriname's waters, in an apparent dispute over fishing locales, sentencing them to imprisonment varying from five to 35 years.⁴⁶ Guyana also has issues with drug trafficking, especially to Europe and North America. Guyanese fishing vessels have been found to engage in "mothership" operations to offload drugs offshore,⁴⁷ and the country is an important transit point for Colombian cocaine, which often finds its way to seaborne routes.⁴⁸ For example, in 2017 four Guyanese fishers were arrested for smuggling 4.2 tons of cocaine on a fishing boat heading north of Suriname.⁴⁹

[Read more:](#) "Guyana: Struggling to Tame Lawless Waters"

Suriname

Suriname suffers from a similar dynamic as Guyana, albeit with a more regulated domestic fleet and a fairly strong consensus between fishers and authorities on the importance of preserving access to foreign markets – particularly in the EU – through effective regulation. It also has foreign industrial fishing vessels offshore, both from its regional neighbors and from Asia and Europe. As one workshop participant noted, by dint of the large number of colonial links between Europe and the Caribbean, as with French Guiana, Caribbean fishing grounds serve as a release valve for European governments to ease pressures on their own fishing industry.

Over the years Japan has established two fisheries centers and provided substantial financial and material donations to Suriname. In return Suriname has supported Japan's commercial whaling interests in such forums as the International Whaling Commission (IWC) which it joined in 2004 (although Japan left the IWC in 2019).

Guyana does not have the resources to fully patrol its waters, and licensing of domestic fishers is non-systematic.

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Suriname also has a bilateral agreement with Venezuela whereby Venezuelan boats are permitted via a fish processing company in Suriname.⁵⁰

Although licensing is more controlled in Suriname than the other two Caribbean nations covered in this report, sources point to a number of pervasive problems, such as the renting out of fishing licenses to foreign actors and the landing of Surinamese catch in Guyana.⁵¹ The majority of fishers in Suriname have fishing licenses and registered boat numbers, but sources note that these licenses are often copied and recopied. Falsely registered vessels are then used to fish in Suriname, French Guiana and Brazil.⁵² In recognition of this problem, the government has paused licensing: existing permits are being renewed but no new licenses are being granted.⁵³

Suriname is a prime spot for IUU fishing not only for fishers from Suriname but also for fishers coming from Trinidad, French Guiana, Guyana and Venezuela. The abundance of mangroves and mud banks means that there are large quantities of fish which in turn attracts high numbers of IUU fishers.⁵⁴ IUU fishing is associated with various other crimes in Suriname. As noted earlier, a mass homicide was committed in 2018, when twelve fishers were killed in a dispute over fishing territory. Smuggling is an issue, in particular to Brazil. Fish bladder is a particularly popular item to smuggle due to its high price in Asian markets.⁵⁵ Scattered reports exist of human smuggling.⁵⁶ There are also multiple reports of cocaine trafficking in Suriname's waters.⁵⁷ There is also a recurring problem of theft of fishers' nets, which are extremely expensive.⁵⁸

[Read more:](#) "Suriname: Haven for Smugglers and Illegal Fishers"

Costa Rica

Costa Rica suffers from criminal activities committed both by artisanal fishers and by foreign fleets. In part due to political pressures, there is very little regulation of domestic fishing licenses, leading to a proliferation of artisanal fishing vessels. Lax regulation carries over to more sophisticated industrial fishers, including both domestic and foreign actors. It has been estimated that around 17% of landings on Costa Rica's Pacific coast, including industrial, subsistence and sport fishing, go unreported.⁵⁹ Most tuna fishing within Costa Rica's EEZ is carried out by foreign ships.⁶⁰ Although in theory, port controls may be a method of reducing IUU fishing by foreign vessels, transshipments at sea allow boats to avoid the country's ports altogether, making the job of tracing illegally fished animals difficult.⁶¹ NOAA reported Costa Rica to Congress in 2021, listing a number of problematic practices, including poor reporting to ICCAT, harvest of North Atlantic swordfish without quota, and extensive overharvest of Atlantic white marlin.⁶²

A number of factors make Costa Rica extremely attractive to fishers. It is home to the Thermal Dome, an area of colder, nutrient rich water that fluctuates from 300

to 1,000km in diameter.⁶³ It also contains a number of marine protected areas (MPAs) rich in marine life. Further, although the location of Costa Rica's EEZ means that it is not as vulnerable to encroachment from international fleets as other countries in the region – ships would in many cases have to pass through the EEZs of Colombia, Ecuador, or Panama in order to reach Costa Rican fishing grounds⁶⁴ -- the EEZ is only nominally policed.

This is in part because Costa Rica has an Exclusive Economic Zone (EEZ) eleven times the size of its land area. Low MCS capacity, and the government's prioritization of other crimes such as drug trafficking,⁶⁵ spell considerable impunity for fishing crimes. Illegal practices, such as large net fishing in the Pacific Gulf of Nicoya and in the waters of the Cocos Island National Park, are frequent⁶⁶ and largely unprosecuted. Of the 220 sightings of vessels within the marine protected area of Cocos Island Park between 2005 and 2018, only six led to legal sanction.⁶⁷ Closed seasons designed to protect the reproduction of species, such as in the Gulf of Nicoya, are not respected.⁶⁸ The government has been accused of tolerating unlicensed fishing by artisanal fishers.⁶⁹ One study showed that 90% of vessels caught within the Cocos Island's protected marine space were Costa Rican and concluded that national fishers, rather than international fleets, posed the greatest threat to species in this zone.⁷⁰ That said, foreign ships have also been observed in the country's EEZ.⁷¹ Illegal fishing of various species of tuna – yellowfin, skipjack, bigeye and black skipjack – has been significant.⁷² Although regulations are in place to protect sailfish – a major draw for tourists – it is fished at increasing rates.⁷³ There is a significant domestic black market for turtle eggs and fish, as well as supply of foreign markets for shark fin.⁷⁴

Costa Rica's location between South America and North America means that illegal fishing often has links to crimes such as drug trafficking, as well as people trafficking or smuggling.⁷⁵ One maritime enforcement specialist drew a connection between illegal fishing and drug trafficking, particularly in coastal areas, stating that illegal fishers rob legal fishers of a potential money making opportunity, and thus cause them to resort to illegal methods of attaining income, including drug trafficking.⁷⁶ Fishing boats are used for drug trafficking,⁷⁷ with Costa Rican ships in some cases used to unload drugs to other ships on the high seas.⁷⁸ There is anecdotal evidence of fisheries being used to launder drug money.⁷⁹ Human trafficking has been reported in prior years, including labor exploitation on fishing vessels.⁸⁰

[Read more:](#) “Costa Rica: High Hopes for Radar Crash Against Reality of Illegal Fishing”

Panama

The regulation of local fishing vessels in Panama is significantly stronger than in neighboring Costa Rica. However, Panama's role as a flag of convenience makes

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Panama's role as a flag of convenience makes it not only a victim of IUU fishing by distant water fleets, but also an important enabler of some of the worst IUU fishing dynamics, both in its own territory and beyond it.

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Within Panamanian waters, foreign ships are believed to be the most important actors in IUU fishing. The species most affected by IUU fishing are shrimp, Caribbean and Pacific lobster, sea cucumbers, sea conch, and dorado.⁸¹ Tuna and shark are also targeted and overfished.⁸² Chinese vessels, in particular, are the most frequent foreign presence in the Sea of Panama and the Panamanian EEZ.⁸³ At the 200-mile mark, Chinese vessels reportedly engage in a variety of illegal practices, including overfishing and unreported transfers to processing vessels,⁸⁴ while frequently turning off their transponders to undermine MCS.⁸⁵ They catch large volumes of sharks “incidentally,” finning them for sale to Asian markets.⁸⁶ They are also present and suspected of fishing in protected areas.⁸⁷

IUU fishing by vessels flying the Panamanian flag has been significant in foreign EEZ and RFMO waters, a crime made more jarring by the ease with which vessels have been able to switch flags and thereby avoid fines.⁸⁸ So-called flags of convenience permit shipowners to take advantage of looser regulations, preserve ownership anonymity, and make it very difficult to punish IUU fishing activities.⁸⁹ Panama provides a flag for 16% of global carrying capacity, and as of 2020, nearly 400 fishing vessels,⁹⁰ and flagging provides some \$500 million in annual revenue for the Panamanian government.⁹¹ Panamanian-flagged vessels are attractive because the flags of convenience are lightly regulated, but historically have had the implicit political protection of the United States.⁹²

Beyond IUU fishing itself, the isthmus location of Panama has made it susceptible to drug trafficking, and there are credible reports of drug trafficking by fishing vessels in Panamanian waters.⁹³

[Read more:](#) “Panama: Lending the Flag to Most Destructive Fishing Ships”

Ecuador

Ecuador suffers from all three dynamics outlined above, as both victim and perpetrator of IUU fishing. Reports of IUU fishing near the Galapagos Islands by foreign vessels are widespread. But there is also significant IUU fishing by Ecuadoran vessels in those same waters, as well as in protected areas in Colombia and Costa Rica.⁹⁴ In 2019 NOAA cited Ecuador for violations of international agreements,⁹⁵ and in 2018 a committee within the CITES convention recommended suspension of trade in fish with Ecuador due to contraventions.⁹⁶

Ecuadorian law authorizes two types of fishing; artisanal and industrial. Only artisanal fishers are authorized to fish within the Galapagos Island reserve and must do so in accordance with the guidelines set out by the Ministry of the Environment which monitors the fishing zone and size of the catch. Beyond this there are 160

nautical miles of insular exclusive economic zone where much IUU fishing takes place, especially since 1998 when the marine reserve was created and fishers were pushed further out into the economic zone. Despite not being allowed to fish within the marine reserve, fishers use aggregator devices to capture species within the reserve and pull them out.⁹⁷

Shark fishing is popular and 2021 saw the highest number of fin exports in the last five years. It is estimated that around 200,000 sharks are “incidentally” fished each year. In one notorious incident, the Chinese vessel *Fu Yuan Yu Leng* was caught crossing through the Marine Reserve in 2017 without permission, with more than seven thousand shark carcasses on board.⁹⁸ Despite regulations aimed at diminishing finning,⁹⁹ the practice continues: in May 2020, Hong Kong impounded 24 tons of illegal shark fins from Ecuador, the largest seizure in Hong Kong history.¹⁰⁰

IUU fishing is driven by a combination of domestic industrial fishers and Asian fishing fleets.¹⁰¹ In one of the most notorious examples, in July 2020 the Ecuadorian Navy raised concerns about a fleet of more than 340 vessels located just outside of the Exclusive Economic Zone, the majority of which were flagged as Chinese.¹⁰² Many of these vessels had turned off their tracking and identification systems.¹⁰³ Global Fishing Watch VMS data routinely shows signs of possible transshipment – “where two vessels, a carrier and fishing vessel, were within 500 meters for at least 2 hours and traveling at a median speed under 2 knots...” – in waters off the Galapagos.¹⁰⁴

Crimes associated with IUU fishing run the gamut. Ecuador is considered a top tier risk jurisdiction for human trafficking, including forced labor, in the fisheries industry.¹⁰⁵ Drug trafficking is another concern: Ecuador is a major transit country both for chemical precursors, as well as for cocaine and heroin from Colombia and Peru, and they provide an easy way for fishers to make extra money: in towns such as Pasorja, fishers can earn anywhere between \$10,000 and \$30,000 for a single smuggling trip.¹⁰⁶

[Read more:](#) “Ecuador: Loopholes fuel Ecuador’s Shark Fin Trade”

Chile

Although Chile has one of the best regulated fisheries sector of the nine countries covered by this report, it nonetheless suffers substantially from the first and second dynamics of IUU fishing noted at the outset, which jointly may cost the country between \$300 and \$400 million a year, and account for about 30% of all catch.¹⁰⁷ The third dynamic, of IUU fishing by foreign distant water fleets, has been observed, but is not as prevalent, in part because of deterrence by Chilean naval authorities.

The dynamics of artisanal fishers are important for IUU fishing in Chile.¹⁰⁸ At the most basic level, relatively unsophisticated fishers with simple equipment can make

IUU fishing is driven by a combination of domestic industrial fishers and Asian fishing fleets. In one of the most notorious examples, in July 2020 the Ecuadorian Navy raised concerns about a fleet of more than 340 vessels located just outside of the Exclusive Economic Zone, the majority of which were flagged as Chinese.

Middlemen and fish traders play a key role in IUU fishing dynamics in Chile, by engaging in both document fraud and trade in illicit seafood.

a reasonable living by harvesting seaweed for export, an unregulated and largely unreported but extraordinarily damaging practice.¹⁰⁹

For both artisanal and domestic industrial fishing vessels, middlemen and fish traders play a key role in IUU fishing dynamics, by engaging in both document fraud and trade in illicit seafood.¹¹⁰ Several sources confirm that these intermediaries profit from IUU fishing.¹¹¹ They pay a small overhead on production above the quota limit¹¹² and thus fraudulently “launder” the fish that are sold on the domestic market.¹¹³ They have the storage and transportation equipment that make such crimes possible, and oftentimes have licit ties to fishers as buyers and suppliers.¹¹⁴ Artisanal fishers may resort to IUU fishing as a response to the quotas imposed by authorities, incentivized by middlemen.¹¹⁵ When fishers face low prices, they prefer to sell their license to larger ships that pull together a catch piecemeal, employing a variety of quota licenses.¹¹⁶ Middlemen may provide invoices to intermediaries, which can be used to slip illegal catch past legal authorities.¹¹⁷

With regard to the second set of dynamics, IUU fishing by domestic industrial boats, a variety of IUU fishing crimes have been observed. The first is offshore, undeclared transfer of catch on the high seas.¹¹⁸ This happens primarily among industrial vessels that have exceeded their quota, who then contact other ships – including foreign vessels – so as not to lose their surplus profit.¹¹⁹ Another practice is theft from protected or special management areas (e.g., monopoly concessions provided to artisanal fishers from particular communities, intended to encourage sustainable harvesting of the resources in their concession areas).¹²⁰ Since the location of these management areas is public knowledge, they can easily be targeted by either artisanal or industrial vessels who enter the management areas with their tracking systems turned off and may subsequently engage in seafood laundering, mixing illicit haul with licit catch.¹²¹

Crimes associated with IUU fishing are less evident in Chile than in some other neighboring countries. Although there are suggestions of links between artisanal fishers and drug trafficking, there is little direct evidence to confirm the involvement of Chilean fishing vessels, although Colombian and Peruvian vessels have been seized by Chilean authorities in recent years.¹²² Similarly, there are suggestions that seafood laundering might be a good avenue for laundering drug proceeds, but little direct evidence.¹²³ Proof of other crimes is more robust, such as fraud and corruption. Document fraud in offloading ports is suspected, and perhaps made possible through the payment of bribes, although we did not find direct evidence of bribery of fishery regulators.¹²⁴

[Read more:](#) “Chile: The Merluza Mafia: Middlemen Profit Off Cod Catch”

Argentina

Like Chile, Argentina has considerable offshore maritime domain awareness, although the persistent presence of significant foreign distant water fleets at the edge of its EEZ tests naval capacity. The most important IUU fishing dynamic

for Argentina is the presence of foreign, particularly Chinese, ships operating just outside its EEZ. The most trafficked species in the area, by a substantial margin, is squid, followed by the Patagonian toothfish. Many other types of fish, such as hake, suffer from being caught incidentally. Overall, more than 750,000 tons of fishery resources may be extracted illegally from Argentina's EEZ annually by foreign fleets.¹²⁵

A study of the period between January 2018 and late April 2021 found more than 800 fishing vessels within 20 nautical miles of Argentina's EEZ border, with most of their apparent fishing hours conducted "in the dark," with their AIS trackers turned off. Nearly two-thirds of the "dark" vessels were Chinese.¹²⁶ A variety of IUU fishing practices are associated with this offshore fishing just outside Argentina's territorial limits. Foreign ships outside the EEZ are not subject to the same standards required of Argentinian fishing boats within it, such as those governing waste disposal in the ocean or explicitly forbidding the transfer of fuel at sea. Argentine fishers have complained that they face aggressive behavior from foreign ships when they try to leave the EEZ. Several notorious vessels have resisted authorities when found within this zone. Foreign vessels have been accused of turning off transponders to avoid notice when straying into Argentina's EEZ, and there is frequent evidence of transshipment in this area.¹²⁷

At least three factors contribute to the problem of IUU fishing at the edge of Argentina's EEZ: distant water fleet subsidies, lack of an RFMO, and the relative proximity of the port of Montevideo. Many foreign ships are able to operate in Argentine waters, far from their home ports, due to subsidies from their respective nations. In the case of Taiwan, South Korea, and Spain, these usually come in the form of fuel provisions, while some Chinese boats also receive tax exemptions and navigation equipment. The second problem that contributes to the particular Argentine IUU fishing dynamic is the lack of fishing regulations in the sea outside of Argentina's EEZ, due to the absence of a Regional Fisheries Management Organization (RFMO), the lack of which is partly a result of conflicting claims in the South Atlantic by Argentina and the United Kingdom. The British government's licensing of foreign ships that operate in waters off the Falkland islands ("illegally" in the eyes of the Argentines), has also been posited as a significant factor in terms of overfishing. Part of the problem is a lack of transparency in the number of ships the UK licenses. A third concern is that, by accepting ships from the foreign fleet at Montevideo port without applying necessary controls, Uruguay is contributing to IUU fishing by allowing foreign fishing fleets to stay away from their home ports indefinitely.

A number of crimes are associated with IUU fishing in Argentine waters. The most significant concern is the treatment of crewmembers aboard foreign vessels near Argentina's EEZ, especially those flying the Chinese flag. Although captains and officers on these ships are Chinese, there are credible reports of the abuse and traffic of crew members, who are typically from Indonesia, the Philippines and countries

The most important IUU fishing dynamic for Argentina is the presence of foreign, particularly Chinese, ships operating just outside its EEZ.

The port of Montevideo plays a very significant role in enabling IUU fishing by distant water fleets in the South Atlantic. Foreign fleets from China, Portugal and Spain are attracted to Uruguay due to its proximity to good fisheries and low regulatory oversight of the fishing industry.

across Africa. Knowledgeable observers suggest the lack of control of IUU fishing potentially opens the door for other illegal activities, such as drug trafficking or money laundering. In 2019 a group of Chinese nationals were accused of smuggling, money laundering and evading some \$23 million in taxes, using fish export businesses based in the coastal city of Mar del Plata.¹²⁸

[Read more:](#) “Argentina: Plunder and Danger on Argentina’s Sea Shelf”

Uruguay

This report has already alluded to the important enabling role of Uruguay in IUU fishing in the south Atlantic. As with several of the other countries in this report, such as Panama and Ecuador, Uruguay is both an enabler and a victim of IUU fishing.

With regard to the first and second dynamics described in the introduction, two points are important. First, the fishing industry in Uruguay has declined significantly in recent decades. Second, the government has not shown much political commitment to regulate fishing, whether artisanal, industrial, or foreign deep water,¹²⁹ despite having a number of coastal fisheries. More than 400 vessels involved in IUU fishing are believed to operate off the Uruguayan coast, including both Uruguayan vessels and ships from Brazil.¹³⁰ Uruguay has seen IUU fishing of protected species, of spawning and juvenile fish, and the use of prohibited practices, such as bottom trawling, that have significant impacts on marine ecosystems.¹³¹

With regard to the third dynamic, the port of Montevideo plays a very significant role in enabling IUU fishing by distant water fleets in the South Atlantic. Foreign fleets from China, Portugal and Spain are attracted to Uruguay due to its proximity to good fisheries and low regulatory oversight of the fishing industry.¹³² Uruguay’s enforcement is particularly weak by comparison to that of its neighbors.¹³³ A 2017 study found that the port was the second most visited port in the world for trans-shipment vessels (“reefers”) suspected of IUU fishing.¹³⁴ Although that study is now dated, there are few indications that the port’s role has changed significantly.¹³⁵ Many foreign vessels suspected of fishing “dark” off the Argentine EEZ subsequently proceed into the port.¹³⁶ The port is open to foreign vessels needing resupply and repair, and also permits offloading of illegal catch.¹³⁷

Sources interviewed by our team suggest that there is active bribery in the port. Although there is ample evidence of offloading of illegal seafood, port authorities have actively regulated or prosecuted such behavior.¹³⁸ China is an important trading partner of Uruguay’s, and Chinese vessels are the most common in the Montevideo port.¹³⁹ Chinese demand is clearly central to the Uruguayan fishing economy.¹⁴⁰

The port of Montevideo sees a number of crimes associated with IUU fishing. Human trafficking and labor abuses in the port of Montevideo are the most important. Local union officials report that complaints are regularly made to port

authorities and maritime agencies, but little has been done to address these issues.¹⁴¹ Among the complaints is the subcontracting of crew not from the vessel's flagged ship state. Subcontractors often recruit crew from other countries such as Peru, and place them on distant water vessels that are known for bad labor practices.¹⁴² Another complaint regards crew who are abandoned in port, often with signs of mistreatment and physical abuse, without documents or money.¹⁴³ Others have been confined to ship while in port, without shore leave, and intimidated when they seek to leave their vessel.¹⁴⁴ Mistreatment has been so significant that there have been repeated, confirmed reports of crew members' bodies being offloaded in port.¹⁴⁵ Drug trafficking through the port of Montevideo is also well-established. Although the seizure did not involve fishing vessels per se, in 2018 a cargo of 400 kilos of cocaine was seized from a shipping container, in a scheme that involved both customs officials and a prominent fishing business owner.¹⁴⁶

[Read more:](#) "Uruguay: At Port of Montevideo, A Deadly Circle of Fishing and Labor Abuses"

The weakness of government responses to IUU fishing in Latin America and the Caribbean

Frameworks for advancing the fight against IUU fishing are weak and generally subject to significant collective action problems. The current international framework includes a mishmash of international and national agreements and initiatives, sometimes weakened by the absence of active engagement by many of the world's largest fishing nations. The most important cornerstone of this framework is the Agreement on Port State Measures (PSMA), which seeks to reduce illicit fishing by denying access to port services for IUU fishing vessels and to impede illicit catch from accessing international markets. The PSMA currently has 69 ratified parties and 4 signatories. International bodies such as the UN Food and Agricultural Organization (FAO) have established important informational databases, such as the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels and the Global Information Exchange System, which provide the tools for tracking and controlling fishing fleets and fish catch. But key participants in the international trade, such as China, have still not ratified the PSMA agreement.¹⁴⁷ Sovereign states' failure to accord with this binding international agreement and ensure compliance significantly undermines the international community's capacity to curb malign actors, such as predatory Chinese long-distance fishing fleets supported by massive government subsidies, and the best information in the world can only be of limited use if there is only limited sovereign commitment to the rules.

A wide range of measures have been taken by national governments, including national governments' patrols of hemispheric fisheries, sometimes in concert with regional partners, bilateral fishing agreements, and regional fisheries management organizations (RFMOs). While such measures are useful in reducing incursions in national waters, ultimately, these national agreements are weakened by the fact that

Frameworks for advancing the fight against IUU fishing are weak and generally subject to significant collective action problems.

There is great variation in domestic legislation regarding IUU fishing across the Western Hemisphere.

most fish species are migratory and can be found in international waters, where the UN Convention on the Law of the Sea (UNCLOS) permits largely unfettered fishing. Further, Article 73 of the UNCLOS explicitly disallows criminal prosecution of fishing violations in the absence of a bilateral treaty, and not all countries adhere to UNCLOS, in any case. Further, RMFOs do not always follow scientific guidance in developing their fisheries planning.¹⁴⁸ RFMOs are frequently disparaged by critics as failing to uphold even the weak rules participating nations self-impose on themselves.

Non-governmental organizations have played an important role both in building international demand for action and in taking steps to improve national and international regulation of fishing. NGOs have taken the lead in building monitoring, control and surveillance systems, such as Global Fishing Watch (GFW), established five years ago. GFW has a number of sovereign country contributors throughout Latin America, and is able to map a wide range of fishing vessels in real-time across the hemisphere.¹⁴⁹ These efforts are welcome and significant, but of course insufficient without strenuous accompanying enforcement actions, which require the commitment of sovereign countries.

Finally, many of the countries in the hemisphere have weak to non-existent capabilities and tools to fight IUU fishing. Only a few countries have robust national legislation dedicated to effectively curbing IUU fishing. The majority lack the physical assets – ships, drones, or satellite capabilities – that would be needed to effectively regulate fishing in the whole of their national EEZ. Only a few have the ostensive law enforcement or naval capabilities that would be needed to effectively curb IUU fishing, and none have the ability to dedicate sufficient forces to the enterprise full-time. We address some of the specifics of these two shortcomings – legislative and law enforcement capacity – in the next sections.

The Scope of IUU Fishing-Related Legislation

There is great variation in domestic legislation regarding IUU fishing across the Western Hemisphere. All nine countries covered by this report have created fisheries agencies and implemented basic regulation of fishing vessels and fisheries, but not all have clearly established National Plans of Action (NPOAs) on fishing, have created Marine Protected Areas (MPAs), or have clearly typified IUU related crimes and penalties. There are also significant differences in the treaty commitments of the nine countries covered by this report, although all nine are members of UNCLOS, CBD and CITES. Three of the nine countries covered by this report (Costa Rica, Guyana, and Ecuador) have been reported by the NOAA to Congress since 2018. Further, although none of the countries covered by this report have publicly-divulged bilateral fishing access agreements with other non-compliant states, several have bilateral agreements on fishing with non-compliant countries.¹⁵⁰ Each of these points is detailed below.

Existing National IUU Fishing Legislation

Domestic legislation regarding IUU fishing has undergone a major transformation in Latin America and the Caribbean in recent years. Older laws, like Costa Rica's Law 7384 or Ecuador's Supreme Decree No. 2026, signed into law in the last quarter of the twentieth century, created fisheries agencies or established penalties for fisheries related crimes.¹⁵¹ Some of this legislation aimed at implementing and adapting national legislative frameworks to the United Nations Convention on the Law of the Sea (UNCLOS, signed in 1982 and entered into force in 1994). Since the turn of the century, new laws have been passed to assist in implementing international fisheries agreements, such as the FAO Agreement on Port State Measures (PSMA, adopted in 2009 and entered into force in 2016). The overlay of different generations of substantive and procedural legislation creates the patchwork legal and regulatory frameworks that characterize these nine countries' domestic approaches to IUU fishing and are used as a barometer for their compliance with international norms and treaties.

Domestic legislation regarding IUU fishing varies considerably, with the sub-equatorial nations of South America having adopted the most comprehensive and up-to-date legislation, while the Caribbean nations have the weakest statutory frameworks. Yet across all nine countries covered by this report, there are common shortcomings. Many crimes are not typified in law. In Ecuador, for example, of 53 infractions listed by the FAO, only three are dealt with in law.¹⁵² More needs to be done to align legislation with international treaty agreements. Second, most laws do not clearly establish how to deal with foreign vessels: who should prosecute a Colombian ship reported for finning in Panamanian restricted areas, but that has already moved into another country's waters, for example? Third, many laws and their implementation are driven by political considerations. For example, one article within Panama's otherwise quite robust new fisheries law establishes the possibility of offloading catch anywhere along the coast, a rule that is popular among fishers, but would effectively make inspection of catch impossible.¹⁵³ Fourth, all too often the punishments meted out in domestic legislation are too loosely applied to shift incentives: fines in the thousands of dollars, for example, that might cripple an artisanal fisher, but would not serve as an effective deterrent for large industrial fleets.

The South American countries have reasonably comprehensive national IUU fishing legislation that emphasize the importance of a multidimensional, whole-of-government approach to countering IUU fishing. Chile (2004), Argentina (2008), and Ecuador (2015) have adopted National Plans of Action (NPOAs) to confront IUU fishing, which outline the specific tasks of their government agencies in this realm and are often a first step that countries with ambitions of joining the PSMA take.¹⁵⁴

Argentina, Chile, Ecuador, and Uruguay have also passed multiple decrees and regulations that govern fishing in particular regions or for specific species.¹⁵⁵ For example, in 2020, Argentina's Congress unanimously passed a reform to the Federal Fishing Regime that increases fines for illegal fishing in the Argentine Sea.¹⁵⁶

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Uruguay, meanwhile, adopted Law 19.128 in 2013, which designates the country's territorial waters and EEZ as a sanctuary for whales and dolphins.¹⁵⁷

Similarly, countries in South America have taken the initiative to create Marine Protected Areas (MPAs) that are delineated zones available for only certain regulated uses so as to conserve the area's biodiversity. The function of MPAs in the fight against IUU fishing is to allow fish stocks space to recover. After they are replenished, they will presumably restock commercial areas.¹⁵⁸ Ecuador issued a series of laws designating and regulating the use of the Galapagos as an MPA in 2005 and 2014, while Uruguay created its National System of Natural Protected Areas in 2000.¹⁵⁹ Chile has a longstanding commitment to creating MPAs to combat climate change and conserve biodiversity. The country has created MPAs covering 40 percent of its national waters, which makes it one of the few countries currently surpassing the 30 percent protection recommendation of scientists and environmental NGOs.¹⁶⁰ In response to the growing threat of IUU fishing and weak oversight of prior MPAs, Argentina created two MPAs in the South Atlantic Ocean in late 2018 (Yaganes and Namuncurá-Burdwood Bank II) that cover an area the size of Hungary and are home to many threatened species.¹⁶¹

Finally, some of these countries have increasingly made the regulation of fishing vessels a priority. Chile's Law 19.713 establishes maximum limits for ship capture, and its 2012 Law 20.445 regulates its swordfish fleet.¹⁶² Uruguay's Law 15.641 (1984) regulates national fishing vessels, while Ecuador's 2020 Organic Law for the Development of Aquaculture and Fisheries emphasizes the importance of vessel tracking devices.¹⁶³ Similarly, Argentina's Fisheries Law establishes a regulatory framework for the country's vessels.¹⁶⁴

In Central America, Costa Rica and Panama have made significant strides in recent years to create NPOA infrastructure and expand protected areas. While Costa Rica lacks an NPOA, it has worked with the FAO since 2019 to develop one.¹⁶⁵ Panama, meanwhile, has had an NPOA since 2009.¹⁶⁶ In the field of MPAs, Costa Rica rivals Chile. With its ambitious initiative to expand the Cocos Island MPA and Bicentennial Marine Management Area, Costa Rica has expanded its protected ocean area from less than 3 percent of territorial waters to more than 30 percent in recent years.¹⁶⁷ This expansion takes place in areas that are home to some of the largest shark populations in the world, as well as whale and turtle species.¹⁶⁸ Panama established the Cordillera de Coiba protected area in its southwest in 2015 and expanded it in 2021, bringing more than 30 percent of the country's territorial waters under protection.¹⁶⁹ Finally, in 2021, Colombia, Ecuador, Costa Rica, and Panama banded together to forge the Eastern Tropical Pacific Maritime Corridor (CMAR) initiative, which joined and enlarged the countries' protected territorial waters to form a single fishing-free corridor covering more than 200,000 square miles of one of the primary migratory areas in the world for sea turtles, whales, sharks, and rays.¹⁷⁰

National Legislation Regarding IUU Fishing

PANAMA



- Law 16 (chapters on maritime regulation) (1975)
- Law 14 (approves CITES) (1977)
- Execution Degree 63 (protects aquatic mammals from tuna fishing) (1988)
- Law 24 (Wildlife Law, amended 2005) (1995)
- Law 38 (ratifies 1982 UNCLOS) (1995)
- Law 7, 41, and 75: creation of the Environmental Ministry, the National Environment Authority-ANAM and implements the Dolphin Protection Agreement (1998)
- Law 9, 44: Prohibits shark finning in territorial waters and creates authority for Panamanian aquatic resources (2006)
- Law 14: Penal Code, includes environmental offenses (2007)
- Law 54: Agreement for Implementations of UNCLOS on Straddling Fish Stocks and Highly Migratory Fish Stocks (2008)
- Executive Decree No. 162: regulates fishing vessel licensing and compliance with VMS standards (2013)
- Law 43: Ratifies FAO Agreement on Port State Measures (2016)
- Law 204: Regulates fish and aquaculture in Panamanian waters (2021)

COSTA RICA



- Law 6267: establishes rules for foreign vessels fishing in Costa Rican waters (1978)
- Law 7384: creates the Costa Rican Fisheries and Aquaculture Institute (INCOPECSA) (modified 2019) (1994)
- Law 7554: Organic Law of the Environment (1995)
- Law 6042: Law of the Maritime Terrestrial Zone (1997)
- Law 7788: Biodiversity Law (1998)
- Law 8000: creates the National Coast Guard Service (2000)
- Law 8436: Law on Fisheries and Aquaculture (2005)
- Multiple decrees and resolutions governing fishing in particular regions and of particular species.

American University and InSight Crime, 2022.

Sources: Organization of American States (OAS); United Nations Food and Agriculture Organization (FAO); national governments.

National Legislation Regarding IUU Fishing

ARGENTINA



- Law 23.968: Law of Maritime Spaces (1991)
- Law 48: Regimen of commercial exploration of mariculture (1993)
- Constitution (stipulates rational use of natural resources and preservation of biological diversity) (1994)
- Law 24.922: Fishing Law (supersedes prior fishing law) (1998)
- Law 25.470: Law establishing sanctions for violations of Fishing Law (2001)
- Law 5.037: Regimen for control and oversight of maritime resources (2003)
- Law 5.639: General Maritime Fishing Law (2007)
- Federal Fisheries Council (FFC) Resolution No. 1: National Plan of Action to Discourage Illegal Fishing (2008)
- Law 27.231: Law on Sustainable Development of Aquaculture (2015)
- Multiple resolutions regulating fishing of specific species.

CHILE



- Decree Law 2.222: Law on Navigation (modified in subsequent years) (1978)
- Law 18.892: General Law of Fishing and Aquaculture (subsequently amended on multiple occasions) (1989)
- Law 19.520: establishes competency for courts judging high sea infractions by Chilean ships (1997)
- General Customs Order (DFL-2/97): regulates disembarkation, transfer and imports of fish products (1997)
- Law 19.713: establishes Maximum Limits for Ship Capture (2001)
- Decree 78: Promulgates 1993 FAO Distant Water Fleet Agreement (2004)
- National Action Plan for preventing, discouraging, and eliminating IUU Fishing (2004)
- Law 20.445: Regularizes regulation of swordfishing fleet (2012)
- Multiple decrees and resolutions governing fishing in particular regions and of particular species.

ECUADOR



- Supreme Decree No. 2025: Creates the National Fishing Institute (1977)
- Constitution (Article 406 on the environment) (1980)
- Decree Law No. 3: Law Reforming the Law on Fishing and Fishing Development (1985)
- Law on the National Fishing Chamber (2003)
- Law on the Special Regime for the Conservation and Sustainable Development of the Province of Galapagos (2005)
- Plan for the Management of Protected Areas of the Galapagos (2014)
- Organic Law for the Development of Aquaculture and Fisheries (2020)
- Multiple decrees and resolutions governing fishing in particular regions and of particular species.

American University and InSight Crime, 2022

URUGUAY



- Law 13.833: Law of Fishing (1969)
- Law 14.484: creates the National Institute of Fishing (1975)
- Law 15.641: regulates national fishing vessels (1984)
- Law 16.736: establishes state jurisdiction over living resources in maritime waters (1996)
- Law 17.118 and Law 17.802: Ratifies FAO Distant Water Fleet Agreement and UNCLOS (1998)
- Law 17.234: creating the National System of Protected Natural Areas (2000)
- Law 19.175: Declaring public interest in conservation and sustainable development of hydrobiological resources (2013)
- Law 19.402: Law on Aquaculture (2016)

Sources: Organization of American States (OAS); United Nations Food and Agriculture Organization (FAO); national governments.

One of the most hopeful legislative initiatives has been the creation of Marine Protected Areas (MPAs) in recent years.

National Legislation Regarding IUU Fishing

| SURINAME  | GUYANA  | JAMAICA  |
|--|---|--|
| Game Act and Nature Protection Act (1954) Fish Stock Protection Act (1961) Law on the Territorial Sea and Continuous Economic Zone (1978) Sea Fishery Act (1980) Constitution (1987) Fish Inspection Act (2000) Environmental Framework Act (2020) | Criminal Law Act: establishes provisions on offences and penalties, including for fish related crimes (1893) Constitution (1980) Environmental Protection Act (1996) Fisheries Act (2003) Maritime Zones Act (2010) Animal Health Act (2011) Protected Areas Act (2011) Wildlife Conservation and Management Act (2016) Fisheries Regulations on management and conservation, licensing of vessels, fishing gear, etc. (2018) | Wildlife Protection Regulations (subsequently amended) (1945) Beach Control Act (subsequently amended) (1956) Watershed Protection Act (amended in 1991) (1963) Fishing Industry Act (revised by Fisheries Act of 2018) (1976) Natural Resources (Marine Parks) Regulations (1992) Aquaculture, Inland, and Marine Products and By-products Act (1999) Endangered Species (Protection, Conservation, and Regulation of Trade Act) (2000) Fishing Industry (Special Fishery Conservation Area) Regulations (2012) Fisheries Act No. 18 (2018) |
| <small>American University and InSight Crime, 2022</small> | | |
| <small>Sources: Organization of American States (OAS); United Nations Food and Agriculture Organization (FAO); national governments.</small> | | |

The Caribbean countries of Guyana, Jamaica, and Suriname tend to have the fewest and weakest laws regarding IUU fishing. None of the three countries have an NPOA.¹⁷² Guyana has made a stated commitment to protected areas with its Protected Areas Act, but according to the Marine Conservation Institute, less than one percent of its territorial waters are under any form of protection.¹⁷³ The Marine Conservation Institute estimates that Jamaica and Suriname fare only slightly better on this metric, protecting 1.2 and 1.6 percent, respectively, of their waters.¹⁷⁴

The domestic legal infrastructure in the Caribbean countries is a developing effort. For example, in 2018, Guyana enacted new fisheries regulations on management and conservation, licensing of vessels, and fishing gear.¹⁷⁵ That same year, Jamaica enacted Fisheries Act No. 18, governing the establishment of fishery institutions, fishery management areas, and licensing of vessels.¹⁷⁶ The absence of a unified register of license permits is a significant impediment to monitoring, control and surveillance, and new legislation enforcing the creation of a register is pending.¹⁷⁷ Suriname's domestic legislation is the oldest of the three countries, as its key governing document (the Fish Inspection Act of 2000, governing the production, import, and export of fishery products in Suriname) is more than two decades old.¹⁷⁸

Country Membership in International Treaties

One of the primary methods of building international cooperation on the issue of IUU fishing has been through the adoption of multilateral international treaties related to the issue. Currently, there are numerous international treaties, as well as non-binding agreements, that relate in part or in their entirety to this topic.

As noted above, the most prominent treaty specific to IUU fishing is the Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and

Unregulated Fishing (PSMA). This treaty entered into force in June 2016 as the first binding international agreement to target IUU fishing and now includes more than 70 parties.¹⁷⁹ The PSMA mandates that fishing vessels request permission to dock at another country's ports and provide information to the port about their fishing operations, and allows for permission to dock to be denied if a vessel is determined to have been engaging in IUU fishing. Of the nine countries covered by this report, only Argentina, Jamaica, and Suriname are not parties to the PSMA. Argentina is not a party to the PSMA due to its ongoing territorial dispute with the United Kingdom over the Falkland Islands and other South Atlantic islands under British control, though members of the Argentine legislature have called for Argentina to ratify the treaty.¹⁸⁰ Jamaica and Suriname have engaged with the FAO and the U.S. in recent years about building monitoring, control, and surveillance (MCS) capacity with the eventual goal of joining the PSMA.¹⁸¹ Chile and Uruguay were two of the PSMA's first ratifiers, having ratified the treaty in 2012 and 2013 respectively.¹⁸² Costa Rica (2015), Panama (2016), and Guyana (2016) were next to join the treaty, with Ecuador becoming the most recent party with its 2019 accession.¹⁸³

Another relevant treaty is the UN Convention on the Law of the Sea (UNCLOS). UNCLOS opened for signature in 1982, entered into force in 1994, and is regarded as the "constitution of the ocean."¹⁸⁴ Although the concept of IUU fishing did not exist when UNCLOS was created, the treaty remains valuable in discussions of the phenomenon because it expanded the rights of coastal states over a 200 nautical mile Exclusive Economic Zone (EEZ) and extended the breadth of the territorial sea to 12 nautical miles.¹⁸⁵ UNCLOS also featured a provision that mandated the coastal state to make available surplus permissible catch by way of fishing access agreements with different countries.¹⁸⁶ Finally, Part XII of UNCLOS pertains to the conservation of the marine environment while Article 287 establishes the International Tribunal on the Law of the Sea (ITLOS), which at times hears cases that relate to the issue of IUU fishing.¹⁸⁷ Every one of the countries covered by this report is a party to UNCLOS, as are 159 other countries, but not the United States.¹⁸⁸ The U.S. has not ratified UNCLOS because of disagreement over its provisions on deep seabed mining and private technology transfers.¹⁸⁹

The 1993 Convention on Biological Diversity is relevant to IUU fishing because of its Strategic Plan for Biodiversity, adopted in 2010. Biodiversity Target 6 of the Strategic Plan states that by 2020, all fish and invertebrate stocks should be managed and sustained sustainably and legally to avoid overfishing.¹⁹⁰ Every one of the nine countries covered by this report is a party to this agreement. The only UN member state not party to the agreement is the United States (which has signed the treaty but not ratified it).









Other relevant major international treaties that touch upon IUU fishing include the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Migratory Species (CMS) and its Memorandum on

The PSMA, which entered into force in 2016, is one of the most potentially impactful of international treaties regulating fishing.

Sharks (CMS Sharks), the FAO Compliance Agreement, the UN Agreement for the Implementation of UNCLOS Provisions on Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA), and the International Convention on the Regulation of Whaling (ICRW).

The most successful of these, in terms of its wide acceptance throughout the region, is CITES, which every one of the nine countries in this report has ratified.¹⁹¹ The region's record with the CMS protocols is more mixed, with Guyana, Jamaica, and Suriname not participating, and Argentina, Panama, and Uruguay joining, but as non-parties to the Sharks protocol.¹⁹² The state of the UNFSA in the region is complex, as most of the nine countries have signed the agreement but have yet to fully ratify and implement it.¹⁹³ Finally, there is work to be done to institutionalize the ICRW and the FAO Compliance Agreement, as only two and three countries respectively have signed onto those treaties.¹⁹⁴

Country Membership in International Fisheries Treaties and Compliance Measures

| |  Argentina |  Chile |  Costa Rica |  Ecuador |  Guyana |  Jamaica |  Panama |  Suriname |  Uruguay |
|---------------------------------|--|--|---|--|---|--|---|---|--|
| UNCLOS | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| PSMA | - | Yes | Yes | Yes | Yes | - | Yes | - | Yes |
| NEINE | - | Yes | Yes | Yes | - | - | Yes | - | Yes |
| CBD | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| CITES | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| CMS | Yes | Yes | Yes | Yes | - | - | Yes | - | Yes |
| CMS Sharks | - | Yes | Yes | Yes | - | - | - | - | - |
| FAO Compliance Agreement | Yes | Yes | - | - | - | - | - | - | Yes |
| ICRW | Yes | - | - | - | - | - | Yes | - | - |
| UNFSA | Signed, not acceded | Yes | Yes | Signed, not acceded | Signed, not acceded | Signed, not acceded | Yes | Yes | Yes |
| Copenhagen Declaration | - | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| NOAA Biannual Reports | - | - | Reported by NOAA (2021) | Reported by NOAA (2019) | Reported by NOAA (2021) | - | - | - | - |
| European Union | - | - | - | Yellow card (2019) | - | - | Yellow card (2019) | - | - |
| Ranking (out of 152; 1 is best) | 102 | 24 | 87 | 104 | 121 | 112 | 92 | 56 | 26 |

American University and InSight Crime, 2022

Sources: FAOLEX Database, IUU Fishing Index (2021)

The nine countries covered by this report are also engaged in non-legally binding regional and multilateral agreements related to IUU fishing. One such example is the Network for the Exchange of Information and Shared Experiences between Latin American and Caribbean Countries to Prevent, Deter, and Eliminate IUU Fishing (NEINE). This is a body of Latin American and Caribbean member-states who seek to facilitate and coordinate regional information sharing on IUU fishing concerns. Chile, Costa Rica, Ecuador, Panama, and Uruguay are all members of this body, alongside Colombia, the Dominican Republic, Guatemala, Peru, Spain, and the U.S.¹⁹⁵ A second example is the 2018 International Declaration on Transnational Organized Crime in the Global Fishing Industry (hereafter Copenhagen Declaration). The Copenhagen Declaration specifies that IUU fishing and transnational organized crime constitutes a threat to sustainable use of marine resources and all of the nine countries covered in this report except Argentina have signed the Declaration.¹⁹⁶

Bilateral Fishing Agreements, Including with Non-Compliant Actors

There are three main barometers of compliance with IUU fishing-related international agreements (Table 2). First, the U.S. National Oceanic and Atmospheric Administration (NOAA) compiles a biennial report to Congress that identifies state actors it deems to be non-compliant with IUU fishing treaties. In the two most recent NOAA reports from 2019 and 2021, three of the nine countries covered by this report were reported to Congress. Costa Rica and Guyana were downgraded from compliant to non-compliant (from 2019 to 2021), while Ecuador was deemed non-compliant in 2019 but compliant in 2021.¹⁹⁷

A second indicator is the European Union's (EU) carding system. In accordance with its IUU Regulation of 2010, the EU will issue a yellow card to countries it deems to be in noncompliance with international rules, sparking a formal dialogue on IUU fishing between the EU and the carded country. If the country does not come into compliance, the country will be issued a red card, banning all fisheries products caught by fishing vessels under the flag of the listed countries from being imported into the EU until the country is compliant. Ecuador and Panama both have a history of being yellow carded.¹⁹⁸ None of the nine countries covered by this report has ever been red carded.

The final indicator is the Global Initiative Against Transnational Organized Crime's IUU Fishing Index. The Index evaluates countries' vulnerability, exposure, and responses to IUU fishing in an effort to demonstrate to policymakers where policy interventions are most necessary. The index incorporates various factors, each measured on a scale of 1 (the best) to 5 (the worst), with each country being ranked on its average across all factors. According to the index, Chile and Uruguay were ranked among the 25 best countries in the world in their efforts to counter IUU fishing.¹⁹⁹ Guyana was the lowest rated of the nine countries evaluated here, with Jamaica, Ecuador, and Argentina joining Guyana in the bottom third of the overall ranking.²⁰⁰ Costa Rica, Panama, and Suriname were each closer to the middle of the Index.²⁰¹

There are three main barometers of compliance with IUU fishing-related international agreements: NOAA biennial reports, the EU's carding system, and the Global Initiative Against Transnational Organized Crime's IUU Fishing Index.

Many of the countries analyzed in this report have bilateral agreements with Russia and China, who have become major players in regional fishing, even as NOAA has reported them to Congress as non-compliant with international IUU fishing law.

By all three indicators, despite the challenges they face, Chile and Uruguay are regarded as regional leaders in combatting IUU fishing. At the next tier, countries still face hurdles with meeting their numerous international obligations, or have yet to join important international agreements despite their progress in developing some effective strategies (like MPAs). Two smaller Caribbean nations (Guyana and Jamaica) are still building capacity to join international fisheries institutions.

Table 2: Measures of Country Compliance, last five years

| Country | NOAA Biannual Reports | European Union | Ranking (out of 152; 1 is best) |
|------------|--------------------------------|--------------------|---------------------------------|
| Chile | - | - | 24 |
| Uruguay | - | - | 26 |
| Suriname | - | - | 56 |
| Costa Rica | NOAA report to Congress (2021) | - | 87 |
| Panama | - | Yellow card (2019) | 92 |
| Argentina | - | - | 102 |
| Ecuador | NOAA report to Congress (2019) | Yellow card (2019) | 104 |
| Jamaica | - | - | 112 |
| Guyana | NOAA report to Congress (2021) | - | 121 |

Source: IUU Fishing Index (2021)

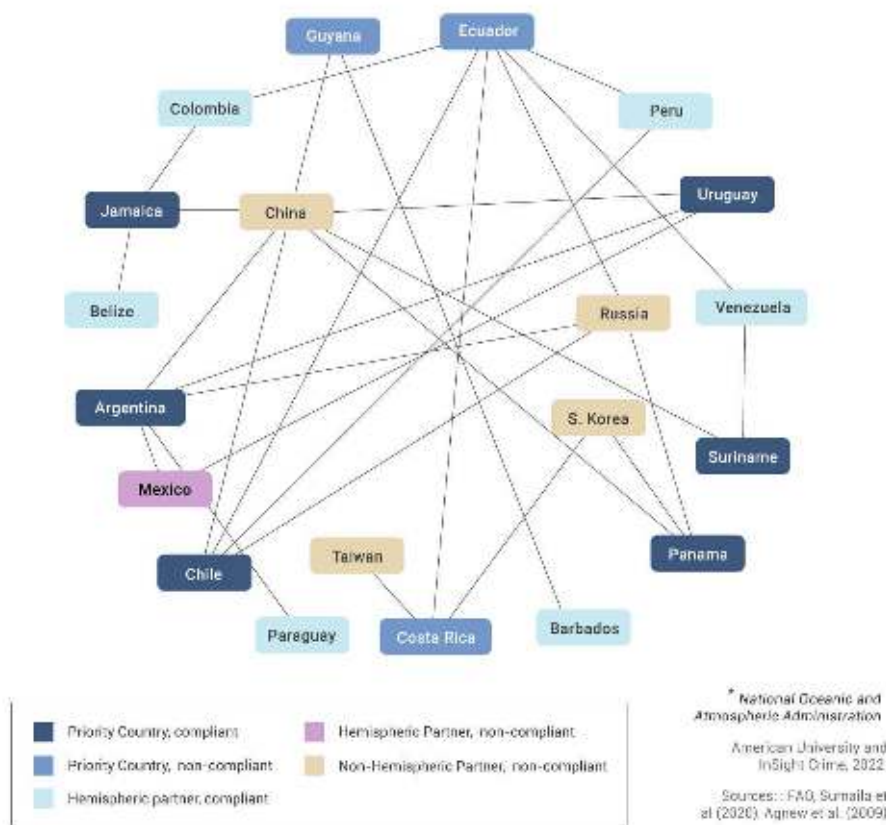
However, these compliance measures do not tell the full story. A number of the countries who are compliant in Table 2 also contribute to the problem of IUU fishing through their bilateral agreements with non-compliant countries.²⁰² Figure 1 illustrates the problem.

As Figure 1 shows, three of the countries covered by this report were considered non-compliant by NOAA within the past five years: Costa Rica, Guyana, and Ecuador. It is notable that these non-compliant countries have many bilateral agreements with each other and with other countries analyzed in this report. For example, Costa Rica and Ecuador, both non-compliant countries, in 2021 agreed to a bilateral memorandum of understanding (MOU) to combat IUU fishing.²⁰³ Other examples are Chile, a compliant country, and Ecuador, a non-compliant country, who have signed multiple bilateral MOUs on fishing cooperation over the past twenty years.²⁰⁴ Many of the nine countries covered by this report also have bilateral agreements with Mexico, a major regional non-compliant country. Mexico has numerous free trade agreements with the countries covered by this report, including Costa Rica, Panama, and Uruguay.²⁰⁵

With regard to actors from outside the Latin American and Caribbean region, many of the countries analyzed in this report have bilateral agreements with Russia and China, who have become major players in regional fishing, even as NOAA has reported them to Congress as non-compliant with international IUU fishing law.

Figure 1:

Bilateral Fishing Agreements between Nine Priority Latin American Countries and Countries Reported by NOAA for IUU Fishing



China has the most fishing agreements with Latin American and Caribbean countries of any non-compliant country.

Source: Authors. Research was conducted on agreements with any of the following countries reported to Congress in NOAA Reports in either 2019 or 2021: China, Costa Rica, Ecuador, Guyana, Mexico, Russia, Senegal, South Korea, and Taiwan. Note: There are no active fishing access agreements in place between the nine countries covered by this report and countries certi-

China has the most fishing agreements with Latin American and Caribbean countries of any non-compliant country. China began signing fishing agreements with South and Central American countries as long ago as 1981. But China remains very active in establishing such agreements, including a wave of agreements in the late 2010s with Guyana, Jamaica, Panama, Suriname, and Uruguay.²⁰⁶ These fishing agreements with China address a variety of technical and strategic efforts, from creating bilateral channels for information sharing and best practices to the training of technical officers and normalization of port relations.²⁰⁷

Russia established its first agreement with a country covered by this report in 1997 with Panama, signing an agreement that included sections on preserving highly

There are great disparities between the material capabilities of the more developed South American states and the Central American and Caribbean states, which tend to have the least personnel and equipment.

migratory fish species and broader sea-based environmental issues.²⁰⁸ Since 2012, Russia has established bilateral agreements with both Argentina and Ecuador on developing cooperation for the sustainable use of marine resources and combating IUU fishing.²⁰⁹ Finally, in 2020, the Russian Federation and Chile reached an agreement on scientific and technical cooperation to prevent illnesses in aquaculture.²¹⁰

Other non-compliant actors, such as Taiwan and South Korea, have a smaller number of bilateral agreements with the countries covered by this report. Costa Rica signed a free trade agreement with South Korea in 2018 and Panama has free trade agreements with both Taiwan (2004) and South Korea (2018).²¹¹ Chile signed a free trade agreement with South Korea in 2003.²¹²

Law Enforcement Capacity to Address IUU Fishing

The law enforcement capacity of Latin American and Caribbean states to address IUU fishing may be thought of as having at least three significant components: physical capacity, surveillance capabilities, and prosecutorial-judicial capacity. The capacity of these states to monitor, prosecute, and deter IUU fishing varies considerably along all three components.

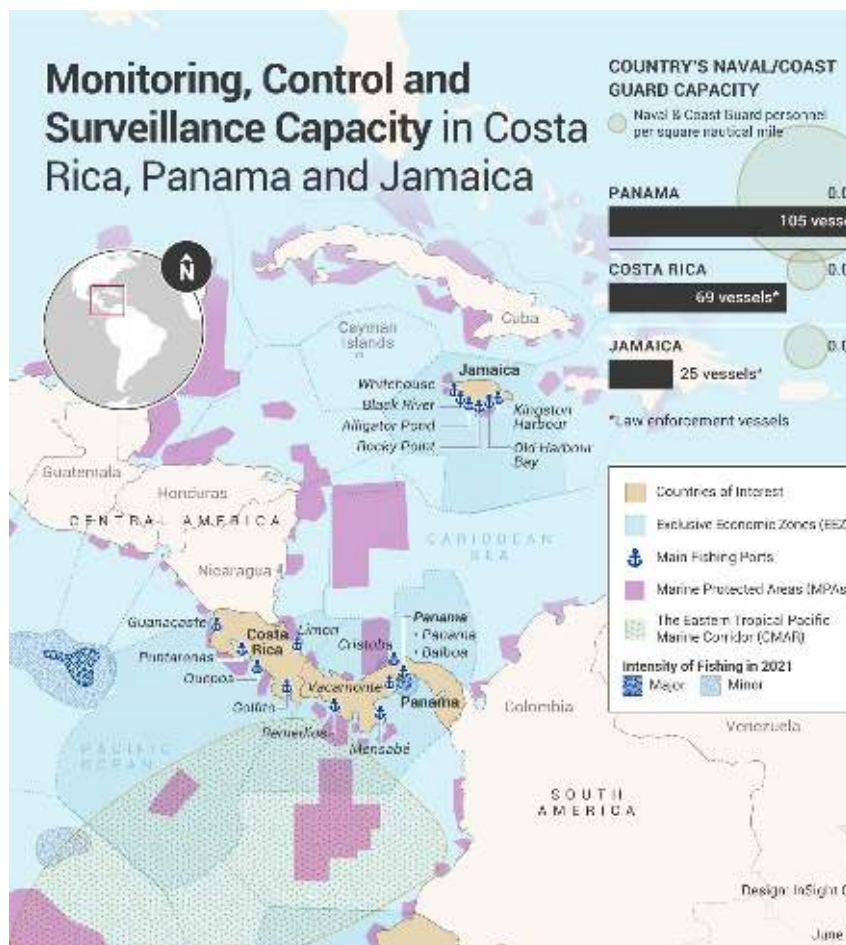
Physical Capacity

One of the primary problems of Latin American and Caribbean states in combatting IUU fishing relates to these countries' underwhelming physical capabilities. There are great disparities between the material capabilities of the more developed South American states and the Central American and Caribbean states, which tend to have the least personnel and equipment. For example, Argentina has a combined naval and coast guard fleet of more than 250 vessels and more than 64,000 naval and coast guard personnel, while Guyana has just nine vessels and 180 active sailors in its joint coast guard and navy²¹³ and Suriname's Coast Guard – established in 2017— has three vessels.²¹⁴

These disparities persist even if we take into account the size of fleets relative to the size of national waters in the nine countries covered by this report. Argentina has by far the largest combined fleet, with a ratio of 0.132 personnel per nautical square mile in the national EEZ, a ratio which puts it slightly ahead of both the U.S., a major naval power (0.089), and Colombia (0.108), an important regional peer.²¹⁵ Ecuador (.072) and Uruguay (.065) are slightly lower, but still demonstrate sizeable scale. At the other end of the spectrum, Guyana (.002), Jamaica (.002), and Suriname (.003) are the three nations with the lowest measures of manpower by far, aside from Costa Rica, with the caveat that Costa Rica does not have a navy and only has rudimentary coast guard capabilities (.0016).²¹⁶ Panama (.02) and Chile (.017) sit in the middle of the pack.²¹⁷

These quantitative estimates of relative physical capacity could be misleading, because of a number of other factors that may affect the deployment of capacity. For example, ships and personnel are often more devoted more to other priorities, such as combatting drug trafficking, than to deterring IUU fishing, as will be discussed in

the next section. The condition and age of fleets across the region is also of particular concern, as fiscal constraints limit investment and maintenance. In the case of Jamaica, for example, the state of economic disrepair after the global recession of the late 2000s left its Coast Guard “almost completely unserviceable” by 2012,²¹⁸ although plans are in the works to upgrade the coast guard’s personnel and fleet, and the U.S. recently donated Boston Whaler patrol boats to the Jamaican government.²¹⁹ Another example comes from Suriname, where “[o]verall the armed forces show a lack of maintenance and negligence, which compromises its capabilities.”²²⁰ Even in wealthier countries, fleets are aging and undermaintained. According to Jane’s World Navies, regional power Argentina “deploys an ageing blue-water fleet with finite capabilities across the spectrum of force roles, especially pertaining to patrolling,” and modernization of the fleet has been a stated priority of the government since the early 2000s, but little progress has been made on its implementation.²²¹



The most significant exception to these problems is Chile, whose Navy (and coast guard component), is “the most modern and best-equipped in South America.”²²² Chile recently underwent a decade-long naval modernization campaign that included the acquisition of offshore patrol vessels (OPVs) which have expanded its patrol capabilities beyond its Exclusive Economic Zone (EEZ) and into international waters, while increasing the number of OPVs patrolling its EEZ.²²³

In terms of physical capacity, Chile and Argentina invest the most in their coast guards and navies by a wide margin. Chile is poised to spend almost \$1 billion on its navy in 2022 and an additional \$127 million (down from \$145 million in 2020) on its coast guard.²²⁴ Argentina is poised to spend \$340 million on its navy in 2022 and spent \$302 million on its coast guard forces in 2021.²²⁵ In terms of the naval budget, the only other country in this report that approaches Chile and Argentina is Ecuador, which spends almost as much on its navy as Argentina, though defense-wide budget cuts have pushed that figure down in recent years.²²⁶



Surveillance Capability

Monitoring, control, and surveillance (MCS) is another important component to combatting IUU fishing. Monitoring refers to the measurement of fishing effort yields and the attributes of those yields. Control refers to the regulatory environment in which the utilization of fishery resources is conducted. Surveillance refers

to efforts to observe the state of compliance with the regulatory environment for fishery resources. According to the United Nations Food and Agriculture Organization (UN FAO):

*MCS is an often overlooked aspect of oceans and fisheries management; but, in reality, it is key to the success of any planning strategy. The absence of a strategy and methodology for implementation of monitoring, control and surveillance operations would render a fisheries management scheme incomplete.*²²⁷

In the region, there are several major categories of efforts to combat IUU fishing through MCS, including 1) U.S. partnership efforts aimed at increasing joint MCS capabilities; 2) MCS instruments developed and carried out by non-governmental organizations; and 3) domestic MCS capabilities.

With regard to the first of these, the U.S. has surveillance partnerships with counter-IUU fishing components in a number of countries in the region. Ecuador is one such example. A U.S. Orion P-3 aircraft carries out maritime aerial exploration operations to collect information on IUU fishing and the U.S. is developing sensors and communications equipment to enhance the Ecuadorian Navy's surveillance profile.²²⁸ In response to the Chinese fishing fleet's growing presence in Ecuador's EEZ, the U.S. has deployed Coast Guard patrol boats and personnel to Ecuadoran waters.²²⁹ Another example is the U.S.'s 2020 Operation Southern Cross, which institutionalized maritime surveillance cooperation with Guyana, Argentina, and Uruguay.²³⁰

In the Caribbean, U.S. surveillance capacity building operations have traditionally emphasized counter-narcotics missions. The U.S. has developed shiprider agreements that allow U.S. assets and personnel to patrol local waters with host country officials. In 2020, the U.S. signed a shiprider agreement with Guyana that allows U.S. personnel and assets to patrol local waters and train Guyanese forces.²³¹ Similarly, in 2021, Jamaica and the U.S. amended an existing 1997 shiprider agreement focused on drug interdiction to expand technical assistance and cooperation against IUU fishing.²³² As the Caribbean states are also less likely to be parties to the PSMA, the U.S. and FAO in recent years have focused on building capacity to bring these countries into compliance, with the eventual goal of joining the agreement. For example, from 2017 to 2020, NOAA's Office of Law Enforcement, in partnership with the FAO, has provided support for MCS capacity building to implement the terms of the PSMA in Guyana and Jamaica, which are not currently members.²³³

Second, there are international instruments in the field of MCS that include several of the countries surveyed in this study. The International MCS Network (IMCS Network) emerged out of the 2000 Santiago Declaration, drafted by representatives of Australia, Chile, the European Union, Peru, and the United States.²³⁴ The IMCS Network is a voluntary network of countries and RFMOs committed to improving fisheries-related MCS activities and it encourages information sharing and organizes

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capacity building trainings for MCS, among other functions.²³⁵ Because participation is voluntary, commitments established in IMCS Network proceedings are non-binding. One thing to note about the Network is that the Santiago Declaration expressly tasked the FAO with coordinating the Network and promoting participation by less developed nations (many of which have the most at stake in terms of food insecurity and lost revenue when it comes to IUUF).²³⁶ Only five of the nine countries that are the focus of this research (Chile, Costa Rica, Ecuador, Panama, and Uruguay) are members of this institution.²³⁷ The Network is not significantly integrated into existing fishery institutions and “has struggled to attain global legitimacy.”²³⁸

Another relevant international instrument in the field of MCS is Interpol’s Project Scale, a project to help Interpol member countries prevent fisheries crime by exposing criminals and their networks. The Fisheries Crime Working Group (FCWG) is an international platform within INTERPOL’s Project Scale for the sharing of knowledge and information, as well as the development of policing approaches to fisheries crimes.²³⁹ Costa Rica appears to be the only country of the nine covered here to have engaged on a significant level with Project Scale. Costa Rica utilized the Project Scale Interpol architecture to prosecute violators of IUU fishing law, requesting that a Purple Notice be issued to make states aware of an illegal shark-finning technique that Costa Rica discovered in 2011.²⁴⁰ However, only 49 countries worldwide are currently members.²⁴¹

With regard to domestic MCS, the surveillance capacities of individual countries in the LAC region and their law enforcement agencies vary enormously. The South American countries in this report generally outperform their peers in the Caribbean and Central America, although the extensive fisheries they surveil are also home to significant international fishing vessels, including many engaged in IUU fishing activities.

Argentina has “adequate MCS infrastructure” to monitor domestic and foreign fleets fishing in its EEZ.²⁴² Fishing vessels flagged to Argentina that intend to fish on the high seas must follow rules on vessel registration, flag state obligations, and reporting requirements. Argentina has a vessel monitoring system (VMS) mandate for artisanal boats longer than 10 meters. Onboard video cameras were required to monitor compliance with fishing regulations, although this mandate has not been uniformly implemented. Onboard observer coverage varies considerably. The maritime forces have adequate manpower for sea-based patrols, but “gaps are reported with respect to number of inspectors versus operational vessels for surveillance in artisanal fisheries” and corruption has been reported among inspectors.²⁴³ The Argentine navy has the capacity to conduct aerial patrols of fishing vessels and does so. It also has a relatively good offshore presence to deter fishing of squid along its EEZ boundary, especially by comparison to its neighbors.²⁴⁴

Chile is a regional leader on surveillance capacity. In 2019, Chile's National Fisheries and Aquaculture Service (SERNAPESCA) elected to share its VMS data with Global Fishing Watch in the interest of transparency, and also mandated the use and publication of VMS. However, Chile has struggled to build sufficient infrastructure to monitor vessels that do not voluntarily report their VMS data.²⁴⁵ In order to comply with the 1979 International Maritime Search and Rescue Convention (SAR Convention), Chile established a "vessel situation notification system" that reports on the monitoring of vessels in Chile's SAR jurisdiction. Chile has invested dramatically in recent years in drones and satellite technologies to improve its MCS capabilities, especially in Marine Protected Areas (MPAs) further away from the coast. In areas with a high concentration of foreign fishing vessels, the Chilean Navy conducts anti-IUU fishing Oceanic Fisheries Control Operations.²⁴⁶

The two other South American countries covered by this report have considerably less MCS capacity. Ecuador is "moderately equipped" to monitor fishing vessels active within its EEZ²⁴⁷ but it has been understaffed. In marine reserves there are good satellite, radial and radar systems. Boats can be sanctioned or fined for entering the marine reserve.²⁴⁸ But existing inspections at landing docks in artisanal fisheries and coastal patrols are insufficient to deter illegal fishing and illegal cross-border trade. Since Ecuador is not a signatory to the FAO Compliance Agreement and its national laws do not require Ecuador-flagged vessels to report their position at regular intervals on the high seas, it lacks adequate management plans to monitor its vessels on the high seas.²⁴⁹ A portion of industrial tuna vessels, trawlers, and purse seiners are fitted with VMS; however, many of its artisanal vessels are classifiable as semi-industrial vessels capable of fishing on the high seas but are not fitted with VMS.²⁵⁰

Uruguay has a number of regulations on the books. It requires all large fishing vessels to share their VMS location data. It also requires foreign vessels fishing in its water to have VMS surveilled by the flag state. Within the country, foreign vessels with catches to unload are required to notify Uruguayan fisheries authorities at least 48 hours in advance of their arrival in Montevideo. However, capacity to actually implement these regulations has been sparse, and experts estimate that no more than one fifth of all vessels docking in Montevideo are even nominally inspected.²⁵¹ Montevideo has seen multiple cases in recent years of crew members being abandoned in port, reports of mistreatment, and routine disembarkation of fishers' corpses. Partly in consequence, the government has announced plans to increase the number of fishing vessel inspectors by 33 percent. But this may not address the issue of significant bribery of inspectors, reportedly persistent in Uruguay, nor does it counteract the larger structural issue, which is that the port of Montevideo benefits enormously from servicing foreign fishing fleets that are often engaged in questionable activities in neighboring countries' waters.²⁵²

Chile is a regional leader on surveillance capacity.

The Caribbean nations covered by this report have the weakest capacity, starting with bad data collection, which poses an immense challenge to any significant fisheries planning.

The two Central American countries covered by this report have middling MCS capabilities. Costa Rica suffers from serious overfishing in its EEZ, including tuna catch that may be three times as great as the quotas set by the fisheries authority INCOPESCA.²⁵³ Costa Rica has invested in patrol boats, installed radars in marine protected areas (MPAs), and launched a drone surveillance system in 2015 to deter poaching and eliminate IUU fishing. It also shares VMS data with Global Fishing Watch.²⁵⁴ But overall capacity remains insufficient to adequately control the maritime domain, especially in MPAs, where the remoteness of the location means that authorities are often absent or understaffed.²⁵⁵ One expert suggested that as many as two-thirds of fishers are unlicensed, and government inspectors have little control or data, aside from being susceptible to corruption.²⁵⁶

Panama was yellow flagged by the EU in 2019 for failing to demonstrate sufficient effort in combatting IUU fishing. The National Aeronaval Service (SENAN) and Coast Guard have sufficient capacity to patrol coastal and territorial waters, as well as to control ports to prevent IUU fishing, and to control vessel activities within MPAs.²⁵⁷ But although Panama monitors all industrial fishing boats by VMS, it does not automatically overlay EEZ and high seas boundaries, “rendering identification of fisheries violators ineffective.”²⁵⁸ The government shares its VMS data with Global Fishing Watch, but Panama’s International Maritime Organization (IMO) vessel numbers are replaced by anonymous GFW ID numbers (Chile, by comparison, allows GFW to release IMO ID numbers).²⁵⁹ Further, many problems visible elsewhere are also present in Panama: prioritization of drug interdiction over IUU fishing; a shortage of fisheries inspectors; and inadequate onboard observer presence. As a result, even though its budget for fishing control is much larger than Costa Rica’s, Panama has limited capability to monitor its vessels on the high seas, and those found violating the law are often able to avoid penalties (ships could often just switch their flag after being caught to avoid paying fines).²⁶⁰

The Caribbean nations covered by this report have the weakest capacity, starting with bad data collection, which poses an immense challenge to any significant fisheries planning. In Guyana, all trawlers are required to install VMS transponders before licenses are issued every year, and catch recording in logbooks is mandatory.²⁶¹ However, Guyana has limited manpower for land and sea-based enforcement, the Fisheries Department budget is insufficient, the Guyana Coast Guard lacks radar systems to conduct surveillance,²⁶² and the government has largely been dependent on patrol boats and training donated by the U.S. via the Caribbean Basin Security Initiative (CBSI).²⁶³ At present, the Coast Guard can only monitor 40 miles out from shore and is poorly equipped to pursue IUU fishers.²⁶⁴ The government has often relied on private vessels for surveillance on what is happening, although the recent purchase of a 115-foot vessel may improve control over the EEZ.²⁶⁵ Fines by the coast guard are used as a deterrent, but they are seldom enforced. There are important gaps in licensing procedures, and small fishers often deliberately avoid licensing so as to avoid income tax.²⁶⁶ One consequence is overfishing: some areas

are so crowded that there is not enough space for the fishing nets.²⁶⁷ Vessels are not being inspected or measured, landing sites are not being monitored and there is little inspection on the water.²⁶⁸

Jamaica is in the process of expanding VMS mandates to all locally-licensed motor fishing vehicles, and in 2019 the government expanded guidelines and sought to improve interagency cooperation around IUU fishing. In recent years there has been a good partnership between the Marine Police and Coast Guard.²⁶⁹ In 2018 the government also obtained a Beechcraft King Air 350 WR maritime patrol aircraft (MPA) and two Bell 429 helicopters to build up surveillance capabilities specifically against IUU fishing. Yet Jamaica's patrol boats are old and poorly maintained.²⁷⁰ It is also difficult to gain a full picture of IUU fishing in Jamaica because of poor data collection. Jamaica has collaborated with CARICOM and the Inter-American Development Bank to create a system with management plans, a list of boats with permits to fish in Jamaica and a system through which foreigners can apply for boating licenses and pay online. Under this new system sports fishers will also have to register their boats.²⁷¹ However, an absence of effective data collection allows illegal fishers to continue their activities, especially as currently conch and lobsters are the only two regulated species.

Suriname seeks to maintain close regulation over its own domestic fisheries, in part to ensure that it is able to continue to export to foreign markets, especially the European Union.²⁷² The country requires permits for offshore fishing and a VMS mandate for every license holder of a fishing vessel, although this regulation is still in the process of implementation with private sector cooperation.²⁷³ But the newly formed Coast Guard, as noted earlier, is quite small, and limited budgets mean that patrols occur only sporadically, while there are few statistics on which to base fishery policies.²⁷⁴ This means that monitoring is more effective with domestic fishers that land fish at national ports than with fleets operating further offshore. Even here, however, there are significant problems with the forgery of fishing licenses and boat numbers, which are used to evade fishing restrictions.

Prosecutorial capacity

The ability of the nine countries covered in this report to deter IUU fishing is also hampered by low levels of effective prosecution of environmental crimes. In part, this is due to the low priority given to environmental crimes by prosecutors, and the low sentencing guidelines for such crimes. Across the region, experts note that not all crimes are typified in criminal code, nor are the fines and possible sentences an effective deterrent.²⁷⁵ In some countries, such as Costa Rica and Ecuador, local experts report that it can be difficult to educate members of the judiciary about the issue and judges refuse to accept evidence related to fishing crimes.²⁷⁶

Also problematic is weak prosecutorial-judicial capacity: a majority of the nine countries show low capacity despite considerable divergence across their prosecutorial and judicial systems.²⁷⁷ Only four of the nine countries are above the fiftieth percentile

The ability of the nine countries covered in this report to deter IUU fishing is also hampered by low levels of effective prosecution of environmental crimes.

Given low prosecutorial-judicial capacity, it is perhaps not surprising that examples of successful prosecution are few and far between.

on the World Bank's "Rule of Law" index: Chile (84th percentile), Uruguay (74th), Costa Rica (70th), and Suriname (50th).²⁷⁸ A measure of "timely, effective criminal adjudication" by the World Justice Project shows only two of the nine countries in the top tercile internationally: Suriname and Chile.²⁷⁹ Uruguay, Ecuador, Costa Rica, and Guyana fall in the second tercile, and Argentina, Jamaica and Panama in the third.²⁸⁰

There has been important international support for prosecutorial efforts. The U.S. government and international organizations have worked with partners to improve prosecutorial training regarding IUU fishing. For example, the U.S. trained Ecuadoran prosecutors on deterring IUU fishing,²⁸¹ and through the Caribbean Basin Security Initiative (CBSI), the U.S. has provided support for technical capacity training of Guyanese and Jamaican prosecutors.²⁸²

Given low prosecutorial-judicial capacity, it is perhaps not surprising that examples of successful prosecution are few and far between. However, the prosecution of a variety of fishing-related crimes in the countries covered by this report in recent years suggests that with adequate will, violations can begin to be addressed:

- In Chile, salmon thieves were busted in 2019 and sentenced in 2021 to between seven hundred days and three years in jail for stealing ten tons of farmed fish.²⁸³
- In Ecuador in 2019, authorities sentenced 20 crew members of the Chinese ship *Fu Yuan Yu Leng 999* to one to three year terms, confiscated the ship, and imposed a US\$6.1 million fine after they were caught with 7,600 sharks off the Galapagos.²⁸⁴
- Also in Ecuador, in 2021 the alleged exporter of 26 tons of illegal shark fins to Hong Kong, taken from more than 38,000 sharks, was fined by the government (the fine, however, was less than \$4,000).²⁸⁵
- The Guyanese Coast Guard in 2018 conducted operations against three vessels found fishing without turtle excluding devices (TEDs). The captains were prosecuted, and two were found guilty.²⁸⁶
- In Jamaica, two fishing vessels run by Dominican fishers were seized for IUU fishing. The fishers were convicted in 2019 resulting in the forfeiture of their ships.²⁸⁷

These examples demonstrate that prosecution of IUU fishing is possible, although it is far from common in any of the nine countries covered by this report.

What can be done?

Developing a more effective approach to curbing illegal, unreported, and unregulated (IUU) fishing in the nine countries covered by this report requires local, regional, and international action. This report details priority areas in which policies toward IUU fishing can be strengthened across Latin America and the Caribbean.

1. Build Regulatory, Legislative, and Law Enforcement Capacity

The nine countries vary considerably across all aspects of capacity, including regulatory oversight, legislative frameworks, and law enforcement capacity.

Some countries do not have sufficient capacity to establish the baseline data required to produce reliable estimations of fish stock for effective management, nor to distinguish illegal fishing from unregulated or unreported fishing. Continued bilateral support for the most basic forms of capacity building – equipment, training, and technical support – across all aspects of regulatory oversight is essential to developing technological know-how, simple registries of fishers and vessels, licensing systems, inspection and enforcement procedures, and implementation of international treaty law.²⁸⁸ Countries that have not yet developed National Plans of Action (NPOAs) – Costa Rica, Suriname, Guyana, Jamaica²⁸⁹ – should be encouraged to do so. All nine countries require (or will require) support in making their NPOAs effective.

Regulations vary considerably across the region, with significant gaps in some countries and a hodgepodge of regulations across the hemisphere. Efforts at harmonization should continue to focus on developing consistent national regulations regarding protected species, quotas, gear, catch documentation, port controls, and standards for Exclusive Economic Zone (EEZ) access, among others.²⁹⁰

In several countries, domestic laws fail to criminalize IUU activities. Greater criminalization of the most egregious crimes will ensure that violators can be prosecuted and that illegal fishing is punished not solely as a regulatory violation, but instead as a serious criminal act.²⁹¹ The U.S. might contribute to this effort via the assertion of concurrent jurisdiction in the most egregious IUU fishing crimes, such as labor violations, catch upgrading, or destruction of marine habitats.²⁹²

Across Latin America and the Caribbean, there is considerable variance in accession to and implementation of existing treaties and agreements, including the Agreement on Port State Measures (PSMA, 2016), the International Labor Organization Work in Fishing Convention 188 (2007), the Cape Town Agreement (CTA, 2012) on vessel safety, as well as the Copenhagen Declaration on Transnational Organized Crime in the Fishing Industry (2018). Countries across the region should be encouraged to sign, ratify, and implement these accords. So, too, private sector actors in the fishing industry should be encouraged to develop training and compliance frameworks that meet or exceed international standards.

Continued bilateral support for the most basic forms of capacity building – equipment, training, and technical support – across all aspects of regulatory oversight is essential.

Within nation-states, it is important to encourage adoption of a whole-of-government approach that improves attention to IUU fishing matters across a variety of authorities.

Regional fisheries management organizations (RFMOs) are widely recognized as playing a central role in regulating member states. The absence of an RFMO in the South Atlantic, a legacy of the conflict over the Malvinas/Falklands, ensures a significant regulatory gap in a critical fishery, even as the number of IUU incidents by actors from outside the region has increased sharply. Creative thinking is needed that might break this unproductive logjam, to encourage the construction of a South Atlantic RFMO.

Even the best-equipped naval and coastal forces in the region are overwhelmed by the challenge of deterring IUU fishing by both domestic and foreign actors. The U.S. and its partners can help by working to develop consistent and enforceable standards for monitoring, control, and surveillance (MCS) that mandate that all fishing vessels are equipped with and use tracking technology such as automatic identification systems (AIS); release their vessel monitoring systems (VMS) data to the public; and ensure that fishing vessel authorizations are publicly available.²⁹³ Experts consulted for this report recommended creating incentives to reward good operators who follow MCS protocols consistently, such as expedited licensing and access to restricted fisheries. The U.S. should continue to build upon joint cooperative patrolling, such as the U.S. Coast Guard's Operation Southern Cross, whereby the USCG cutter Stone patrolled jointly in 2020-21 with partners in Guyana, Brazil, Uruguay, and Portugal. Finally, local fishers may be encouraged to serve as monitors within a broader maritime sensor network, feeding crowdsourced data platforms on IUU fishing activities in their national waters.²⁹⁴

2. Build Whole of Government Networks

It is commonplace to argue that a whole of government approach is needed to combat crime, and that networks of government are needed to combat transnational organized crime.

Within nation-states, it is important to encourage adoption of a whole-of-government approach that improves attention to IUU fishing matters across a variety of authorities.²⁹⁵ Most of the countries covered by this report have only limited inter-agency cooperation on fishing matters. Experts from the region consulted for this report particularly highlighted the low priority given to IUU fishing in their countries' executive branches, as well as the weakness of prosecutors' and judges' understanding of the urgency and the seriousness of IUU fishing crimes.

At a regional level, the international migrations of marine species and interconnectivity of ecosystems means that countries should be encouraged to engage in more systematic examination, and information sharing regarding the health of marine species, as well as examination, sharing, and analysis of crimes.²⁹⁶

3. Establish More Effective Controls over Transshipment

Transshipment is pernicious for a variety of reasons: it allows IUU fishing vessels to avoid port inspections, facilitates laundering of illicit catch into licit streams, makes

it more difficult for national authorities to detect labor abuses, and complicates the task of national fisheries management by making it harder to record catch data.²⁹⁷

Significant transshipment activity takes place off the Argentine, Peruvian and Ecuadoran (including both mainland and Galapagos) coasts, including within national EEZs.²⁹⁸ Studies demonstrate that transshipment occurs both on the high seas and within the EEZs of coastal countries, and that “fishing vessels from China, Taiwan, South Korea, and Japan (the next common fishing vessel flag states engaged in these activities, apart from the United States) were associated with transshipment vessels flagged to Panama, Liberia, and Vanuatu, all of which are known open-registry states...”²⁹⁹

Some have argued that transshipment at sea should be avoided whenever possible.³⁰⁰ The South Pacific RFMO (SPRFMO) in early 2022 considered, but ultimately did not reach consensus on a mandate that all ships have observers on board by 2028 and that they unload their catches only in ports.³⁰¹ As this demonstrates, it may be difficult to achieve international consensus to restrict transshipment. However, the relatively small number of transshipment vessels – one study found that only 130 carriers (22% of all carriers globally) accounted for 72% of all transshipment events³⁰² – means that observation of key players can be achieved at relatively low cost. Regulatory frameworks for the control of transshipments should be improved in cooperation with the private sector to encourage catch documentation and to implement an independent observer program aboard all transshipment vessels operating in the hemisphere.

4. Assess and Control Ports

Ports are a key chokepoint in the fishing production chain, as they are central to the tasks of replenishing ships, landing and boarding crews, and offloading and processing catch. As such, they also offer an important space for regulation. The Port State Measures Agreement was designed to reduce IUU fishing crimes, by ensuring more rigorous notification and inspection requirements in port, as well as establishing the possibility that port use might be denied.³⁰³

At least three problems arise with the PSMA in the nine countries covered by this report. First, there is a considerable threat of a “race to the bottom,” as countries compete for ship provisioning and repair services, fish processing business, and port fees.³⁰⁴ Recent studies indicate a high risk of IUU fishing crimes at ports in Ecuador, Peru, and Uruguay.³⁰⁵ The port of Montevideo is believed to be at a particularly high risk of labor abuse, and regional experts consulted for this report note that significant numbers of dead crew offloaded there. A report from Oceana also notes that 31% of vessels that go “dark” in the waters off Argentina’s EEZ – a clear flag for IUU fishing – subsequently visit the port of Montevideo.³⁰⁶ Further, countries desperate for foreign investment may be susceptible to a race to the bottom. In recent years Peru pioneered new tracking data requirements for vessels visiting its ports, leading to a noticeable decline in port visits by Chinese fishing

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Priority should be given to encouraging accession to, and effective implementation of, the Port State Measures Act.

vessels. However, these gains may be in danger of disappearing in the wake of plans for a Chinese port investment.

Second, Argentina, Jamaica and Suriname have not yet acceded to the PSMA (and only 56% of port states have joined globally³⁰⁷). Third, even when port states do undertake inspections and uncover wrongdoing, these findings are not always passed on to problem vessels RFMOs or Flag States, nor do Flag States often act upon them.³⁰⁸

Until these gaps in PSMA coverage are filled, regional port controls will continue to revert to the least common denominator. Priority should be given to encouraging accession to, and effective implementation of, the Port State Measures Act.³⁰⁹

5. Increase Beneficial Ownership and Flag State Transparency

A key driver of IUU fishing is the difficulty of identifying fishers and their true origin: that is, the challenge of tracking the real, or beneficial, owners of fishing vessels, and figuring out which are their true Flag States.

Vessels flying so-called “flags of convenience” – available in some cases online for a minimal fee – are believed to represent somewhere between 10% and 15% of vessels longer than 24 meters in the global fishing fleet.³¹⁰ Convenience flagging is not illegal and is driven by economic rationality: it decreases operating costs and reduces regulatory burdens. It may also permit industrial fishers in international waters to avoid RMFO regulations, since they are not subject to the RMFO if they are flagged to a state not party to that RMFO.³¹¹ Similarly, ownership structures that shield beneficial ownership provide a legally permissible veil against regulators, shareholders, employees, or media. And both beneficial ownership provisions and flags of convenience are lucrative for the states that provide them. In Latin America, Bolivia and Panama are well-known for their flagging operations, while offshore companies prosper in a variety of jurisdictions in the Caribbean, as well as Panama and Uruguay.

The combination of beneficial ownership opacity and flags of convenience has significant costs. First, they contribute to a generalized lack of transparency in the fishing industry. Simply tracking fish catch as it moves from captain to agent to customer, oftentimes through a network of complex financial transactions in a variety of jurisdictions, can be a challenging proposition.³¹² Complicating matters is the fact that in artisanal fishing many countries in the region lack the capacity to register all vessels and license them adequately, while in transoceanic industrial fishing it is possible for more sophisticated operators to “flag” a vessel to a variety of Flag States and update those registries (“re-flag”) frequently.

Second, they contribute to a regulatory “race to the bottom.” If regulation increases in one jurisdiction, it is likely that some regulated vessels will simply “re-flag” or “flaghop” to a less burdensome jurisdiction. Indeed, it is not unheard of for a vessel

to reflag “on the fly,” as soon as enforcement officers close in on it. Meanwhile, past efforts to force states to effectively control the vessels they flag have failed.³¹³

Third, they permit criminality. Many Flag States provide flagging services for a fee without much regulation, whether it is to register true ownership or to engage in the type of due diligence that might prevent wrongdoing. It is not surprising, then, that recent studies show that the risk of criminality at sea is often heightened by beneficial owners hiding behind a web of front companies, subsidiaries, and concealed ownership networks.³¹⁴ Indeed, one scholar notes that the low capacity and lack of interest of Flag States in policing operators flying their flags amounts to a “modus operandi” in IUU fishing.³¹⁵

To diminish these deleterious consequences, efforts should be deepened to ensure that Flag States are held responsible for their flagged vessels’ behavior, by seizing repeat offenders, by using coercive measures such as export limitations or tariffs on offender states, and by further embedding Flag State responsibilities in treaty. Already, the U.S. government has authority to block shipments from states engaged in IUU fishing, through National Marine Fisheries Service/NOAA biennial reports to Congress.³¹⁶ Flag States, especially countries such as Panama that provide flags of convenience with low levels of regulation, should be encouraged to increase oversight and recording to ensure that ownership structures are transparent.

Further, national governments should be encouraged to make all vessel data public. A number of the countries covered by this report have shied away from reporting vessel tracking information, due to reasonable fears that fishing locations might be revealed to competitors. Because VMS data is higher quality than other forms of tracking data, it is often kept confidential. Of the nine countries covered by this report, only Chile, Panama and Costa Rica have agreed to share this data.³¹⁷ VMS data collection should be routinely analyzed in conjunction with data on corporate registers and beneficial ownership to weed out bad actors.³¹⁸

6. All Fishers Must Bear Fishing’s True Economic Cost: Reduce Subsidies and Certify Catch

IUU fishing crimes are frequently committed precisely so as to elide the true economic cost of sustainable fisheries. Illegal fishers do not face the cost of exploiting workers or fisheries, nor of meeting the regulatory and tax burdens required to sustain sustainable fishing grounds.

One particularly pernicious practice that contributes to IUU fishing is the subsidizing of fishing fleets, which reaches \$35 billion annually³¹⁹ (of which \$22 billion are harmful subsidies) and props up a global fleet 2.5 times larger than would be needed to fish sustainably.³²⁰ Subsidies introduce otherwise unproductive vessels into fisheries that may already be under strain.³²¹ To give a sense of the problem, it is estimated that subsidies that permitted foreign fishing in Peru’s EEZ accounted for 54% of the value of catch by those foreign fishers.³²²

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After two decades of negotiations, in June 2022 the World Trade Organization (WTO) committed to a pared-back agreement to curb harmful fishing subsidies. Further efforts are needed. At a most basic level, WTO members should be encouraged to ratify and implement these commitments. Negotiations continue, and more must be done to extend the scope of these efforts, including by limiting subsidies for fuel and fish processing that facilitate IUU fishing by foreign fleets.³²³

A second problem is that there are very few limits to the laundering of illegal catch. As a recent Financial Action Task Force report noted, environmental crimes often involve the comingling of legal and illegal goods early in the supply chain to conceal their illicit source. Further, the use of layers of shell and front companies that occurs in crimes such as illegal logging, illegal mining, and waste trafficking is equally common in IUU fishing related crimes.³²⁴ The problems of comingling and non-transparency must be addressed to ensure that illegal fishers are forced to play on the same playing field as their legal competitors.

A variety of audits and certifications are available from groups such as FishWise, the International Seafood Sustainability Foundation (ISSF), the Marine Stewardship Council (MSC), SeaBOS, the Seafood Ethics Action Alliance (SEA Alliance), the Seafood Alliance for Legality and Traceability (SALT) and the Seafood Task Force. However, these certifications are not widely employed in fisheries in Latin America and the Caribbean. Regional RFMOs should be encouraged to create and strengthen semi-market-based solutions such as “catch documentation schemes” that provide a certification of sustainable stocks from “net to plate,”³²⁵ so that buyers will preferentially purchase marine catch from particular fisheries.³²⁶ In the most rigorous of these certification programs, permanently operational vessel tracking systems and due diligence would be required for certification. The U.S. may assist this process through continued expansion of the Seafood Import Monitoring Program (SIMP) to cover a greater proportion of its imports, building on commitments made at the June 2022 United Nations Ocean Conference.³²⁷

7. Target High Offenders

Criminologists have noted that a small percentage of wrongdoers usually accounts for the vast majority of crimes, and that targeting those wrongdoers is therefore a cost-effective way to reduce the overall volume of crime, while reducing the incentives for lesser offenders to engage in wrongdoing. High offenders should be specifically targeted by authorities and penalized sufficiently to serve as an effective deterrent.

Recent studies of fisheries crime find high levels of concentration among a few bad actors. For example, one 2022 study concluded that, globally, “33% of all recorded offenses are associated with 450 industrial vessels and 20 companies originating from China, the EU, and tax haven jurisdictions.”³²⁸ Further, “[w]ithin that sample, a third of all illegal activities (n = 684) were linked to 20 companies.”³²⁹ Another study found that at-sea risk areas were marked by three qualities: poor control of

corruption by the Flag State, high ownership of fishing vessels by countries other than the Flag State, and Chinese-flagged vessels.”³³⁰ Additionally, as noted earlier, a highly concentrated group of vessels is responsible for transshipment events: only 130 carriers (22% of the global total) account for 72% of all transshipment events.³³¹

Too often, the penalties for IUU fishing related crimes are a mere slap on the wrist. In part, this may be because there “seems to be an unstated assumption that parties engaged in IUU fishing are rationally self-interested enough not to destroy a fishery.”³³² But this assumption is clearly misguided, and egregious abuses by criminal actors suggest that current penalties are insufficient deterrent. Too often penalties are limited to jail time for crew members rather than the actual vessel owners. Vessel seizures, rare though they may be, are an insufficient deterrent because the cost of a trawler may be less than a year’s profit from IUU fishing.³³³ More needs to be done to establish clear deterrent penalties for the worst offenders, to improve the likelihood of effective prosecution of vessel owners, and to hit the pocketbook of potential offenders through vessel seizures, fines, and limitations on the sale of IUU fishing catch.³³⁴

8. Expand and Safeguard Protected Zones

There are many benefits to establishing marine protected areas: MPAs protect species diversity, as well as providing space for stocks to replenish. The U.S. made an Ocean Conservation Pledge at the April 2022 Our Ocean Conference in Palau, committing to conserve, protect and restore 30% of oceans under its jurisdiction and pushing other nations to do so as well. A wide variety of MPA expansion projects are currently underway, including in the Western Hemisphere.³³⁵ Notably, in 2021 Colombia, Costa Rica, Ecuador, and Panama announced the establishment of the Eastern Tropical Pacific Marine Corridor (CMAR), covering more than 500,000 square kilometers of ocean. And in 2022, during the Summit of the Americas, nine countries agreed to establish a network of interconnected MPAs along the Pacific coast of the Americas, from Alaska to Patagonia (Chile, Canada, United States, Mexico, Costa Rica, Panama, Colombia, Ecuador, Peru).

However, establishment of an MPA is not by itself a panacea. For example, Costa Rica’s MPA around Cocos Island is subject to frequent incursions by a variety of foreign and domestic IUU fishers. To reap the full benefits of MPAs, then, countries should be encouraged to establish MPAs, provide buffer zones around them, and effectively police and safeguard these areas.

Regional partners should be encouraged to establish MPAs, provide buffer zones around them, and effectively police and safeguard these areas.

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