



Bad Catch

Examining Illegal, Unreported, and Unregulated Fishing



American Security Project



White Paper

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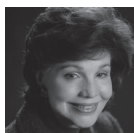
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American Security & the Oceans

In this Report:

Illegal, Unreported, and Unregulated (IUU) fishing threatens global maritime security. IUU fishing operations exacerbate food insecurity, marine degradation, organized crime, and poverty. IUU fishing is challenging to combat and undermines sustainable fisheries practices. People are increasingly reliant on seafood and fisheries for subsistence and livelihoods, causing increasing pressure on fragile marine ecosystems. Competition over marine resources has led to the evasion of fisheries authorities and the flourishing of corruption and transnational organized crime. Billions of dollars of global revenue are lost annually due to IUU fishing. This paper aims to link IUU fishing impacts to national security policy. Specifically, it investigates whether the regional approach to fisheries management could be strengthened through collaborative processes and whether the United States can play a more significant role in combatting IUU fishing. Capacity building for fisheries monitoring, control, and surveillance (MCS) efforts coupled with well-enforced fisheries policy is vital to deterring illicit actors. Without strengthening the US and international approach to combat IUU fishing, the tensions among fishing nations could threaten geopolitical stability.

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IN BRIEF

- IUU fishing exacerbates poverty, threatens livelihoods, and fosters food insecurity. These impacts are especially detrimental to developing countries that rely heavily on marine ecosystems for subsistence and employment.
- The ability of DWF fleets to travel far and wide, the divergent enforcement mechanisms for IUU fishing, the ability of fishers to evade detection, and possibilities for transshipment on the high seas make IUU fishing extremely challenging to prosecute.
- The United States has the resources to assist developing countries to build capacity for MCS operations and share resources and knowledge to combat IUU fishing.
- Fostering partnerships across regional organizations, international institutions, and NGOs will facilitate better information sharing, capacity building, and subject expertise.

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Glossary:

ABNJ – Areas Beyond National Jurisdiction

AIS – Automatic Identification System

APEC – Asia-Pacific Economic Cooperation

CCAMLR – Commission for the Conservation of Antarctic Marine Living Resources

DWF – Distant Water Fishing

EEZ(s) – Exclusive Economic Zone(s)

FAO – Food and Agriculture Organization of the United Nations

IPOA-IUU – International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing

ITF – International Transport Workers Federation

IUU Fishing – Illegal, Unreported, & Unregulated Fishing

Maritime SAFE Act – Maritime Security and Fisheries Enforcement Act

MCS – Monitoring, Control, and Surveillance

NGO(s) – Non-Governmental Organization(s)

MSY – Maximum Sustainable Yield

NMFS – National Marine Fisheries Service

NOAA – National Oceanic and Atmospheric Administration

PSMA – Port State Measures Agreement

RFMO(s) – Regional Fisheries Management Organization(s)

SIDS – Small Island Developing States

SIMP – Seafood Import Monitoring Program

UNCLOS – United Nations Convention on the Law of the Sea

UNFSA – United Nations Fish Stock Agreement

UNODC – United Nations Office on Drugs and Crime

US – United States of America

USCG – United States Coast Guard

VMS – Vessel Monitoring System

WATF – West Africa Task Force

Illegal, Unreported, and Unregulated Fishing

Fish account for 17% of the animal protein consumed by the global population and overall provide about 3 billion people worldwide with nearly 20% of their animal protein. Further, about 12% of the world's population—over 870 million people—depend on fisheries and aquaculture to support their livelihoods.¹ However, fish populations and marine ecosystems are increasingly at risk of exploitation and degradation. Overfishing, climate change, ocean acidification, and habitat degradation threaten already fragile marine ecosystems. Illegal, Unreported, and Unregulated (IUU) fishing activity threatens marine ecosystems because it undermines efforts to manage fisheries and conserve marine biodiversity sustainably. Due to challenges in identifying, detecting, and quantifying the scope of IUU practices, this problem has proved difficult to combat.

IUU fishing exacerbates poverty, threatens livelihoods, and fosters food insecurity. These impacts are especially detrimental to developing countries that rely heavily on marine ecosystems for subsistence and employment. Resources derived from IUU fishing are typically exported away from communities already at the margins of society and into developed countries. Once the illegal catch is brought to shore and processed, the fish products are shipped and sold in overseas markets. Between 20-32% of wild-caught seafood in the United States of America is illegal.² Not only does overfishing from illicit actors exacerbate food insecurity, but it also subjects marginalized communities to human rights abuses within the fishing industry, including substandard working conditions and human trafficking. IUU fishing activities pose a significant national security threat by fostering other illicit activities such as money laundering, drug smuggling, illegal arms dealing, and other transnational organized crimes.³ The US Coast Guard identified IUU fishing as the leading global maritime security threat due to the expected deterioration of government authority within fragile coastal states and increased tension between fishing nations. Without US and international efforts to stop illegal fishing, the tension among fishing nations could threaten geopolitical stability worldwide.⁴

Defining IUU Fishing

The Food and Agriculture Organization of the United Nations (FAO) defines IUU fishing as activities that encompass the following:

❖ Illegal:

- conducted by national or foreign vessels in waters under the jurisdiction of a state, without the permission of that state, or in contravention of its laws and regulations;
- conducted by vessels flying the flag of states that are parties to a relevant regional fisheries management organization but operate in violation of the conservation and management measures adopted by that organization and by which the states are bound, or relevant provisions of the applicable international law;
- or in violation of national laws or international obligations, including those undertaken by cooperating states to an appropriate regional fisheries management organization.



USCGC Rush escorting a fishing vessel in 2012. USCG photo.

❖ Unreported –

- which have not been reported, or have been misreported, to the relevant national authority, in contravention of federal laws and regulations;
- or are undertaken in the area of competence of a relevant regional fisheries management organization which have not been reported or has been misreported, in contravention of the reporting procedures of that organization.

❖ Unregulated –

- in the area of application of a relevant regional fisheries management organization that is conducted by vessels without nationality, or by those flying the flag of a state not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization;
- or in areas or for fish stocks concerning which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with state responsibilities for the conservation of living marine resources under international law.⁵

Fisheries Management

The United Nations Convention on the Law of the Sea (UNCLOS) defines the international parameters for managing fish. Under UNCLOS, coastal nations have jurisdiction over the natural resources within their Exclusive Economic Zones (EEZs), which extend up to 200 miles offshore. How coastal countries govern the marine resources in these zones may look different; it is ultimately the coastal nation's responsibility to manage the resources within their EEZs. Globally, 150 EEZs account for about 42% of the ocean.⁶ All water beyond the EEZ is considered the “high seas.”

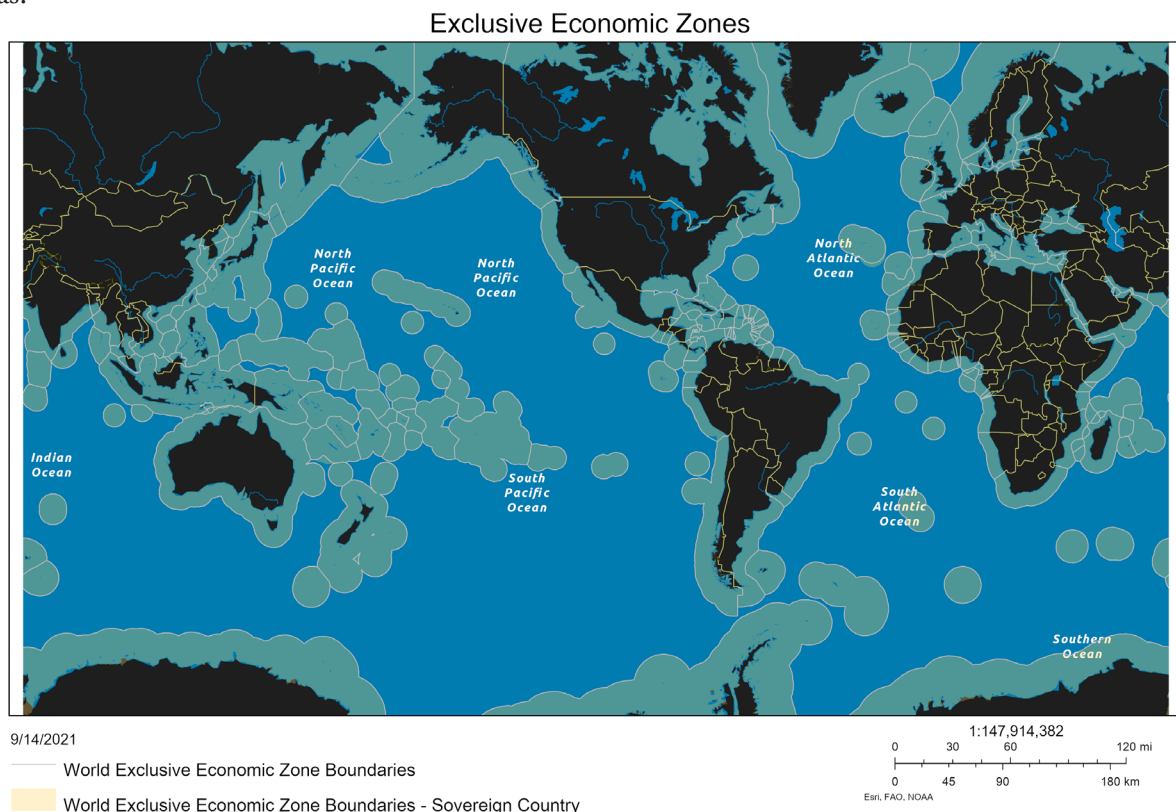


Figure 1. Map of global EEZs depicting their boundaries in yellow. The blue outside of the EEZs represents the high seas.

The high seas, sometimes referred to as international waters or Areas Beyond National Jurisdiction (ABNJ), account for about 58% of the ocean.⁷ The high seas lack ownership and, therefore, can only be regulated by international agreements. The intergovernmental bodies that manage fish populations on the high seas are Regional Fisheries Management Organizations (RFMOs).

Seventeen RFMOs cover various geographic areas, and there can be multiple RFMOs covering the same area. RFMOs are established to regulate fishing for a particular species or group of species. They can also attempt to ensure that a specific fishery has minimal impact on the marine ecosystem. Of the 17 RFMOs, five manage tuna and other large species such as swordfish and marlin. These five tuna RFMOs—Indian Ocean Tuna Commission (IOTC), Commission for the Conservation of Southern Bluefin Tuna (CCSBT), Western and Central Pacific Fisheries Commission (WCPFC), Inter-American Tropical Tuna Commission (IATTC), and International Commission for the Conservation of Atlantic Tunas (ICCAT)—manage approximately 91% of the world’s oceans.

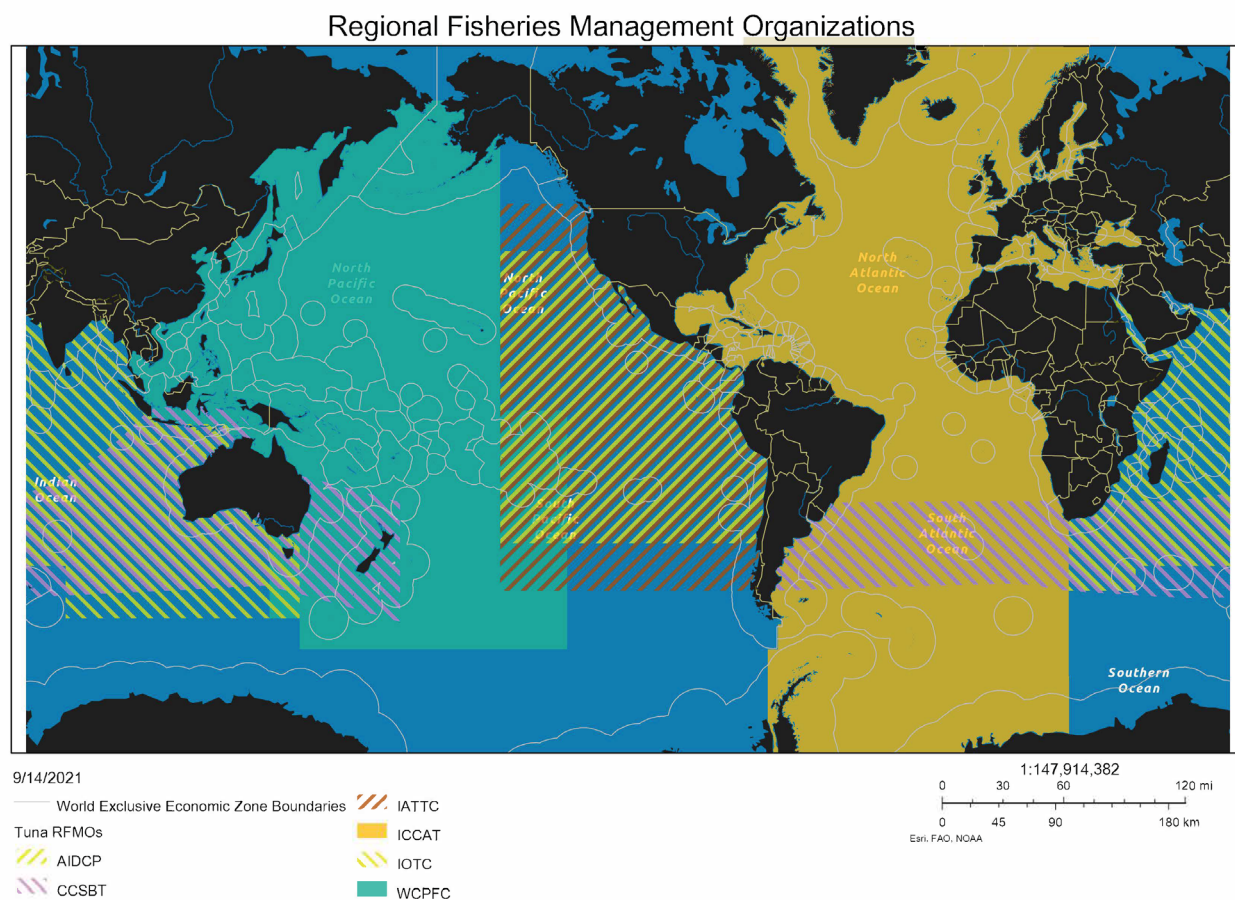


Figure 2. Map showing the boundaries for RFMOs that manage tuna and other large species.

Aside from tuna RFMOs, there are general and specialized RFMOs. General RFMOs have a broad scope which allows them to adopt measures for most fisheries within their respective areas or regions. Examples of general RFMOs are the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the South Pacific Regional Fisheries Management Organization (SPRFMO). Unlike general RFMOs, specialized RFMOs have a narrow legal mandate that allows for managing a specific type of fishery or species. Examples of the specialized RFMOs are the North Atlantic Salmon Conservation Organization (NASCO) and the North Pacific Anadromous Fish Commission (NPAFC).⁸

Regional Fisheries Management Organizations

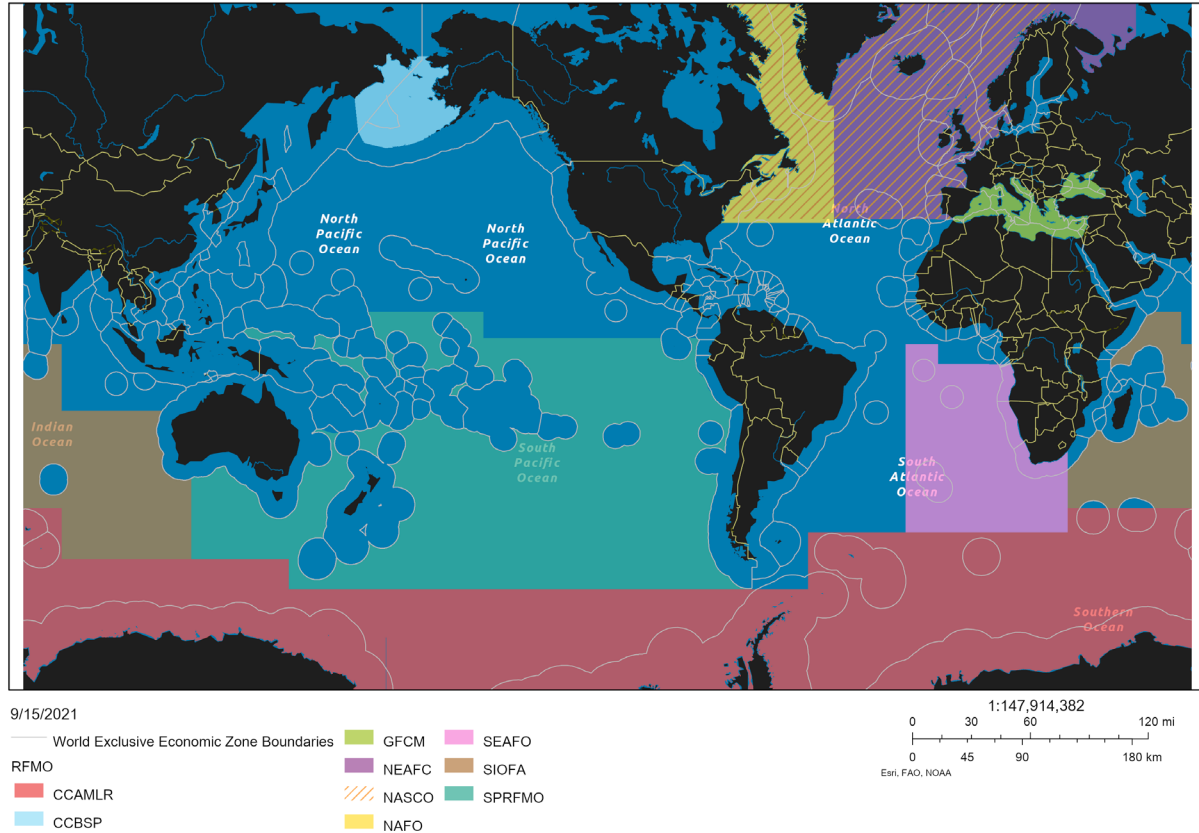


Figure 3. Map showing the management areas for general RFMOs.

Countries can be members of more than one RFMO or none. If a country has a vested interest in a regional fishery managed by a particular RFMO, they may apply to join that RFMO and agree to the terms and provisions therein. Countries with sizeable distant water fishing (DWF) fleets such as the United States, China, the European Union (EU), Japan, and Korea participate in many RFMOs. The US, for example, is a member of nine RFMOs.



A U.S. Coast Guard Cutter conducts a law enforcement boarding on a fishing vessel in the Pacific in 2020. U.S. Army photo.

Due to the divergent structures, mobility of fish populations, and overlapping boundaries of RFMOs, ambiguities can undermine the management efforts established. Additionally, RFMOs typically focus on a limited species or group of species in certain areas leaving large swaths of the ocean unmanaged. In some cases, RFMOs do not monitor fishing for shark species or deep-sea fish within their management boundaries. For the monitored fish species, the confusion surrounding a ship registered in more than one RFMO can add challenges to enforcing regulations. Nonetheless, RFMOs are the only international bodies charged with managing the high seas, and their role in fisheries management is vital for decision-making and information sharing among member nations.

Implications of IUU fishing

Threats to Food Security & Fisheries Sustainability

IUU fishing contributes to the depletion of fish stocks and prevents sustainable fishing regulations from being effective. Driven by population growth, a growing middle class, and increasing pressure on global food supplies due to climate change, demand for fish protein continues to grow.⁹ To support the estimated population of 9.7 billion people by 2050 would require an increase in food supply by 25-70%.¹⁰ In 2017, fish consumption accounted for 17% of the global population's intake of animal protein. The average per capita fish intake as the primary source of animal proteins is highest, reaching over 50%, in Bangladesh, Cambodia, the Gambia, Ghana, Indonesia, Sierra Leone, Sri Lanka, and several small island developing states (SIDS).¹¹ However, as fish are increasingly sought after, the fish stocks upon which we rely are dwindling.

FAO defines a biologically sustainable fish stock as having abundance at or greater than the level that can produce the maximum sustainable yield (MSY) or the highest possible annual catch that can be sustained over time. A fish stock is considered underfished when it can maintain catches higher than those currently taken. In contrast, when abundance falls below the MSY level, the stock is considered biologically unsustainable. The FAO's long-term monitoring of assessed marine fish stocks, indicator 14.4.1 of the United Nations Sustainable Development Goals, determined that the proportion of fish stocks within biologically sustainable levels has decreased from 90% in 1974 to 65.8% in 2017. Additionally, as of 2017, 34.2% of fish stocks are fished at a biologically unsustainable rate (figure 4).¹² In other words, more than one-third of fish stocks are overfished.

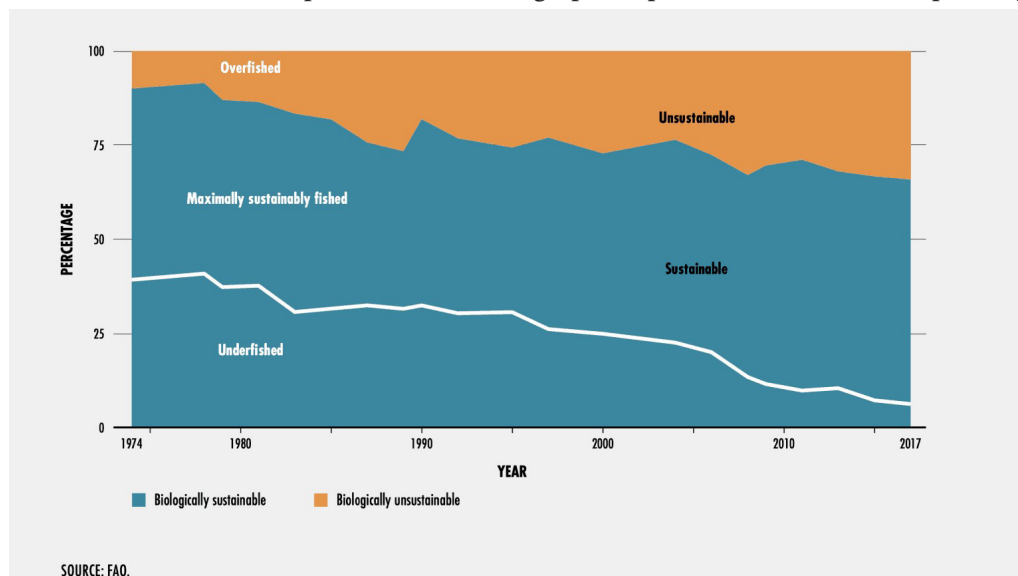


Figure 4. Graph showing trends in the state of the world's marine fish stocks from 1974-2017.



Figure 5. Percentages of stocks fished at biologically sustainable and unsustainable rates in FAO Statistical Areas, 2017.

Socioeconomic Effects

Many of the most overfished stocks are located off the coast of developed countries, such as the United States and China (Figure 5). As a result of overfishing in their domestic waters, developed nations have expanded their distant water fishing fleets to sustain their fishing economies in foreign waters. The most biologically productive fisheries are located around the coastlines of developing countries and within their exclusive economic zones (EEZs). These developing countries do not have the same technology and industrial fleets to compete with the DWF fleets from foreign countries, and they rely more heavily on fish protein for subsistence. Despite the harm caused to the local economy and fishers, governments grant fishing access and licenses to the DWF fleets.¹³ When faced with the competition of outside fishing fleets, some subsistence fishermen are forced to resort to less sustainable, often illegal, fishing practices to support their livelihoods and feed their families.

In Malaysia for example, as large fishing fleets devastate fish stocks, local subsistence fishers feel pressure to engage in illicit fishing practices like blast fishing—fishing using explosives such as dynamite—to bring home food to feed their families.¹⁴ Not only do these practices devastate the marine ecosystem by reducing once-flourishing reefs to piles of rubble, but the unintended consequence of such practices further marginalizes these communities and economies. Despite being illegal, under both the Fisheries Act 1985¹⁵ and Explosives Act 1957¹⁶, blast fishing in Malaysia continues with few punishments. Due to lack of funds, staff, and facilities for enforcement coupled with the shortage of political will, these threats are often highly complicated to combat.¹⁷

Challenges to Sovereignty: Corruption, Human Rights, & Transnational Organized Crime

While a fight over limited resources motivates bad actors to engage in IUU fishing, corruption and ease of evading detection have allowed IUU fishing to flourish. Research has shown a strong correlation between highly corrupt governments, based on the Corruption Perceptions Index (CPI) – index which ranks countries “by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys,” and poor monitoring, control, and surveillance (MCS) capacity.¹⁸ CPI defines corruption as the abuse of entrusted power for private gain.¹⁹ Like most international and highly regulated industries, fisheries are vulnerable to corruption. Companies attempt to persuade entities and officials to give special treatment in issuing licenses and quotas or evade relevant authorities.²⁰ Corruption and poor surveillance are two pieces of the illegal web that IUU fishing operations exist and thrive. There are opportunities for corruption throughout the fishing sector supply chain, from registering vessels in a country with weak regulations to bribery of law enforcement and falsifying permits.²¹ This corruption gives rise to profit maximization for illicit actors and opportunities to get away with other transnational organized crimes, including large-scale tax evasion and money laundering.²²

The international nature of the fishing industry, the vastness of the ocean, the presence of legitimate fishing vessels, and the distribution network for fish and fishing products create the perfect opportunity to evade authorities. Money laundering and tax crimes impact economies, but they are not the only criminal activities associated with IUU fishing. Corruption and lack of MCS enforcement enable human trafficking, drug smuggling, and wildlife trafficking. Human trafficking in the fishing industry has been widely cited and depicted in documentaries and films.^{23,24,25,26} Many of those employed on DWF vessels operating worldwide experience contract discrepancies, excessive working hours, poor living conditions, severe verbal and physical abuse, denial of access to health care, restricted communication, retention – or confiscation – of identity documents, arbitrary garnishing or nonpayment of wages, and other forced labor indicators while being restricted to a vessel at sea for months or years at a time.²⁷ While much of the human trafficking cited amongst IUU fishing operations appears to occur for forced labor, sexual exploitation has also been documented.²⁸

The United Nations Office on Drugs and Crime (UNODC) highlighted the extent of illicit practices involved in the fishing sector: the commission of fraud by recruitment agencies and intermediary brokers to deliver labor aboard vessels, the use of deception, intimidation, and violence aboard boats, and the practice of turning the crew into bonded workers through debts incurred to recruiters.²⁹ Once onboard the vessel, crews can be forced to stay at sea indefinitely due to transshipment of fish and at-sea refueling. The lack of monitoring capacity in many countries means that ships are not at risk of being caught for criminal activity such as IUU fishing, using forced labor, mistreating crew, and even murder.³⁰

Ship identification systems exist to aid governments, RFMOs, and maritime security groups in monitoring and surveilling the seas. However, vessel operators can turn off both the automatic identification system (AIS) and vessel monitoring system (VMS), allowing the vessel to go 'dark' for hours to days at a time. By going dark, illicit actors avoid detection for incursions into EEZs or protected areas. They also hide maneuvers that indicate illegal activity to AIS or VMS observers, like particular speeds and directions required to fish for specific species or two vessels meeting at sea to exchange catch or fuel. Other ways that vessels evade MCS surveillance include, but are not limited to:³¹

- ❖ Co-mingling of legal and illegal catches
- ❖ Vertical integration of fishing businesses to facilitate money-laundering
- ❖ Falsification of documentation
- ❖ Bribery of officials and corruption
- ❖ Fishing in areas with little to no capacity for enforcement
- ❖ Corrupting the data transmitted by the VMS terminal in their vessels to change vessel location
- ❖ Taking advantage of states' failure to exchange and share data promptly
- ❖ Exploiting the lack of oversight or corruption in a port states' inspection and control efforts
- ❖ Exporting fish products between countries with weak trade measures
- ❖ Abusing flags of convenience by changing ownership structures, flags, operational bases, and vessel names to conceal identities

Due to the many ways to avoid detection on the open seas, other high-reward low-risk illegal activities sometimes occur in conjunction with IUU fishing. The same factors that make fishing vessels opportune for human trafficking also create a suitable environment to commit other forms of trafficking, including drugs, wildlife, and weapons. Fishing vessels are often not interdicted or seized for carrying illicit drugs. When they are, however, there are usually large quantities on board. The most prevalent drugs trafficked on fishing vessels are cocaine and amphetamines trafficked to North America, to Europe, and to Europe via West Africa.³² Fishing vessels perform various functions in trafficking drugs at sea, from mother ships (base stations for smaller boats to move drugs to-and-from) to support vessels for faster boats to refuel on the route. Smaller fishing vessels traffic drugs in and out of harbors in lesser quantities. Frequently, drugs are transshipped to mother ships outside of a coastal states' EEZ. Studies have found that fishers are not often originally part of the organized criminal activity but rather recruited.³³ Fishers are targeted due to their professional skills and to give the illegal operations the guise of a legitimate trade.

Increased MCS capacity, in addition to enforcement and prosecution, is necessary to combat transnational organized crime at sea. Currently, the high rewards of engaging in illegal activities in the fishing industry far outweigh the risk of being caught and, in some cases, the penalties of persecution.

Enforcement Efforts

Monitoring, Control & Surveillance

Estimating the worldwide extent of illegal fishing has proven difficult due to the mobility of fishing vessels and various evasion tactics used by IUU fishing vessels. The most widely accepted estimate comes from a study published in 2009 that examined illegal and unreported catches, omitting unregulated catches.³⁴ This study found that the estimated total value of illegal and unreported fishing losses worldwide is between \$10 billion and \$23.5 billion annually, representing 11 to 26 million metric tons of fish.³⁵ More recent research shows the overall economic losses resulting from illegal fishing are even more significant than previous estimates, with global losses between \$26 to \$50 billion and an additional \$2 to \$4 billion in losses to countries' tax revenue.³⁶ Thus, IUU fishing benefits a small number of fishing operators and businesses to the detriment of society.

States must have a system in place for MCS of vessels and enforcement of fishing regulations to prevent IUU fishing from occurring and reduce the impacts of those occurrences. By failing to provide adequate oversight and enforcement, inadequate MCS capacity fosters the potential for IUU fishing in the same way as corruption



A U.S. Coast Guard helicopter flies over a vessel suspected of illegal fishing in the Pacific Ocean. USCG photo.

and poor governance.³⁷ Fisheries MCS activities must focus on domestic and foreign fishing efforts, including on the high seas, to prove a successful component of fishery conservation strategy.

MCS activities should not be regarded solely as enforcement operations. MCS must also include data collection, information sharing, stock assessments, and enforcement of safety-at-sea protocols. MCS is sometimes regarded as simply using a states' military or coast guard to arrest poachers; however, activating the military is expensive and can be politically tumultuous,

and coast guards may be underfunded and unable to enforce regulations. Some countries may have the political will to enforce and prosecute fisheries crimes but fall short of action due to lack of funds and resources to patrol the entirety of their sovereign waters. According to the FAO, these are the baseline requirements for fisheries MCS operations: vessels that can remain at sea with the fishing fleets, meaning they can travel the distance of the EEZ and, if necessary, into the high seas; an appropriately equipped aircraft for cost-effective rapid surveillance and information collection; and, adequate coastal support infrastructure for both the verification of landings (the fish caught at sea and brought to port) and the monitoring of the port trade of fish products.³⁸ States can partner with civil society, like Sea Shepherd Conservation Society, and the U.S. government through ship rider programs to conduct joint at-sea patrols. These joint patrols allow countries who may not otherwise have the capacity to patrol their waters to deter bad actors, see first-hand the state of their fisheries, and generate critical revenue through the issuance of fines or asset forfeiture.

To mitigate the cost associated with MCS operations, developing and developed countries should co-operate with neighboring countries on bilateral, sub-regional, or regional initiatives. Examples of these partnerships that result in mutually beneficial MCS systems include FISH-i Africa, the West Africa Task Force (WATF), and the Asia-Pacific Economic Cooperation (APEC). However, these partnerships and regional initiatives are only as successful as the legislation that they are enforcing.

Legislation is most effective when it is understood and accepted by fishers and enforceable by authorities. If fishers do not see the legislation as credible or necessary, they will actively ignore it and evade detection. For example, suppose legislation states that a fisher cannot use a mosquito net to catch fish, similar to Kenya's mosquito net fishing ban.³⁹ In that case, the legislation can only be enforced if the fisher is seen in the act. This legislation would be better implemented if it stated that a fisher could not be in possession of a mosquito net on the fishing vessel. Better yet, if the purpose is to protect juvenile fish, the legislation should state that a fisher cannot be in possession of fish under a specific size. If authorities inspect a vessel's catch and find juvenile fish, they can deliver the appropriate penalties.

Legislation is also only as strong as the MCS capabilities of the states enforcing it. The Port State Measures Agreement (PSMA) is an excellent example; this agreement requires parties to prevent IUU fish catch and fish products from entering the commerce stream by restricting port entry and access to port services to vessels engaged in IUU fishing. However, for the PSMA to combat IUU fishing effectively, all parties and coastal states must be able to detect IUU fishing and efficiently relay information and share data about illicit actors' activities. They must also have aggressive MCS and enforcement measures to detect and prevent vessels entry into their ports. Influential MCS can also ensure vessels do not avoid PSMA stipulations through transshipment. Transshipment at sea allows ships to refuel and offload catch without entering a port. If there are not adequate MCS operations on the high seas, these vessels will not be inspected and may return to their state with illegal catch and little risk of punishment depending on the country.

While the PSMA is the first legally binding international agreement targeting illicit fishing activities, it is only as strong as the parties that adhere to and enforce it. In the countries that are already signatories, there is a unified front against IUU fishing operations and an international agreement to support it. There are currently 69 parties to the agreement. The more governments sign on to the agreement, the stronger it gets and the more effective it will be at combatting illegal fishing. For illustration, If the US suspects or has proof of a boat engaging in IUU fishing activities within the US EEZ and denies entry to port, the vessel may attempt to land in a port of entry in Mexico. Mexico is not a signatory to the PSMA and could allow the vessel entry to port regardless of the illicit activity. In a situation like this, the PSMA is ineffective at combatting IUU fishing because the neighboring country, Mexico, has not agreed to the PSMA.

Prosecution

Fishers consciously or subconsciously conduct a cost-benefit analysis each time they weigh the option to engage in IUU activity. To ensure that the fishers' analysis results in the costs outweighing the benefits, countries and fisheries administrators must be sure that the enforcement of fisheries crimes is swift and firm. As with capacity building in MCS activities, shared training and workshops for cooperating parties can streamline the enforcement and punishment process. An example of such collaboration is the US National Oceanic and Atmospheric Administration's (NOAA) Office of Law Enforcement's international training program, which offers global partners technical support and training for MCS and enforcement.⁴⁰

Fisheries patrol staff should be trained to act quickly, document the details of the vessel sighting to determine its activities, and observe any suspicious activity such as dumping gear or fish products overboard. Further, the fisheries patrol officers should use and share surveillance data to detect dubious routes or navigation patterns and investigate where necessary. Once sighted, the officers must turn over the vessel and documentation to the relevant authorities. In most cases, the relevant authorities are the vessel's flag state. However, the flag state may have little enforcement incentive, political will, or capacity for holding the ship and crew accountable with penalties.⁴¹

States have various regulatory and enforcement systems and measures to punish illicit actors, from small administrative fines with minor deterrent effects to civil sanctions and imprisonment. International fisheries instruments such as the UNCLOS, the FAO Compliance Agreement, the PSMA, the United Nations Fish Stock Agreement (UNFSA), and the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) give states options when applying and enforcing regulations.⁴² Yet, the way that countries adopt and implement the same or similar fisheries regulations may be different. For example, a government may adopt some of the principles of the PSMA but not enforce others. States' differing enforcement systems and national regulations leave room for IUU fishers to choose to operate in jurisdictions with the least severe sanctions and penalties.

The ability for DWF fleets to travel far and wide, the divergent enforcement mechanisms for IUU fishing, the ability of fishers to evade detection, and possibilities for transshipment on the high seas make IUU fishing extremely challenging to prosecute. In the 2021 Report to Congress, the US National Marine Fisheries Service (NMFS), as required under the High Seas Driftnet Fishing Moratorium Protection Act (Moratorium Protection Act), identified nations or entities whose vessels are or have been engaged in IUU fishing in the previous three years. The countries identified in the 2021 report for IUU fishing were China, Costa Rica, Guyana, Mexico, Russian Federation, Senegal, and Taiwan.

While China has the largest DWF fleet—with an estimated 19,966 vessels—and is the largest exporter of fish products by far, they are not the only country to have a DWF fleet or engage in IUU fishing. However, using China's fleet as a reference point can be helpful to understand better the scope of IUU vessels and how they evade interdiction. Almost 1,000 of the Chinese DWF fleet are registered in other countries, and at least 183 of the Chinese vessels are suspected of being involved in IUU fishing.⁴³ The widespread use of flags of convenience by these fishing vessels hinders MCS efforts and makes it highly challenging to sanction the beneficiaries of IUU fishing activities.

As defined by the International Transport Workers Federation (ITF), a flag of convenience is a flag in which “beneficial ownership and control of a vessel is found to be elsewhere than in the country of the flag the vessel is flying.”⁴⁴ Flags of convenience have become associated with non-compliant or illicit vessel owners who use flag states with open registers or registers with flexible ship registration requirements.⁴⁵ These flexible registration requirements facilitate loopholes for businesses to operate out of shell companies which work to conceal the identities of the beneficial owners and allow them to evade tax authorities. Not only can flags of convenience be used to hide ownership through registrations, but they can also be used to escape sanctions for IUU offenses under a previous flag. Some IUU vessels will ‘flag hop’ or change their flag frequently to confuse fisheries authorities. By flag hopping and re-flagging to a flag of convenience state, the ship can further exploit areas with weak MCS capacity or lack of enforcement mechanisms.⁴⁶ While the 2021 Report to Congress has called attention to flag states with active IUU fishing vessels, the use of flags of convenience frustrates the efforts of flag states to address and take meaningful action to reform their fishing sectors.

Recommendations

The United States' Role

The United States has the resources to assist developing countries to build capacity for MCS operations and share resources and knowledge to combat IUU fishing. The US Coast Guard (USCG) introduced steps to build partner nation capability through training and technical assistance in Initiative 6 of the 2021 IUU Fishing Strategic Outlook Implementation Plan.⁴⁷ The USCG should ensure that they work with NOAA's Office of Law Enforcement to deliver seamless workshops to partner nations. Further, the USCG must build upon its partnerships with other US federal agencies, NGOs, and private organizations to increase the impact and scope of its initiatives. The USCG identifies INTERPOL in Initiative 6 as a partner to assess the needs of law enforcement bodies in vulnerable countries and provide the necessary tools to disrupt trafficking routes. To take this a step further, the USCG and INTERPOL partnership should extend to the UNODC for an international criminal justice approach to the transnational organized crimes involved with IUU fishing. Without collaboration using a top-down approach, individual states operate in silos with little success in combatting IUU fishing crimes.

Seafood Import Monitoring Program & Illegal and Forced Labor Prevention Act

The increasing pressure on global food supplies and growing demands from Americans for transparent and sustainably sourced seafood creates a ripe environment for meaningful fisheries management policy introduction. In 2016, the US government established the Seafood Import Monitoring Program (SIMP), which requires catch documentation and traceability for 13 types of seafood at risk of illegal fishing and seafood fraud. However, SIMP only screens up to 10% of globally traded and imported fish products under its current implementation. According to NMFS, of the 4,977 importers who held International Fisheries Trade Permits in 2020, 47% imported SIMP products, and 472 underwent a SIMP audit. Of the audits completed, 43% were non-compliant.⁴⁸ In 2019, Oceana produced a report examining popular seafood not covered by SIMP and found that 1 in every 5 fish tested out of 449 – about 21% – were mislabeled.⁴⁹ These numbers show the need for expansion of SIMP to cover all seafood, including information covering the entire supply chain of fish catch, from where it was caught or produced to how it got to the consumers' plate. Adopting more robust requirements for imported seafood in the US would encourage states worldwide to strengthen their fisheries management and reporting requirements and hold imported seafood to the same standard as the US caught seafood. The US has the opportunity to enhance US leadership on IUU fishing issues and ensure that all seafood in US markets is safe, properly labeled, legally caught, and humanely sourced by passing legislation like the Illegal Fishing and Forced Labor Prevention Act.⁵⁰ This bipartisan bill proposes a whole-of-government approach to addressing the intricacies of IUU fishing and human rights abuses.

Maritime Security and Fisheries Enforcement Act

The United States is already making great strides to combat IUU fishing through legislation. In 2019, the US established the Maritime Security and Fisheries Enforcement Act (Maritime SAFE Act), which aims to support a whole-of-government approach to counter IUU fishing and its related threats. The Maritime SAFE Act established an Interagency Working Group on IUU Fishing comprised of representatives from NOAA, the Department of State, the USCG, and other federal agencies. Throughout 2019 and 2020, NOAA worked with global enforcement partners to better detect and interdict IUU fish and fish products. NOAA worked in Indonesia, Latin American and the Caribbean, Southeast Asia, Thailand, and Vietnam to increase the nations' and regions' capacities to mitigate IUU fishing. However, these partnerships will need ongoing support to realize lasting benefits and prevent illegal fisheries activity.

Shiprider Program

Similarly, the USCG's ongoing bilateral maritime law enforcement Shiprider program provides a means by which states without sufficient enforcement capacity can monitor their sovereign waters. Fisheries enforcement personnel from partner states ride onboard US vessels to conduct patrols and protect critical fisheries resources. The USCG currently has shiprider agreements with 16 countries in the Indo-Pacific and West Africa.⁵¹ Congress should ensure this program continues and expands.

Further Research

While the Maritime SAFE Act is intended to bolster a whole-of-government approach to deter IUU fishing and associated threats, some areas have not yet had the research or attention needed to assess impacts related to fisheries management. IUU fishing is often highlighted for its relation to overfishing and the depletion of fish stocks. Climate research characterizes fish stocks as carbon sinks, a valuable mitigative factor against climate change.⁵² The Interagency Working Group has an opportunity to examine IUU fishing from a systems perspective and address all outside forces at play, including climate change, transnational organized crime, and global food security. Otherwise, proposed regulations risk having unintended consequences on other parts of the system.

Regional Fisheries Management Organizations

The United States needs to enforce the policies already passed and ensure they are being followed through and strengthened. In the 2021 Report to Congress, NMFS identified states involved in IUU fishing and assigned negative or positive certifications based on actions taken to address said involvement. While NMFS offers assistance to nations or entities to qualify for positive certifications, the report is primarily a way for the US government to name countries for IUU activities on an international stage and apply pressure to course correct. Ultimately, however, the report cannot enforce regulations. Many of the IUU activities occur within RFMOs; NMFS noted several instances of RFMO members and cooperating non-members failing to fulfill reporting obligations set by the RFMO.⁵³ While NMFS threatens to identify nations or entities in further reports to Congress for reporting deficiencies, more headway could be made by strengthening RFMO regulations and enforcement. The US should ensure that all RFMOs of which it is a part have the same standards for reporting, vessel registration, and MCS efforts.

United Nations Convention on the Law of the Sea

Finally, the US is party to several effective international agreements to combat IUU fishing, including RFMOs and the PSMA. Underpinning international agreements about the ocean is the UNCLOS, which remains unratified by the US. However, US forces regularly enforce freedom of navigation principles enshrined in UNCLOS. Every Chairman of the Joint Chiefs of Staff since the adoption of the convention in 1982 has supported its ratification.⁵⁴ Ratification of the UNCLOS would strengthen U.S. maritime policy and influence abroad.

Collaboration to End IUU Fishing

Many NGOs, private organizations, and governments are working on innovative and technical strategies to combat IUU fishing domestically and internationally. Tackling IUU fishing requires teamwork and collaboration amongst various sectors to pull resources, ideas, knowledge, and expertise together. Collaboration can range from intelligence sharing and legislative development to creative private efforts like providing vessels to countries for joint at-sea patrol, as Sea Shepherd has done in several states. NGOs and private organizations have more flexibility in the range of work they do and whom they work with, but red tape can also restrict them.

At the same time, governments may be limited by politics or funding. By building partnerships across sectors, these limiting factors are reduced. Technology, MCS efforts, and regulation are tools in a more extensive toolbox to help prevent and deter IUU fishing. Without collaborative tools like information gathering, sharing, and capacity building, the toolbox is useless.

The United States government, for example, has already taken steps towards collaborative public-private partnerships in several areas. In June 2021, the United States Southern Command (SOUTHCOM) signed an agreement with Global Fishing Watch (GFW) to use GFW's public vessel tracking data and open maritime awareness tools to assist SOUTHCOM's counter-IUU efforts in Latin America and the Caribbean.⁵⁵ In addition, the USCG 2021 IUU Fishing Strategic Outlook Implementation Plan lists ten initiatives to combat IUU fishing, with much emphasis given to public-private partnerships. These partnerships include working with NGOs to improve intelligence and information sharing and with private organizations to build partner nation capacity.⁵⁶ Expanding partnerships with NGOs and private organizations can increase capacity significantly for less well-resourced states.

The following is a non-exhaustive list of organizations grouped by their interest areas that have expertise on IUU fishing issues and should be included in collaborative decision-making processes:

<i>Research and Policy</i>	<i>Remote Sensing and Transparency</i>	<i>MCS Capacity</i>	<i>Regional Coalitions</i>
<u>American Security Project</u>	<u>Global Fishing Watch</u>	<u>Sea Shepherd Conservation Society</u>	<u>West Africa Task Force</u>
<u>Sea Shepherd Legal Oceana</u>	<u>OceanMind</u>	<u>Sea Shepherd Global</u>	<u>FISH-i Africa</u>
<u>Pew Charitable Trust</u>	<u>HawkEye 360</u>	<u>Trygg Mat Tracking</u>	<u>Stop Illegal Fishing</u>
<u>Safe Seas</u>	<u>Windward</u>	<u>International MCS Network</u>	<u>Fisheries Transparency Initiative</u>
<u>Stable Seas</u>	<u>Unseenlabs</u>	<u>IUU Risk Intelligence</u>	
<u>Secure Fisheries</u>	<u>ICEYE</u>		
<u>Center for Strategic and International Studies</u>	<u>ThayerMahan</u>		
<u>Environmental Justice Foundation</u>	<u>C4ADS</u>		
<u>Earthjustice</u>			
<u>Nature Conservancy</u>			
<u>World Wildlife Fund</u>			
<u>Ocean Conservancy</u>			
<u>Stimson Center</u>			
<u>East-West Center</u>			
<u>I.R. Consilium</u>			
<u>Oceans Asia</u>			

Due to the rising complexity of maritime security and IUU fishing operations, many regional forums, conferences, and information-sharing mechanisms are available. Nonetheless, lack of coordination on a global scale risks duplication of efforts and insufficient solutions to the transnational crimes occurring at sea. In some cases, groups may only participate in mechanisms or partnerships that better suit their agenda and ignore the other dynamics at play. Fostering partnerships across regional organizations, international institutions, and NGOs such as those listed above will facilitate better information sharing, capacity building, and subject expertise.

Why Collaboration Matters

The history of the *F/V STS-50*, otherwise known as *Andrey Dolgov*, provides a notorious example of the intricacies in maritime security and demonstrates why information sharing and collaboration are essential. The *STS-50* is a former long-line fishing boat that engaged in far-reaching IUU fishing operations from 2008 until its capture in 2018, bringing in around \$6 million worth of catch per trip.⁵⁷ The *STS-50* evaded authorities by alternating between several vessel names and eight different flags, including Sierra Leone, Togo, Cambodia, South Korea, Japan, Micronesia, and Namibia.⁵⁸ The stateless vessel was one of Interpol's most wanted ships due to its frequent illegal activities in the Pacific, Indian, and Southern Oceans. If law enforcement approached the *STS-50*, the vessel would flee to the high seas outside states' jurisdictions.

In 2016, authorities in China saw illegally caught toothfish, a fish found in the Antarctic, being unloaded from the *STS-50*, but the vessel fled from China before an investigation commenced. The ship was then listed as an IUU vessel by the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) – the RFMO that oversees the Antarctic toothfish fishery – and it subsequently sailed for the Indian Ocean.⁵⁹ Later in the same year, the *STS-50* attempted to enter a port in Mauritius but was denied entry. The ship then changed flags and was renamed *Sea Breez 1* while it moved from port to port, often using forged documents to deceive authorities. In 2018, the vessel was detected when it docked in Madagascar, and local police notified CCAMLR. However, the vessel once again escaped. From there, attempts were made to track the ship via AIS, but it was found that the *STS-50* was spoofing—or producing false location signatures—its location. According to OceanMind, the vessel was simultaneously appearing near the Falklands Islands, Fiji, and Norway. At times, the vessel's signature was appearing in nearly 100 places at once.⁶⁰

In March 2018, after another near-miss in Maputo, Mozambique, several African countries and international organizations began a collaborative effort to track down the *STS-50*. FISH-i Africa dispatched ships to search for the vessel, as did Sea Shepherd with Tanzanian Navy ship riders. After a three-week pursuit across the Indian Ocean, *STS-50* fled into Seychelles, forcing the Tanzanian Navy to retreat as they did not have legal jurisdiction to board a vessel in another country's EEZ. Sea Shepherd and the Tanzanians recorded vital information about *STS-50*'s speed and heading and shared that data with other groups and, eventually, the Indonesian Navy.⁶¹ On April 6, 2018, the Indonesian Navy interdicted *STS-50* and detained the crew. The 20-man crew consisted of a Russian captain, five Russian officers, and 14 Indonesian crew. The Indonesian government noted that the crew was most likely forced labor. The boat was later found to be tied to organized crime in Russia.⁶²

The *STS-50* serves as a precautionary tale and a testimony to collaborative MCS implementation and regulatory enforcement. This vessel engaged in IUU fishing operations for over a decade, evading authorities and exploiting fisheries management systems. Had the flaws in these systems been monitored more closely or resolved, the vessel would not have been able to begin or continue its crime spree. Authorities estimate that the ship looted up to \$50 million worth of fish during its period of illegal operation.⁶³ Luckily, in the end, international organizations and regional governments were able to share information and data to capture this outlaw vessel. However, the *STS-50* is only one vessel of thousands who participate in IUU activities; the work must continue to combat IUU fishing internationally.

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The American Security Project (ASP) is a nonpartisan organization created to educate the American public and the world about the changing nature of national security in the 21st Century.

Gone are the days when a nation's security could be measured by bombers and battleships. Security in this new era requires harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor and competitiveness of our economy; and the power of our ideals.

We believe that America must lead in the pursuit of our common goals and shared security. We must confront international challenges with our partners and with all the tools at our disposal and address emerging problems before they become security crises. And to do this we must forge a bipartisan consensus here at home.

ASP brings together prominent American business leaders, former members of Congress, retired military flag officers, and prominent former government officials. ASP conducts research on a broad range of issues and engages and empowers the American public by taking its findings directly to them via events, traditional & new media, meetings, and publications.

We live in a time when the threats to our security are as complex and diverse as terrorism, nuclear proliferation, climate change, energy challenges, and our economic wellbeing. Partisan bickering and age old solutions simply won't solve our problems. America – and the world - needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge that consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities that abound.



American Security Project

www.americansecurityproject.org