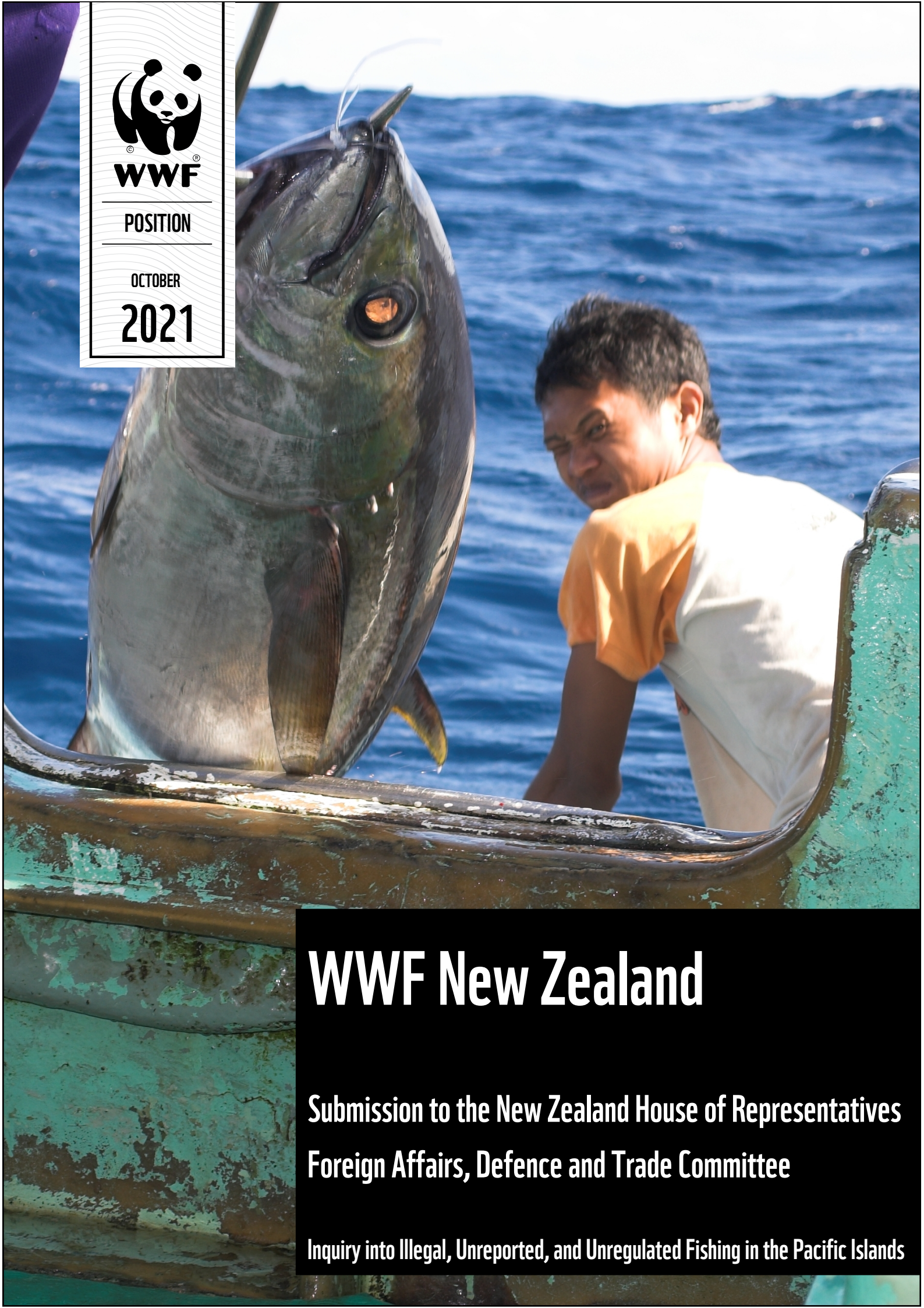

WWF

POSITION

OCTOBER

2021

WWF New Zealand

Submission to the New Zealand House of Representatives Foreign Affairs, Defence and Trade Committee

Inquiry into Illegal, Unreported, and Unregulated Fishing in the Pacific Islands

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Who We Are

The World Wide Fund for Nature (WWF) is an independent conservation organization active across almost 100 countries globally. WWF works to sustain the natural world for the benefit of people and wildlife. WWF has maintained a presence in New Zealand through our WWF-NZ office since 1968.

WWF is a collaborative organisation that works with a diverse range of constituencies extending from individuals and communities to business and government. WWF urgently seeks to protect and restore natural habitats, stop the mass extinction of wildlife, and make the way we produce and consume sustainable.

Our Mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.

Our strong commitment to collaboration – something we call "together possible" – shapes all our work, leading to many powerful partnerships around the world. We are currently part of a growing global coalition calling on world leaders to set nature on the path to recovery by 2030: A New Deal for Nature and People as comprehensive as the global climate deal.

This ambitious nature recovery plan is supported by our own global goals and programme of work focused on:

- Safeguarding the natural world – the oceans, forests, freshwater and rich diversity of wildlife that provide the essentials of life for all.
- Challenging the two most urgent threats to nature: climate change and food production.
- Tackling the underlying global drivers for the loss of nature: a financial system that must value nature; a governance system that empowers people to lead on nature protection; and markets where sustainable production and consumption must become the norm.

WWF was invited to contribute to this inquiry based on its long history of more than 30 years working in the Pacific Islands region and at least 15 years working directly on the conservation of the Pacific tuna fisheries. WWF has supported a variety of initiatives across the region aimed at addressing Illegal, Unreported, and Unregulated (IUU) fishing through policy, advocacy, legal, technological, and community engagement tools.

This submission is not intended to represent a comprehensive report addressing all aspects of IUU but is intended to provide a basic survey of the problem of IUU, briefly evaluate existing approaches to address IUU, and propose some recommendations WWF believes New Zealand should consider to better address IUU.

Recommendations

WWF recommends New Zealand continue to participate in and support international governance arrangements and assist Pacific Islands in their participation and national implementation where relevant and appropriate.

WWF recommends New Zealand to consider pushing important matters before the WCPFC to a vote, specifically with pending decisions that must be made regarding human and labour rights of crew, which will also have repercussions for addressing IUU effectively.

WWF recommends New Zealand to review the outcomes of the Workshop on Best Practices in Compliance in RFMOs: The Role of Transparency in Improving Compliance and support recommendations contained in the Workshop report before the WCPFC.

WWF recommends New Zealand continue to support the goals and objectives of the CROP agencies to address IUU across the Pacific Islands region.

WWF recommends New Zealand encourage fellow Pacific Island governments to ensure their relevant fisheries ministries and associated agencies are appropriately resourced.

WWF recommends that New Zealand continue to support the efforts of the CROP agencies to address IUU through targeted fisheries development aid support aimed at improving information sharing, enforcement, and prosecution of fisheries crimes in countries with limited resources by facilitating better engagement and cooperation by authorities, use of technology, training, and intelligence gathering.

WWF recommends that New Zealand aggressively pursue and promote full fisheries supply chain traceability and transparency policies, processes, and technology as a priority to help exclude IUU fish from domestic and international supply chains and secure future market access for the Pacific Islands region.

WWF recommends that New Zealand assiduously advocate "number of hooks" as the best practice metric for all WCPFC members calculating observer coverage on longline vessels and request a 5-year time frame to shift to use of this metric.

WWF recommends New Zealand aggressively advocate before the WCPFC to improve observer coverage across all longline vessels operating in the Pacific Islands region, to ultimately achieve a coverage rate of 100% by human or electronic observers.

WWF recommends New Zealand support substantial reforms and improvements for all at-sea transhipments, including:

- **100% monitoring through human observers or EM on all delivering and receiving vessels;**
- **prompt advance notification of all transhipments;**
- **timely electronic delivery of all transhipment reports to the WCPFC; and**
- **strong sanctions for non-compliance.**

WWF also recommends that transhipment requirements be buttressed by verification and validation of transhipment activities through redundant systems such as the use of a vessel monitoring system (VMS) supplemented by an operating automated identification system (AIS). If, through investigation of suspected unreported transhipment activity, supporting procedures and technologies indicate that transhipment activity was conducted in violation of transhipment rules, the offending vessel should be subject to sanctions including removal from good standing, license revocation, and listing on the IUU vessel list.

WWF recommends that New Zealand, to the extent possible, encourage and assist Pacific Island states to adopt and implement the PSMA, or equivalent port state measures, and encourage the adoption of measures consistent with the PSMA by the WCPFC.

Introduction

What is IUU Fishing?

Illegal, Unreported, and Unregulated (IUU) Fishing is a term of art to describe any fishing activity that occurs outside the boundaries of agreed legal or customary practices in fisheries. A fully comprehensive definition or IUU is provided by the United Nations Food and Agriculture Organisation (FAO).[1] In WWF's view, the definition of IUU fishing may be distilled into the following brief description:

- Illegal – Fishing without a license/permit or in violation of the laws of the jurisdiction an entity is operating within.
- Unreported – Failing to report or misreporting any information required to be submitted under the laws of the jurisdiction an entity is operating within.
- Unregulated – Fishing for fish or in areas that do not have existing laws in place and in a way inconsistent with international obligations or in a high seas area without an authorised flag.

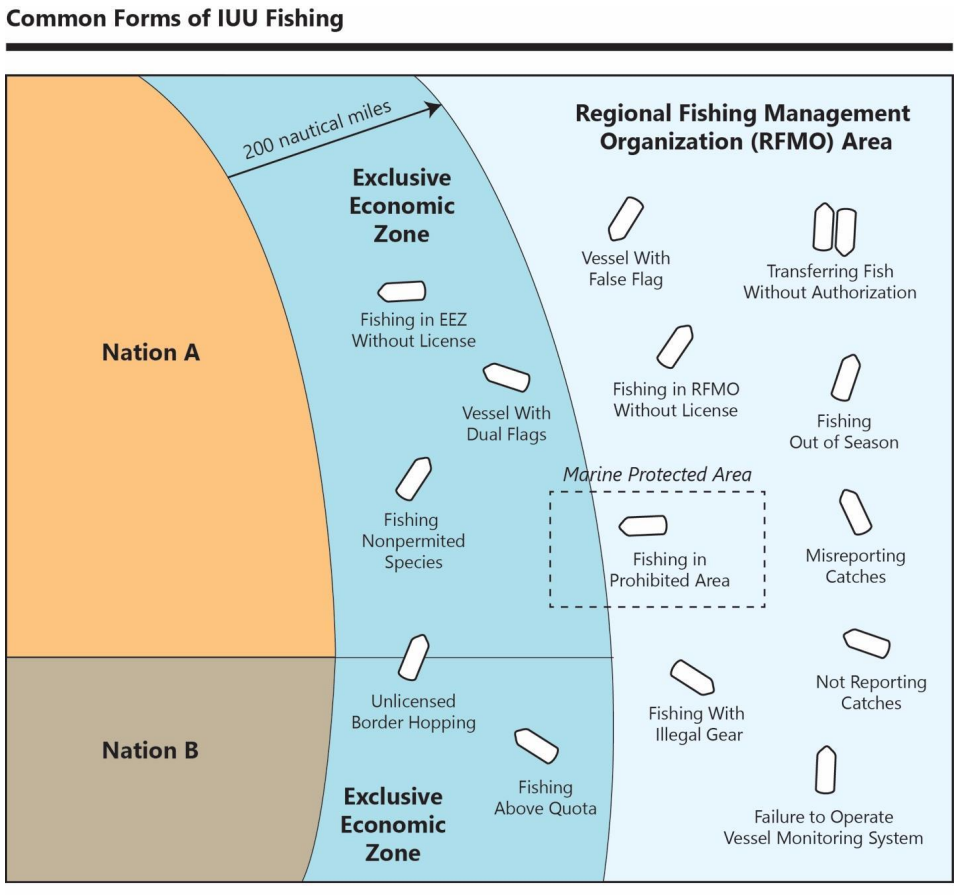

Figure 1: Common Forms of IUU Fishing

At its core, IUU fishing encompasses any fishing activity that falls outside collectively agreed legal authority for an identified jurisdiction. However, activities that constitute or help facilitate IUU may take several forms.

Obscuring Beneficial Ownership

Fisheries are prosecuted across jurisdictions and business relationships are convoluted such that the true beneficial owner is difficult to discern. At present, IUU cases generally occur at the national level and focus on prosecuting the vessel and its crew for a specific violation in that jurisdiction, expending little or no effort to identify potential illegal activities by the same vessel or company in other jurisdictions, or, certainly, prosecute the networks and individuals behind IUU fishing operations. This would be similar to the police repeatedly prosecuting the street corner drug pusher while ignoring the drug kingpin supplying and distributing all the drugs, which fails to address the root of the problem. As a further complication, investigating and prosecuting IUU under these conditions is complex and requires close cooperation and information sharing among countries, agencies and international institutions, which is often lacking.

Flags of Convenience

"Flags of convenience" (FoCs) are often registered by a vessel to a state with no genuine link to its owners or operators. Registrations under these flags offer limited regulatory oversight, ease of registration, reduced taxes or fees, and help obscure beneficial ownership. Vessel owners may use FoCs to circumvent laws and regulations, avoid potential penalties, or re-flag and change names to confuse management and enforcement authorities, thereby frustrating IUU investigations and prosecutions.

Ports of Convenience

IUU fishing vessels prefer ports where they can avoid the scrutiny of appropriate inspection that might result from a lack of capacity, poor information infrastructure, or corrupt inspectors. Ports of convenience allow IUU vessels to access the marketplace and secure support for their vessels with a low risk of detection or associated consequence. These ports of convenience can include some free trade ports or free economic zones with favourable customs regulations and limited controls on landings or transhipment.

Transhipment

Transhipment is sometimes described as the "hub in the wheel of IUU." It often occurs far from shore and beyond the reach of proper monitoring and enforcement, allowing IUU fishing vessels to 'launder' fish at sea by transferring their catch among vessels and continue fishing without having to enter port. As a result of the specific threat that transhipment poses to the ability to adequately address IUU, the UN Food and Agriculture Organization (FAO) recently proposed international reforms aimed at making the practice more accountable.[2]

Undermining Information Systems

Information capture and sharing is at the heart of addressing IUU effectively. Many jurisdictions require vessels to operate Vessel Monitoring Systems (VMS) which sends information on their position and activities over a proprietary satellite network. Some vessels are also required due to their size to broadcast their position over an Automated Identification System (AIS) which is similar to VMS but transmits a publicly accessible satellite signal. However, IUU fishers can undermine these systems by deactivating or manipulating their signal to hide their location or even use a procedural exemption under false pretences to turn their VMS off and report manually.

Furthermore, IUU fishers avail themselves of antiquated paper-based information systems to falsify vessel registration certificates, licenses, catch certificates, or other records to obscure their histories, avoid regulations, defer costs and other obligations, or access other undeserved resources or benefits. Even where electronic systems are available, they are often not used across the entire supply chain and can still be manipulated, even if that manipulation is easier to detect with an electronic versus paper-based system.

Why is IUU Fishing Bad?

Proper fisheries management is like simple accounting on an interest-bearing bank account. The general goal of fisheries management, just like the manager of an investment account, is to ensure the fishermen (joint account holders) only withdraw the surplus production (interest) on a particular fish stock (interest bearing account) and avoid digging into the minimum viable spawning stock (principal) such that the fish stock continues to produce a certain level of harvestable surplus (income) for the fishers in perpetuity. Certain factors are always beyond the control of an investment account manager, such as, for instance, variable interest rates, which would equate to interannual variability in reproduction of a fish stock. To account for that variability, an investment account manager might recommend a maximum annual total withdrawal from the account at a conservative level as a benchmark to ensure joint account holders minimise the risk of overdraw into the principal and, thereby, reduce their long-term annual return. This concept is what is referred to as “maximum sustainable yield” (MSY) in fisheries.

The problem comes when the joint account holders are all acting responsibly, reporting regularly, and coordinating among each other to establish rules and procedures to ensure they are not overdrawing on the account while an unauthorised party, say a hacker, has accessed the account and is siphoning off funds from the account outside the knowledge of the investment account manager or any of the legal joint account holders. In this scenario, the hacker is either unable or unwilling to take everything in the account all at once but manages to withdraw enough that it becomes evident in the declining account balance, possibly digging into the principal of the account over time. Absent any action against these nefarious actors surreptitiously withdrawing funds, the account will eventually be drawn

down to the point that it no longer has enough principal and, therefore, does not produce any interest as well, which is analogous to a fishery collapse scenario.

Approximately 90% of the world's fisheries are fully exploited or overexploited, meaning there is no more room to accommodate any additional legal or illegal fishing.[3] Thus, Illegal, Unreported, and Unregulated (IUU) fishing is a clear and present danger to sustainable, well-managed fisheries around the globe, but especially in the Western and Central Pacific Ocean (WCPO) region.

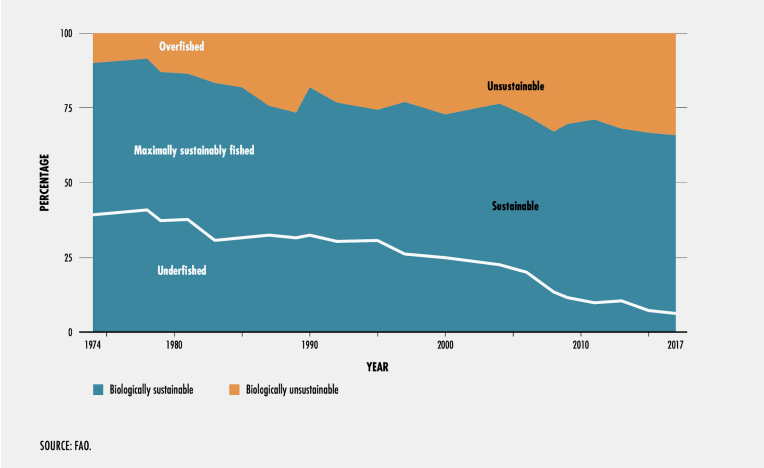

Figure 2: Global Trends in the State of the World's Marine Fish Stocks, 1974-2017

Furthermore, the threat of IUU extends well beyond a direct ecological impact on the ocean and resources within it. A rapidly rising global demand for seafood is driving the low risk/high reward practice of IUU, which is, in turn, resulting in threats to ocean ecosystem health, threatened and endangered species, coastal livelihoods, and food and economic security. Moreover, while IUU fishing directly harms legitimate fishing activities and unfairly maligns the reputation of responsible fishing companies and governing authorities, it also has connections to transnational crime, contributes to human and labour rights violations, distorts global seafood markets, and generally undermines efforts toward sustainable management. When compounded by the impacts of changes in fisheries distribution and abundance expected with climate change, IUU represents a tangible and imminent threat to

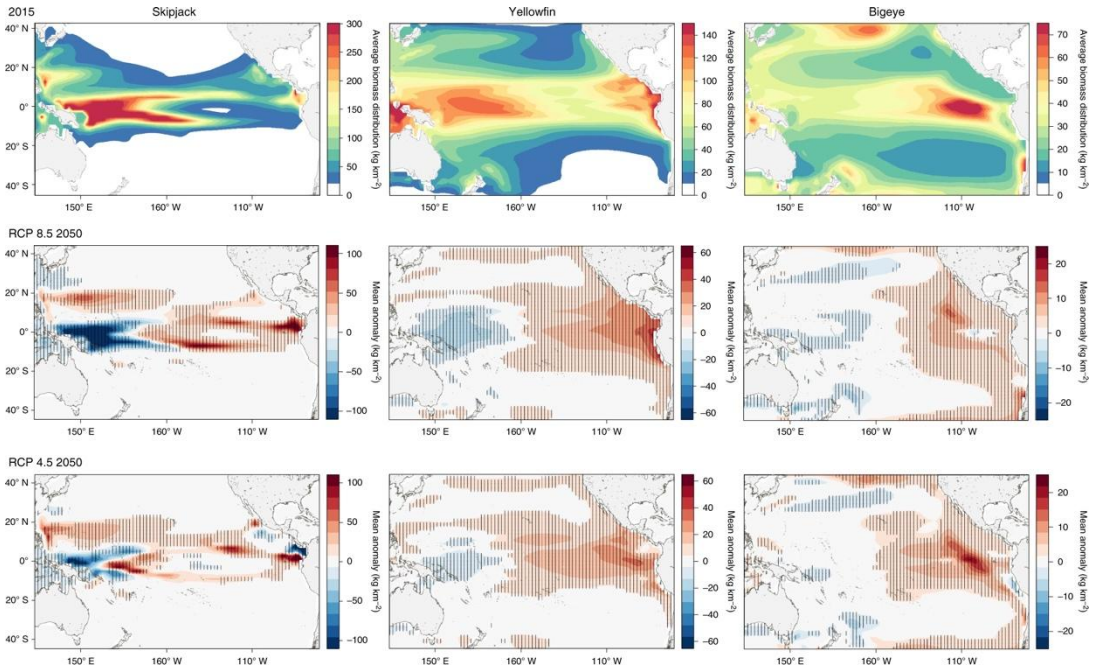

Figure 3: Projected Changes in Distribution and Abundance of Skipjack, Yellowfin, and Bigeye Tuna Resulting from Climate Change.

the well-being of the Pacific.[4] Most importantly, in the case of the Pacific Islands, IUU fishing very simply amounts to theft of the wealth of those nations no different than if someone broke into a bank vault and sped away with bags full of money.

How Bad Is it?

WWF acknowledges that IUU, by nature, is clandestine and outside legal authority, making it difficult to fully assess. However, more recent analysis that incorporates new technologies and forensic research techniques have allowed us to gain a much better understanding of the scale and scope of IUU globally[5] and across the Pacific.[6] Although the evidence varies across regions and fisheries, it indicates that IUU fishing is systemic and endemic globally.

Some experts estimate the annual economic losses attributable to IUU fishing between US$26-$50 billion[7] and around 20 percent of the global seafood catch.[8] At a current value of US$151 billion globally for wild capture fisheries,[9] this means that IUU fish constitutes as much as 33 percent of the total value of wild capture seafood and as many as 1 in 5 wild capture fish in the market from the Pacific Islands were harvested illegally. Nonetheless, while much of the media attention and effort often seems directed toward the "I" of "IUU," with emotive images of high seas pursuits and unlicensed derelict vessels fishing in protected areas, WWF notes that, within the Pacific Islands region, analysis of available information indicates that the "U" of "unreported" or, more specifically, misreported fishing from licensed vessels represents a much greater threat and consequence to the region's fisheries, estimated at more than 95% of the IUU of the region.[10]

Environmental and Ecological Impact

IUU fishing can result in significant environmental and ecological damage, especially when vessels use prohibited gear or engage in activities that fail to account for catches of non-target species such as sharks, turtles, or marine mammals. IUU fishing can also result in activity that physically damages habitat on which fish species depend such as reefs, seamounts, and other vulnerable marine ecosystems.

Fishery Impacts

While many of the commercially significant fisheries in the Pacific Islands region, such as most of the tropical and temperate tuna species, are in a generally healthy state with the notable exception of Pacific bluefin tuna,[11] IUU remains a persistent threat to continued sustainable management. When additional exploitation like IUU goes unaddressed in a well-managed fishery, it is like a small puncture in a car tire. At best, the tire is eventually going to go flat over time if you fail to look for and find the puncture. At worst, because of additional stress, that tire could experience catastrophic failure and blow out completely. Thus, it is imperative that fisheries are closely monitored to detect, deter, prevent, and address IUU.

Because the same level of monitoring, control, and surveillance that is applied to legal regulated fishing is not applicable to IUU fishing, it frequently results in unsustainable impacts on target species and associated non-target species. The impact is most evident in the damage to target fish stocks caused by overfishing instigated and exacerbated by IUU. The systematic overfishing of sea cucumbers across the Pacific Islands, generally due to unreported fishing but also worsened by illegal fishing by Vietnamese "blue boats," is an

example of IUU related overfishing.[12] If fisheries managers and the industry agree to limits that IUU fishers do not abide by, then a stock could very easily be overfished in the presence of IUU. Another common IUU issue that exacerbates overfishing that New Zealand is familiar with involves the unreported discard of non-target or low-grade fish, which may include low-value species or fish of an unmarketable size or quality. Once again, fisheries management amounts to basic accounting and IUU is equivalent to theft.

Capture of non-target species or "bycatch" such as protected, endangered and threatened species including sharks, turtles, albatrosses and marine mammals, is an additional threat posed by IUU fishing. At present, the Antipodean albatross represents an iconic New Zealand species that bears a "nationally critical" status as a result of a 42% drop in female breeding numbers over the last 17 years,[13] which is directly attributable to IUU fishing in both New Zealand and the Pacific Island waters where satellite tracking data has clearly indicated interactions between seabirds and fishing vessels that resulted in mortalities that were unreported.[14] Additionally, in September 2021, a major study re-assessing the IUCN Red List status for all sharks, rays and chimaeras revealed that over 1/3 of all these species are now at risk of extinction caused by overfishing.[15] Up to 100 million sharks are killed annually by a wide range of fisheries,[16] and some populations, such as the oceanic whitetip shark endemic to the Pacific Islands, have declined by more than 95 percent as a result of overfishing.[17] The best available science indicates that the decline cannot be attributable to reported catch alone, meaning IUU is driving the extinction of many of these ecologically and culturally important species.

Ecosystem Impacts

IUU fishing results in both direct and indirect impacts on the ocean ecosystem. A direct impact is represented by removing too many top-level predators, whether target species like tuna or non-target species like sharks, which can substantially disrupt the ecological balance, resulting in substantial degradation of the ecosystem.[18] Additionally, damage to vulnerable habitats using prohibited gear and fishing in protected areas represents an additional IUU threat. As recently as February 2021, two Chinese fishing vessels were accused of illegal fishing and carrying driftnets, a prohibited gear with a prolific ability to harm the ecosystem, in Vanuatu waters.[19]

Other issues related to IUU fishing include the profusion of plastic debris, including fishing gear, that has been discarded or at sea in violation of internationally agreed law under MARPOL Annex V.[20] An analysis of marine debris published in 2020 noted the predominance of fishing gear among the plastic pollution surveyed across the Pacific Islands.[21] Not only does the discarded and lost fishing gear represent a broad ecological threat to the ocean, but it also represents a discrete threat to many species because it continues to capture marine species long after it is lost as ghost gear.[22]

Overall productivity, biodiversity and ecosystem resilience are reduced because of persistent and pervasive IUU fishing. The defining factor is that illegal operators have no incentive to comply with regulations aimed at conserving either fish stocks or the environment in which they live, while the burden of conserving those resources increasingly falls on the shoulders of legal operators.

Social and Economic Impacts

Because WWF believes in a future where humanity lives in harmony with nature, we recognise the substantial interrelationships between fisheries and the communities – and the *people* – that depend on them. Without question, IUU Fishing results in significant and substantial social and economic harm across the Pacific.

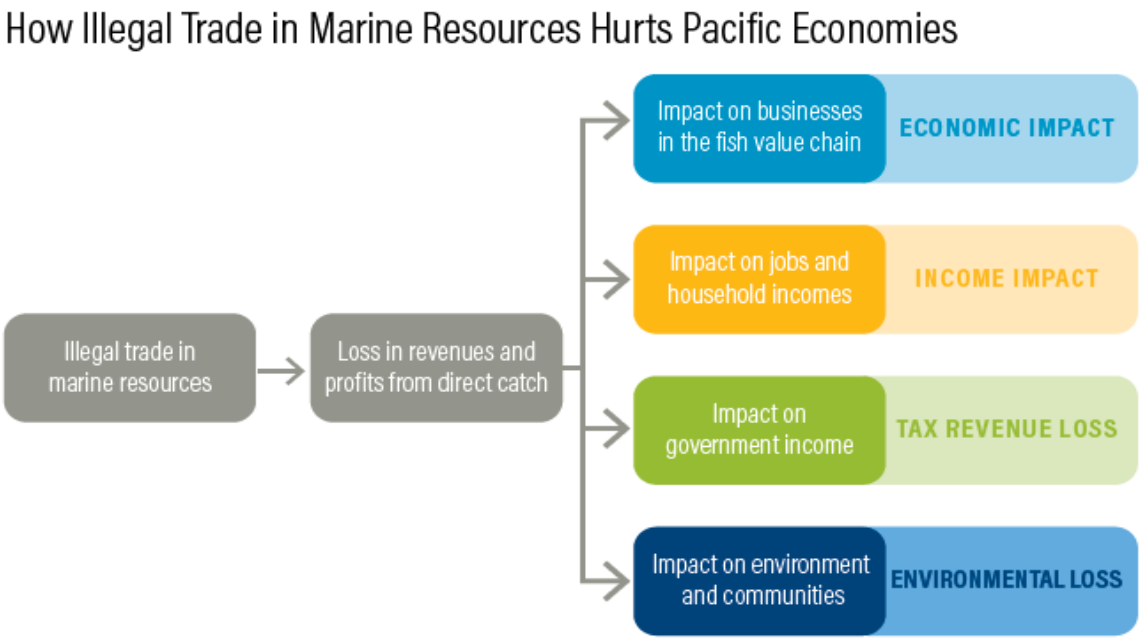

Figure 4: How IUU and Illegal Trade Hurts Pacific Economies WORLD RESOURCES INSTITUTE

Social Impacts

Social impacts of IUU fishing include loss in employment and income for legitimate fishers, economic losses for the tourism sector, and increased food security risks.

The most evident social impact of IUU fishing is the resultant loss of employment and income for those fishers engaged in the legal fishing industry. As fisheries resources are depleted, those jobs and resultant income that would otherwise be available to local fishers evaporate as well. While the data is difficult to compile and analyse, the most recent research implies that losses from IUU resulting from employment losses alone could be on the order of at least tens of millions of USD annually, notwithstanding variability across the individual Pacific Islands.[23]

Other direct results of IUU fishing and consequent overfishing may also be seen in the absence of large marine predators that contributes to poor reef health, which, in turn, negatively affects marine tourism operations that rely on those ecological traits to attract visitors.[24] Some Pacific Islands, such as Palau, depend heavily on tourism, particularly dive tourism, accounting for as much as 86 percent of their total export revenue.[25]

IUU fishing also contributes to food security risks. Approximately 3 billion people globally rely on seafood as their primary source of protein.[26] The World Health Organisation (WHO) recommends that daily protein intake for good nutrition should be approximately 0.7 g of protein per kg body weight per day, derived from a variety of sources to prevent micronutrient deficiencies.[27] While, some Pacific Islands such as Kiribati consume as much as 200 kilograms of fish per person annually,[28] an annual average per capita fish consumption of 34-37 kg is required to provide at least 50% of recommended protein across the Pacific Islands. Uncontrolled IUU fishing, particularly when considering climate-related impacts, could have compounding and devastating effects on Pacific Island communities that depend heavily on access to fish as a food resource, whether through subsistence fishing or access through local markets.

Economic Impacts

Fisheries are a critically important economic resource to many Pacific Island communities. In some cases, like Tokelau, fisheries comprise over 95% of earned revenue, and contribute about 30% of Tokelau's annual capital and operating expenditure.[29] Likewise, in Tuvalu, fisheries represent the only renewable commercial resource and contribute license and access fees that are almost 60% of non-aid revenues and around 45% of the government budget annually.[30] For small island nations like Tokelau and Tuvalu, fisheries are a critical resource for jobs, income, and the revenue that ultimately builds roads, pays for schools, and maintains medical facilities. While other Pacific Islands such as Fiji or Papua New Guinea may possess a more diversified suite of resource revenues and tourism, fishing is still incredibly important economically even if a smaller proportion of national revenue.

Targeted work as part of a quantitative IUU assessment conducted by the Pacific Islands Forum Fisheries Agency in 2016 estimated losses to Pacific Island economies from the total estimated value of IUU-related tuna catch at US $616 million.[31] The World Resources Institute estimated in 2019 that as much as 20% of WCPO fisheries catch is unreported every year,

amounting to as much as 3.4 million tonnes of fish. Additionally, as much as 50% of this unreported catch is illegally traded in international markets every year, resulting in approximately USD$2.4-4.5 billion loss in gross revenues every year from the WCPO alone.[32] Given that the Pacific Islands collectively receive roughly an equivalent amount in international development aid annually, the estimated loss of revenue to IUU fishing across those same countries is not trivial.

Human and Labour Rights

While not specifically identified in the FAO definition of IUU, one can argue that violations of human and labour rights in the fishing industry constitute, at most, a violation of the laws of the relevant jurisdiction or, at least, fishing inconsistent with international obligations. Under any circumstance, awareness of human and labour rights violations across fisheries has grown substantially in prominence in recent years and there exists widespread understanding that human and labour rights abuses are justifiably linked with IUU fishing.

Evidence suggests that human and labour rights violations are pervasive across fishing fleets operating in the Pacific Islands.[33] More recently, research suggests that COVID-19 has only intensified the problem of human and labour rights violations in fisheries.[34] While international governance structures have taken steps to establish instruments aimed at addressing the problem of human and labour rights violations in fisheries, including ILO C188[35] and the Cape Town Agreement[36] these tools have proven insufficient to stem the tide of abuse, requiring additional measures to address these issues through other mechanisms.[37]

New Zealand is unfortunately familiar with labour abuse in fisheries due to relatively recent incidents involving work conditions on some foreign charter vessels (FCVs) operating in New Zealand waters – mostly owned by Korean companies chartered by New Zealand firms – that met international criteria for slavery, forced labour and trafficking.[38] New Zealand effectively resolved the issue by requiring all vessels fishing within its EEZ to carry a New Zealand flag subject to tighter restrictions and controls, but for many reasons the Pacific Islands might not be able to avail themselves of the same effective solution. Vessel charter arrangements remain prevalent across the Pacific Islands, involving some of the same conditions that New Zealand was forced to confront and also creating accountability issues under the conservation and management measures. What this indicates is that even New Zealand, which is better resourced and better placed to address this issue, had human and labour rights abuses occurring in its own waters, which implies that those Pacific Island nations without similar resources will require substantial support in rooting out and addressing the issue in their own waters.

WWF also considers intimidation, threats, and assault against fisheries observers, including their deaths, within the purview of the human and labour rights issue. Fisheries observers serve as the "eyes and ears" for fisheries management and compliance authorities, reporting on catches, methods, and potential compliance violations. Fisheries observers serve onboard fishing vessels, travelling at sea with the rest of the crew for weeks or months at a time, gathering independent information about vessel activities. Sometimes, because the information that fisheries observers collect can have a compliance consequence, vessel operators or crew may attempt to dissuade observers from performing their duties to observe and report. Thus, threats, bribes, intimidation, and assault directed at fisheries observers represents a discrete type of IUU in the form of coerced or deliberate misreporting. Where fisheries observers are coerced and fail to comply or are simply suspected of documenting incriminating evidence, it can lead to their injury or even death or disappearance at sea. WWF notes that within the last 11 years at least 9 Pacific Island fisheries observers have disappeared or died under suspicious or, at least, unnecessary circumstances.[39]

Solving the human and labour rights violation issue as a matter of ocean governance over the fishing industry would result in direct benefits for the Pacific Islands through improved employment opportunities, but also because well-regulated fishing vessels are more likely to comply with laws intended to protect the Pacific's marine heritage. Thus, as a matter of regional strategy, if the Pacific Islands can secure the level of transparency and accountability necessary to address human and labour rights violations in fisheries, they will almost certainly improve the transparency and accountability needed to address IUU fishing.

Transnational Crime

In 2011, the United Nations Office of Drugs and Crime (UNODC) commissioned a report focusing on transnational organized crime in the fishing industry.[40] More recent studies have also drawn connections between IUU fishing and a variety of other crimes.[41] Among those crimes, authorities have documented criminal activity involving drugs, arms, illicit goods, and even human trafficking using fishing vessels as a platform.[42]

WWF wishes to emphasise that because these crimes occur on fishing vessels, it does not mean, implicitly or explicitly, that all fishermen are criminals. However, the nature of fishing, which allows vessels to operate far out at sea and away from the prying eyes of enforcement and oversight, allows fishing activity to be used as a cover for other illicit activities. Like the human and labour rights issue, evidence suggests that the same lack of oversight and transparency that leads to IUU fishing also allows for transnational criminal activity to proliferate as well.

Regional, National, and International Governance Arrangements

WWF acknowledges the challenges and complexity associated with the interwoven tapestry of national, regional, and international governance arrangements in the Pacific Islands region. We note that it would be naïve to consider that geopolitics do not colour every single decision that is made regarding fisheries in the Pacific Islands region. Influences of foreign development aid across the region reflect ambitions toward resource access and "chequebook diplomacy" unquestionably occurs under some circumstances. Furthermore, conflicts over resource access are only becoming more acute as evidenced by increasing tensions near the Spratly Islands over disputed national claims among China, Brunei, Indonesia, Malaysia, the Philippines, Taiwan, and Vietnam to that resource rich region.[43]

WWF also notes that the fisheries prosecuted in the Pacific Islands region are dominated by Distant Water Fishing Nations (DWFN), with vessels primarily from China, Taiwan, Japan and Korea representing the most effort across the region. China's fleet is the largest in the world, with almost 17,000 vessels (1,000 of which use "flags of convenience" and are registered in other countries).[44] China has also received the ignominious distinction of the worst score out of 152 coastal states assessed worldwide on the IUU Fishing Index.[45]

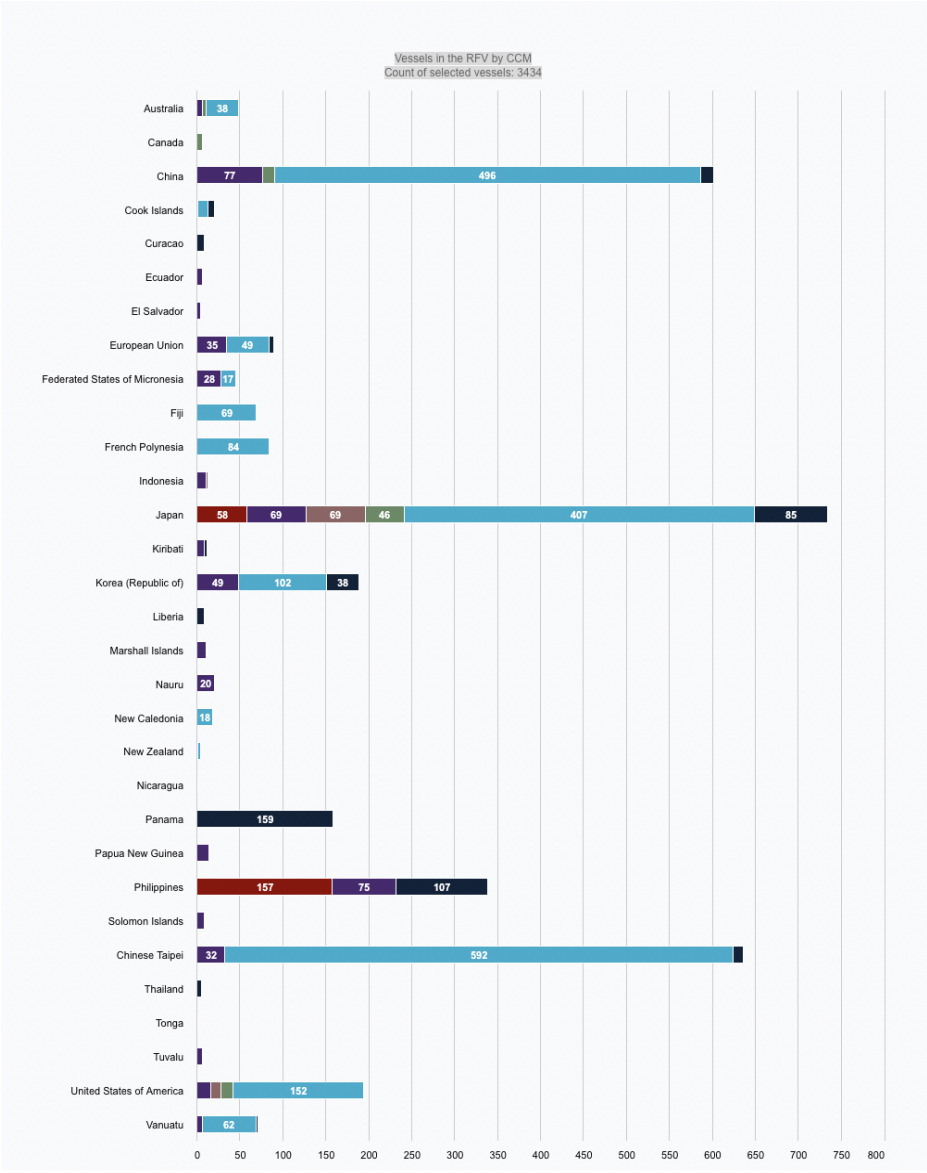

Figure 5: Proportion of Vessels by Flag on WCPFC Vessel Registry

Most of the Chinese fishing companies' net profits come entirely from subsidies. Having dramatically depleted its own domestic fisheries, China uses subsidies to expand its fleet to more productive waters, such as those in the Pacific Islands.[46] Although China is not the only country subsidizing unsustainable fishing practices, these subsidies contribute to the problem of too many vessels trying to catch less and less fish, which subsequently drives legal fishers further towards IUU fishing to stay lucrative or to simply go out of business.

WWF is concerned that these same distant water fleets are engaged in a war of attrition with the remaining viable domestic fleets in the Pacific Islands, such as the Fiji domestic longline fleet that primarily targets South Pacific albacore. In the first instance, the Fiji domestic longline fleet is unable to compete with the heavily subsidised, Chinese-owned fleet, which can harvest fish profitably when the domestic Fiji fleet cannot. Secondarily, not only is this problematic because the substantial onshore investment and local hire policy of the domestic Fiji fleet that contributes significantly to Fiji's economic well-being could disappear, but a recent trend indicates that, due in part to the economic constraints of COVID-19, the remaining genuine domestic Fiji fleet could lose their licenses, which have a 20-year tenure, to front companies in Fiji sponsored by Chinese state entities. As demonstrated by the similar loss of the domestic fleet in Tonga more than a decade ago under similar circumstances, this change in Fiji could be irreversible and could substantially alter the geopolitical dynamics in Fiji as well as across the Pacific Islands region. This narrative underscores the complexity and interplay across international, regional, and national governance structures as well as the very sensitive geopolitics that are at stake, which all have an impact on the Pacific Islands regional approach to IUU.

Lastly, WWF understands that the Parliamentary Committee on Foreign Affairs, Defence and Trade has invited several other regional institutions with a far more substantial depth of experience on this topic to provide submissions. Thus, WWF intends only to make some broad observations of the governance arrangements that exist in the Pacific Islands as they relate to IUU.

Governance Arrangements

International

WWF has long supported the accession of all countries to the various international treaty instruments targeting sustainable fisheries issues on a global level, including the UN Convention on the Law of the Sea (UNCLOS), UN Fish Stocks Agreement (UNFSA), FAO Compliance Agreement and the FAO Port State Measures Agreement (PSMA). We also support all parties seeking to ensure that the national legal framework is consistent with these and is fully implemented at a national level.[47]

WWF believes that countries should continue to look to the FAO Code of Conduct for Responsible Fisheries as a framework to assist establishing foundational elements to support sustainable fisheries management, particularly those elements described in the Appendix G: International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) and, where it has not already occurred, assist Pacific Islands in developing or updating National Plans of Action (NPOAs).

WWF also supports and encourages ongoing engagement in the UN Intergovernmental Conference on Marine Biodiversity Beyond National Jurisdiction (BBNJ). We incorporate by reference our previous submissions to the BBNJ, including a call for Ecosystem Based Management and to establish the BBNJ COP's competency for designating Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction (ABNJ) on the basis of their conservation values.[48]

Lastly, WWF emphatically supports and encourages all countries to ratify the IMO Cape Town Agreement and the International Labour Organization Work in Fishing Convention (C188). If we cannot ensure the health and safety of our fishers, then we cannot possibly hope to effectively combat IUU.

WWF recommends New Zealand continue to participate in and support international governance arrangements and assist Pacific Islands in their participation and national implementation where relevant and appropriate.

Regional

While WWF believes the Regional Fisheries Management Organisations (RFMOs) such as the Western and Central Pacific Fisheries Commission (WCPFC) play an important role in establishing a decision-making structure necessary to address the conservation and management of resources on the high seas, we also believe they could be significantly improved in their operation to ensure they are more effective.

Consensus Process

WWF believes that all the "low hanging fruit" has been picked with respect to fisheries regulations under the authority of the WCPFC. The issues that are left and that are arising more frequently are extremely contentious and near impossible to achieve meaningful consensus agreement, particularly with respect to compliance issues that implicate IUU. The idea behind consensus is that by including input of all stakeholders the resulting proposals may better address all potential concerns and that, by engaging an inclusive and respectful process that generates as much agreement as possible, it sets the stage for greater cooperation in implementing the resulting decisions as well as better compliance.

However, WWF believes that the consensus decision process established by the WCPFC Convention has reached a point where it is no longer effective at securing progress and has become a tool of pure obstruction because it does not require true *consensus*, but requires *unanimity*. This means that a single party can hold a decision hostage and that the end result is to either have nothing or capitulate to the minority party, usually meaning that only the least substantive, ineffective, and watered-down measure is allowed to pass. It has become, in effect, fisheries management and enforcement by the least common denominator subject to the tyranny of the minority.

Notwithstanding that the Rules of Procedure create a structural arrangement that supports the approach of unanimity, the intractability of the consensus process is reflected in several recent issues where, due to vested self interest in the status quo, certain delegations have refused to agree in spite of overwhelming scientific evidence and support from the majority

of the delegations. These issues included critically important issues related to IUU such as fisheries observer safety and security and human/labour rights of crew, but also other issues that should not be contentious such as a target reference point for South Pacific albacore. WWF suggests that there is an option to break the gridlock and secure meaningful progress at the RFMO level, but it will take courage.

Twice in the last 6 years the WCPFC has come close to voting on issues. The closest the WCPFC came to a vote was in 2016 when the Chair of the WCPFC, at the request of a majority of members, called a vote at time certain in response to Japan's refusal to agree to the proposed observer safety and security measure. Japan conceded to agree only minutes before the vote was called with the provision that they be allowed an innocuous footnote in the proposed language. The mere threat of a vote, which is considered a "nuclear option" was enough to spur agreement in that case, but it was also a matter involving human lives that reflected poorly on any delegation that would have to "own" their vote against the proposal. Thus, as a matter of transparency and as a step toward more efficient and effective decision-making, **WWF recommends New Zealand to consider pushing important matters before the WCPFC to a vote, specifically with pending decisions that must be made regarding human and labour rights of crew, which will also have repercussions for addressing IUU effectively.**

Transparency

In addition to the transparency and accountability voting could offer, general improvements in the overall transparency of the WCPFC process could also improve its ability to address important issues related to IUU. For example, at this time the Compliance Monitoring Review (CMR) process is closed to observers. Because these meetings are closed, specific information about potential IUU infringements is restricted from external view. As a result, there is little or no external pressure – no real incentive – to purposefully address compliance issues. As a result, some countries have had compliance violations under "Flag State Investigation" for at least 5 years now, meaning they have done little to respond to potential IUU compliance infringements because there is no consequence for not doing so. Thus, we reference the recent Workshop on Best Practices in Compliance in RFMOs: The Role of Transparency in Improving Compliance convened by Pew Charitable Trusts and the International Sustainable Seafood Foundation (ISSF) that proposed several measures to improve transparency in the RFMO process, broadly including:

- Transparency of information to be provided to and from the RFMO, and among RFMO;
- Transparency of the actual review mechanisms, including deliberations; and
- Transparency in determining the outcomes of situations of non-compliance and follow-up actions.

WWF recommends New Zealand to review the outcomes of the Workshop on Best Practices in Compliance in RFMOs: The Role of Transparency in Improving Compliance and support recommendations contained in the Workshop report before the WCPFC.[49]

Sub-regional

One of the most significant advantages the Pacific Islands region possesses is the regional solidarity that came with the prescient establishment of the Pacific Islands Forum and the Council of Regional Organisations in the Pacific (CROP) agencies of the Pacific Community (SPC), Pacific Islands Forum Fisheries Agency (FFA), and South Pacific Regional Environment Programme (SPREP). While not a CROP agency *per se*, as an independent outgrowth of the Pacific Islands Forum process the Parties to the Nauru Agreement (PNA) has also contributed substantially to advancing the interests of the Pacific Islands at this level.

SPC has played a critical role in supporting the Pacific Islands Regional Fisheries Observer (PIRFO) programme, which provides the frontline training for fisheries observers across the Pacific. This carefully coordinated training role has ensured that observers are trained to a professional capacity to conduct their duties, which include documenting compliance with regulations and, thereby, identifying potential IUU. WWF also recognises the efforts of SPC to advance electronic data capture and storage tools across the Pacific through the electronic reporting platforms incorporating the TAILS and ONBOARD apps as well as improving information system compatibility. SPC's additional work on electronic monitoring with respect to training as well as testing and research of EM systems has been instrumental in advancing that technology across the region as well. In short, SPC's work around ensuring the tools and training is available to the Pacific is important for combatting IUU. Thus, we would support any effort by New Zealand to maintain or enhance SPC's programme of work.

WWF would like to recognise the longstanding efforts of the FFA to combat IUU through a combination of available tools and training platforms. At a policy level, we note the explicit importance of the Niue Treaty Subsidiary Agreement (NTSA) and associated Niue Treaty Information System (NTIS), recognising that the principles contained within those policies and implementing instruments are crucial to ensuring cooperation needed to address IUU collectively across the Pacific Islands such as standards for basic information sharing, hot pursuit, and electronic data storage and transfer related to IUU violations. At a practical level, the development and enhancement of the Regional Fisheries Surveillance Centre (RFSC) and the electronic tools made available to track vessels via satellite remote sensing has literally been a "gamechanger" with respect to IUU detection. Additionally, the MCS Officer Foundation Course and associated certificate is a critical feature to ensure fisheries officers have the background and knowledge to effectively detect and address IUU violations.

We also note the efforts of the FFA as part of the Monitoring, Control, and Surveillance Working Group (MCSWG) to bring fisheries surveillance and enforcement staff from the Pacific Islands together with their Quadrilateral Defence Cooperation (QUADs) counterparts from Australia, New Zealand, France and the United States over specific periods for round the clock surveillance, data analysis, reporting and information-sharing as part of defined operations. As a training and capacity building exercise, this activity is incredibly important, even if resource intensive. The commitment of Australia to replace the Pacific class Patrol Boats across the Pacific Islands region has helped further complement efforts to address IUU across the region through high seas boarding and inspection efforts, but those vessels require well trained and capable staff to do their job effectively and we believe that New Zealand has a role in ensuring the appropriate training and capacity building is available.

SPREP has played an important role as an independent agency able to ensure balance and objectivity on issues related to the marine environment. Specifically, we note SPREP's efforts to compile information from Gen-6 fisheries observer forms on marine pollution that ultimately helped identify the scale and scope of the problem of marine pollution from fishing vessels and catalyze action to address it.[50] The failure of many vessels to report similar information captured in the Gen-6 forms collected by observers technically constitutes IUU.

The PNA has grown into an influential economic powerhouse and has driven improvements that contribute to fighting IUU ranging from their efforts to establish the Fisheries Information Management System (FIMS), which represents one of the most progressive efforts in the region aimed at securing real-time electronic data collection and transmission, to a significant investment in infrastructure in the Republic of Marshall Islands, which substantially benefits the Marshall Islands Marine Resources Authority (MIMRA).

WWF recommends New Zealand continue to support the goals and objectives of the CROP agencies to address IUU across the Pacific Islands region.

National

National governments are responsible for addressing IUU fishing through their respective fisheries ministries and relevant enforcement authorities. It is WWF's view that Pacific Islands fisheries ministries and enforcement authorities are largely under-resourced in terms of their ability to effectively combat IUU fishing. Despite the substantial revenue that fisheries bring into many Pacific Islands governments in the form of license and permitting fees, levies, and other duties, fisheries ministries of those countries are often not the primary beneficiaries of that revenue. This leaves the Pacific Islands short of facilities, equipment, training, and capacity to do the work necessary to conduct day to day fisheries management tasks, much less address IUU. While the aforementioned efforts of subregional institutions have done incredible work to build and support capacity improvements in some national authorities, there is still much more to be done.

Nonetheless, it is irresponsible to address the need for additional resources and not to acknowledge the issue of corruption that exists across Pacific Islands fisheries at a national level. Researchers analysed this issue in 2009, identifying that economic, governance and institutional weaknesses of the Pacific Islands States combine to leave them particularly vulnerable to corruption in the fisheries sector and determined three key areas where corruption is most likely to occur in the Pacific's fishing industry, including licensing, access agreements, and monitoring and inspection.[51] They suggest that organised criminal networks involving politicians are most likely to occur around decisions over licensing and access agreements, which can further bleed into implicitly supporting IUU fishing through Flags of Convenience and other arrangements. It is challenging to address IUU fishing without addressing potential underlying corruption simultaneously.[52]

WWF recommends New Zealand encourage fellow Pacific Island governments to ensure their relevant fisheries ministries and associated agencies are appropriately resourced.

New Zealand's Role in Supporting Solutions for IUU in the Pacific Region

WWF believes that New Zealand should, first and foremost, consider the approach to IUU across the Pacific as a matter of maritime domain awareness and maritime security. As previously described, IUU Fishing is often part of a broader scope of issues involving high seas criminality that includes illicit trafficking of arms, drugs, commercial goods, or even humans. The Pacific Islands are also becoming increasingly aware of and responsible for mounting issues related to human and labour rights abuses. This means it is imperative that responsible governments take a coordinated, interdisciplinary, and interagency approach that brings disparate resources together to deal with matters of maritime domain awareness and maritime security in a collective, efficient, effective, and proactive way. Thus, it is no longer enough to expect fisheries ministries across the Pacific to address IUU in isolation, but requires a coordinated response across fisheries, defence, police, customs and border patrol, trade, biosecurity, and other relevant government agencies.

WWF supports continued regional collaboration, the sharing of resources and intel, and the ongoing training and strengthening of local expertise in the Pacific provided by the New Zealand Defence Force as one of the QUAD partners.

WWF recommends that New Zealand continue to support the efforts of the CROP agencies to address IUU through targeted fisheries development aid support aimed at improving information sharing, enforcement, and prosecution of fisheries crimes in countries with limited resources by facilitating better engagement and cooperation by authorities, use of technology, training, and intelligence gathering.

We also suggest that in addition to these efforts, New Zealand also consider the following issues for investment and resourcing as additional ways to resolve IUU challenges while also recognising and addressing the broader issues related to maritime domain awareness and maritime security.

Support Transparency and Traceability in Seafood Supply Chains

Seafood represents one of the most highly traded food commodities. The seafood supply chain, from the point that a fish lands on the deck of a vessel to its arrival on someone's plate, is global, diffuse, complex, and in most cases highly opaque. Seafood markets are afforded the option of claiming plausible deniability because they are unable to distinguish between fish products that are sustainably and legally caught and those that are not. Thus, the absence of full supply chain traceability is increasingly recognised as a fundamental obstacle to achieving a meaningful positive impact on IUU in addition to comprehensive sustainability in the seafood trade.

Poor traceability, combined with the widespread absence of basic minimum practices for establishing and verifying the legal origins of wild fish products, leads to markets that inadvertently generate significant profits for illegal fishing activities. Additionally, insufficient traceability makes it harder and more expensive for traders, processors, retailers, and consumers to make informed decisions and demand more sustainable seafood products. It also makes it extremely difficult for regulators to enforce existing laws against the trade and sale of illegally caught fish.

However, the technology and tools to facilitate full supply chain traceability are increasingly cheaper, more capable, and more powerful than ever. Furthermore, the application of transparency and traceability tools are advancing rapidly across many commodities, including fisheries.[53] Moreover, many important market states are implementing trade barriers that increasingly restrict seafood products that fail to have adequate traceability elements associated with them. New Zealand and the Pacific Islands could increasingly find themselves locked out of lucrative seafood market states due to trade restrictions like the EU IUU Regulation and US Seafood Import Monitoring Programme, which are both targeted at restricting IUU from entering their high value markets, if they do not get ahead of implementing full supply chain traceability and transparency tools.

WWF recommends that New Zealand aggressively pursue and promote full fisheries supply chain traceability and transparency policies, processes, and technology as a priority to help exclude IUU fish from domestic and international supply chains and secure future market access for the Pacific Islands region.

Improve Fisheries Observer Coverage

New Zealand is currently in a position to lead on the issue of fisheries observer coverage in the Pacific and, by doing so, set an example that will be highly influential across the Pacific. New Zealand's current programme to develop and roll out electronic monitoring (Cameras on Boats) across domestic commercial fishing fleets will indisputably influence the broader application of the technology across the Pacific Islands. Thus, it is critical that work is as successful as possible. However, it is equally critical to recognise that electronic monitoring is meant to secure the objectives typically achieved by a human fisheries observer.

It is unquestionable that information collected as part of a successful observer programme is crucially important to the proper conservation and management of a fishery. Data collected by observers plays a central role in informing fisheries scientists and managers on everything ranging from stock assessments to non-target species impacts.[54] Increased observer coverage is especially important to assess the impact on threatened and endangered species, where, for instance, recent research indicates fishers in Australia and New Zealand are misreporting interactions with seabirds potentially by several orders of magnitude on a regular basis.[55] Furthermore, observers play an indispensable role in combatting IUU by monitoring and documenting compliance with very important regulatory requirements in the Pacific.[56] Therefore, securing appropriate observer coverage must be considered a top priority and New Zealand and the Pacific Islands must make a concerted effort to achieve that coverage.

Calculation of Observer Coverage Metric

Over 14 years ago, the WCPFC established Conservation and Management Measure (CMM) 2007-01, which specified that coverage is to be 5% of effort in each non-purse seine fishery under the jurisdiction of the Commission and shall be achieved no later than 30 June 2012.[57] Specifically, low observer coverage in the longline fishery was identified as a significant conservation risk. Moreover, as indicated by the discussion at that time as well as discussion among members at WCPFC forums since, the arbitrary benchmark established at 5% was considered a starting point for a stepwise progression to appropriate observer coverage,

never a final target as implied by some Asian Distant Water Fishing Nations (DWFN) engaged in the process. Unfortunately, not only has achieving the principal objective of CMM 2007-01 proven difficult, but even measuring how it is achieved remains unsettled.
At the moment, members self-report their longline observer coverage under four separate metrics including:[58]

- Days at Sea - days observer is at sea compared to number of days fleet is at sea;
- Number of Trips - number of observer trips compared to trips by the fleet;
- Days Fished - observed fishing days compared to fleets fishing days; and
- Number of Hooks - number of hooks observed compared to fleet hooks used.

Because these metrics are each calculated differently and subject to different biases, it places an unnecessary burden on the scientific service provider to standardise data in such a way as to properly assess coverage. In effect, it forces the scientific service provider, and ultimately the WCPFC, to "compare apples with oranges" in a way that frustrates efficient analysis and, ultimately, timely and proper management. Moreover, because of the biases of the different metrics, it creates inequity among members that places more of the conservation burden on those using a more accurate and precise metric that is less susceptible to bias and manipulation.

The best scientific information available suggests that "number of hooks" represents the best method for achieving multiple objectives, including effectively calculating effort and accurately assessing rare events like seabird interactions.[59] Several member states, including New Zealand, are currently assessing their observer coverage based on "number of hooks," proving it is practically feasible.

WWF recommends that New Zealand assiduously advocate "number of hooks" as the best practice metric for all WCPFC members calculating observer coverage on longline vessels and request a 5-year time frame to shift to use of this metric.

Level of Observer Coverage

Notwithstanding the current situation under COVID-19, observer coverage rates on the longline fleet remain unacceptably low. Recent efforts by the SPC to standardise observer coverage data indicate that region-wide observer coverage prior to COVID-19 could be near 5%.[60] However, the best available scientific evidence indicates that even a consistently applied level of 5% coverage is statistically and practically useless to effectively achieve most management[61] or compliance objectives.[62]

Low observer coverage exacerbates bias as a result of fishers altering their fishing practices (*e.g*. discarding practices, handling and release practices, effort) and gear when an observer is present, which is a phenomenon known as the "observer effect."[63] The higher the observer coverage rate, the lower the bias from an observer effect, while the larger the proportion of fishing effort that is observed, the more accurately the monitoring data characterize or represent the fishery. In short, people tend to behave better when they think they are being watched. Notwithstanding the observer effect, at just 5%, current observer coverage is not producing the quality or quantity of data necessary to properly manage the Pacific Islands longline tuna fisheries.

At present, a lack of sufficient data that is typically generated through adequate observer coverage represents the single largest obstacle to establishing appropriate management measures and unquestionably contributes to IUU fishing across the region. Moreover, "uncertainty" resulting from a lack of or poor data is continually cited in the WCPFC process as a reason for inaction, while the certainty offered by improved observer coverage seems to be consistently rejected, deferred, and delayed.

WWF concedes that different minimum levels of observer coverage may be necessary for different management or compliance purposes, depending on specific identified objectives. However, data collected under less than 100% coverage may be biased and misrepresent the fishery overall, resulting in management failures. Alternatively, 100% observer coverage, through human or electronic observers, would result in no bias from an observer effect. Thus, along with a consortium of other NGOs and with the support of prominent market partners, we have determined that because of conservation and compliance problems such as illegal fishing, misreported or unreported catch, and bycatch of endangered, threatened and protected species, that only an observer coverage rate of no less than 100%, through human or electronic observers, is acceptable.[64]

By continuing to fail to secure a scientifically or statistically valid level of observer coverage, particularly on longline vessels, the WCPFC fails to meet the charge of its founding documents to generate and use the best available scientific information.

WWF recommends New Zealand aggressively advocate before the WCPFC to improve observer coverage across all longline vessels operating in the Pacific Islands region, to ultimately achieve a coverage rate of 100% by human or electronic observers.

Transhipment Monitoring

At-sea transhipment remains one of the most prominent weaknesses in catch documentation and verification that leads to Illegal, Unreported, and Unregulated (IUU) catch in the Pacific Islands.[65] Additionally, researchers estimate that more than US$142 million is lost in illegal transshipments annually.[66] WWF notes that the most simple, efficient, and effective solution to the challenges of transhipment-related IUU is to simply prohibit all at-sea transhipment and require all fishing vessels to land their catch at the nearest available designated port in the WCPO following the conclusion of fishing activity. However, acknowledging that such a prohibition on transhipment is politically unlikely, **WWF recommends New Zealand support substantial reforms and improvements for all at-sea transhipments, including:**

- **100% monitoring through human observers or EM on all delivering and receiving vessels;**
- **prompt advance notification of all transhipments;**
- **timely electronic delivery of all transhipment reports to the WCPFC; and**
- **strong sanctions for non-compliance.**

WWF also recommends that transhipment requirements be buttressed by verification and validation of transhipment activities through redundant systems such as the use of a vessel monitoring system (VMS) supplemented by an operating automated identification system (AIS). If, through investigation of suspected unreported transhipment activity, supporting

procedures and technologies indicate that transhipment activity was conducted in violation of transhipment rules, the offending vessel should be subject to sanctions including removal from good standing, license revocation, and listing on the IUU vessel list.

Assist Pacific Island Countries in Establishing Strong Port State Controls.

The 2009 Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (PSMA) entered into force in 2016. This treaty codifies and standardizes international rules for how a port State should verify catches that are landed in its ports from vessels flagged to a different State. The treaty also removes the incentive to fish illegally by making it nearly impossible to land illegal catch. The arrangement relies on countries cooperating and sharing information in a timely way, particularly before a vessel enters port, which allows parties to reduce the risk of fish that is the product of IUU being landed. Steps that improve the performance of port state measures include States working cooperatively and sharing information, publicly identifying the landing ports designated by PSMA parties for tightening of regulations, and ensuring that fisheries officers are properly trained—and have enough capacity to enforce PSMA provisions.

WWF recommends that New Zealand, to the extent possible, encourage and assist Pacific Island states to adopt and implement the PSMA, or equivalent port state measures, and encourage the adoption of measures consistent with the PSMA by the WCPFC.

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