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Illegal fishing and Australian security

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ABSTRACT

The security impact of illegal fishing is not well understood. Where illegal fishing is recognised as a security problem, the focus has been on fish as a natural resource, the depletion of which can have impacts on food security, individual livelihoods, and the economic survival of states relying on illegal fishing. We argue that a focus on fish as a natural resource obscures the other security challenges the crime of illegal fishing poses to Australia. As this paper explains, illegal fishing overlaps with drug, human, weapon and other contraband trafficking and smuggling; irregular maritime arrivals; and maritime piracy. In addition, like other easily transported, high value resources, illegal fish can fund insurgencies and other types of political violence. Understanding illegal fishing as a security challenge will improve Australia's national security policy. First, it acknowledges fish as a vital natural resource, implicated in economic, ecological, and human security; second, it analyses how illegal fishing interlinks with other maritime crimes; third, it challenges the effectiveness of monitoring and enforcement of illegal fishing; fourth, it presents an opportunity for effective regional cooperation; and finally it highlights the benefits of regional cooperation in responding to illegal fishing.

KEYWORDS

Maritime security; illegal fishing; national security; transnational organised crime; maritime piracy

Introduction

Illegal fishing¹ is increasingly recognised as an ecological catastrophe. Illegal fishing challenges individual livelihoods, the economic survival of industries, and potentially the survival of small island states. Many of these states are in Australia's immediate maritime neighbourhood. Illegal fishing is extensive. Some 26 million tons of fish are illegally caught around the world: this is more than 15 percent of global capture fisheries and valued at US\$23.5 billion annually (FAO 2016). The cost to states is also significant. In developing nations alone, illegal fishing costs between \$2 and \$15 billion annually (Liddick 2014, 290). Financial estimates cannot capture the broader risk illegal fishing poses to the sustainability of species and ecosystems, nor the socio-economic implications for legitimate fishers and their livelihoods.

Many of Australia's regional neighbours rely on fish as a significant contributor to GDP (Lymer *et al.* 2010) as well as for individual livelihoods. In these states, the damage posed by illegal fishing is acute. Fish stocks in the Indo-Pacific are already under threat from

decades of unsustainable fishing, pollution and habitat loss, and may further decline due to climate change (FAO 2016). Many of these states rely on the 'blue economy' for potential development, which in turn rests on wealth from fisheries (Voyer *et al.* 2018). In these states, illegal fishing is a security threat of extreme proportions.

There are some moves towards recognising that illegal fishing constitutes a security threat to Australia's neighbours, and that this threat may also impact Australia. The *Australian Foreign Policy White Paper* recognises overfishing and illegal fishing as economic and social challenges for states such as Indonesia and Papua New Guinea (Australian Government Department of Foreign Affairs and Trade 2017). It also argues that climate change will exacerbate falling fishing stocks, which could lead to illegal fishing in Australian waters (Australian Government Department of Foreign Affairs and Trade 2017, 103). The 2016 *Australian Defence White Paper* recognises the need to defend Australia's waters against illegal fishing and transnational organised crime (Australian Government Department of Defence 2016, 53). The Defence White Paper makes commitments to protect Southern Ocean resources and work with Pacific Island states and Timor Leste to counter illegal fishing (Australian Government Department of Defence 2016, 53, 55, 59, 126). The recognition of the non-traditional security threat posed by illegal fishing is mirrored in other jurisdictions around the world (Poling and Cronin 2017).

It is undoubtedly true, as emphasised by Australia's current practice, that illegal fishing is a security issue of note for both Australia and its neighbours, and it is evidence of the increasing importance of non-traditional security issues to Australia's foreign policy. The security impact of illegal fishing is framed as an environmental, economic and security threat to a natural resource vitally important for Australia's regional neighbours. It recognises that the security of a natural resource has important implications for Australia's foreign and defense policy.

However, framing the security threat of illegal fishing as a resource-based issue ignores the range of security challenges that illegal fishing actually poses, and ignores the direct threats to Australia that occur because of illegal fishing. The loss of fish as a natural resource in the region currently only indirectly affects Australia, as Australian waters are relatively well-patrolled. Illegal fishing has been bracketed as an ecological and resource issue, where the main drivers are environmental and economic impacts (Haward and Bergin 2016).

Treating illegal fishing only as threat to the security of natural resources ignores the other ways the practice, and the offenders and networks that perpetrate it, pose a broader security threat to Australia and the region. In other words, it is not just the impact of illegal fishing that matters for security. The means through which fish are illegally taken have a significant national security impact. De Coning and Witbooi argue that the term 'fisheries crime' best captures the broad range of crimes that support the act of illegal fishing itself (de Coning and Witbooi 2015, 213). For them, illegal fishing is the tip of a large criminal iceberg composed of a number of other maritime crimes.

We make a similar argument and apply it to Australia's security. Illegal fishing is implicated in a range of other maritime crimes, such as trafficking and smuggling (including humans, drugs and weapons); irregular maritime arrivals; and maritime piracy (Percy 2016a). In line with Chapsos and Hamilton, we argue that fisheries crime and illegal fishing rely on a series of other organised crimes and that it is crucially important to understand how they are linked (Chapsos and Hamilton, 3). This paper argues that

these crimes pose specific challenges for Australia's security, and are connected by illegal fishing. Moving beyond the natural resources frame by recognising the links between illegal fishing, other maritime crimes, and Australia's national security creates a more complete depiction of maritime security threats and offers the possibilities for developing cooperation between current and potential allies.

This paper argues first, that even while Australia and other states are beginning to recognise that illegal fishing poses a security problem as a threat to a crucial natural resource, this appreciation is itself not widespread and lacks systematic study. Moreover, we argue that the nascent recognition of the security impact of illegal fishing fails to acknowledge the genuine nature of the problem and its links to other security problems. Placing illegal fishing at the centre of criminal maritime security threats has three main benefits for Australia: first, Australia's policy on illegal fishing differs regionally, and can be disconnected. Recognising the criminal threats illegal fishing poses will yield a more coherent policy, that in turn will better assist the goals set out in the Defense and Foreign Policy White Papers. Second, understanding the links between illegal fishing and other types of maritime organised crime will enhance Australia's security against these threats. Third, the issue of illegal fishing opens up important avenues of cooperation with existing and potential partners. Effective control of maritime crime also opens up important avenues of cooperation with regional partners. Australia already works with regional organisations and through bi- and multi-lateral arrangements in the Indian, Pacific and Southern Oceans as well as its northern waters to combat illegal fishing. Addressing illegal fishing through a security lens could catalyse new initiatives with regional neighbours and strategic partners which may not be achievable in response to more traditional security threats. These three benefits would run alongside a potential reduction in illegal fishing itself, which remains a serious threat to economies and the environment: the current strategy of addressing illegal fishing as a primarily resource-related security threat has not yielded significant reduction in illegal fishing itself. A multi-pronged approach that targets maritime organised crime in many forms could reduce illegal fishing.

We make this argument in five sections. First, we outline how fish are a vital natural resource, implicated in the economic, ecological, and human security of the Indo-Pacific region. Second, we demonstrate that illegal fishing poses additional security threats linked to other maritime crimes, compounding existing maritime security challenges. Third, we highlight why the links between illegal fishing and transnational organised crime explain the persistence of illegal fishing. We argue that legal frameworks might work more effectively if the wider security threats posed by criminality were explored. Fourth, we note that current approaches to illegal fishing have not led to significant reductions in the crime itself (Liddick 2014; Telesetsky 2014), and argue that Australia's national security could be improved by adopting our wider view of the security implications of illegal fishing. Finally, we examine the benefits of regional collaboration for Australia.

Illegal fishing poses security challenges as a threat to a scarce natural resource

Illegal fishing presents a serious challenge to a declining natural resource. Global fisheries are in a precarious state, even without considering the impact of illegal fishing. The Food

and Agriculture Organization (FAO) estimates over 58 percent of global fish stocks are fully exploited, after 40 years of continuous decline (FAO 2016, 5–6). To put this in perspective, the loss of a single species can trigger catastrophic damage, as the balance is disturbed with resulting effects on dependent species and sometimes whole ecosystems (Baum and Worm 2009; Cramer *et al.* 2017). Where a fishery becomes completely depleted it may take many decades to recover, or may never do so (Leeder 2017). Climate change has a particularly dangerous impact on fisheries, as species numbers and ranges are likely to change with increasing sea temperature, acidification and more extreme weather events (Dueri, Bopp, and Maury 2014; Lan, Evans, and Lee 2013).

Illegal fishing further burdens precarious marine resources, already stressed by decades of industrial fishing, marine pollution and habitat destruction (Halpern *et al.* 2015). Illegal fishers often use unpermitted gear and equipment causing irreparable damage to non-target species and habitats (see for example Weaver *et al.* 2011). Often non-target species are caught accidentally and discarded; much of this ‘by-catch’ is thrown away dead or dying, further challenging stock survival (Alverson 1994). These ecological impacts of fishing are already being felt in the Indo-Pacific (Wafar *et al.* 2011).

The combination of already dwindling and threatened fish stocks and illegal fishing accordingly creates significant, sometimes existential, threats for Australia’s regional neighbours. The 2017 Foreign Policy White Paper explains:

As demand for fish products grows, current stocks will come under greater pressure, affecting food security, livelihoods and economic development across many regions. Depleted fish stocks in neighbouring regions degrade our own stocks and can motivate illegal fishing in Australian waters (Australian Government Department of Foreign Affairs and Trade 2017, 95).

There are more specific ways that illegal fishing challenges ecological, economic, and human security.

Maintaining healthy oceans is not simply a matter of environmental concern. The economies of many Indo-Pacific states rely on GDP generated by their fishing sector and payment from distant water fishing nations to harvest species in their exclusive economic zones (EEZs) (see for example Petersen 2002). Despite economic benefits, increased legal foreign fishing is difficult to monitor and may further deplete fish stocks with negative impacts on coastal communities. Illegal fishing in the high seas adjacent to other maritime zones will have ramifications for EEZs, particularly with respect to highly migratory and straddling stocks, such as tuna, that regularly move in and out of state’s EEZs. The value of offshore licences will likely diminish if stocks crash to levels that make foreign fishing efforts uneconomical for those nations. Loss of inshore stocks through illegal fishing will also impact on domestic commercial and small scale fisheries.

Accordingly, governments may need to shift efforts to develop their economies through other sectors if fisheries decline. In the Maldives, tourism replaced a previously dominant fishing sector as the main contributor to GDP in 1985 (Hemmings, Harper, and Zeller 2014, 108). This was only possible, however, because of the health of the surrounding reefs and marine areas. If the ecological impacts of illegal fishing damage the broader ocean environment, other alternative economic opportunities may also be lost.

The environmental and economic threats posed by illegal fishing combine to create significant threats to human security. In fact, illegal fishing is often considered purely as a

human security threat (Bueger 2015). Fish provide over 50 percent of dietary protein in some developing states, including Bangladesh, Cambodia, Ghana, Indonesia, Sierra Leone and Sri Lanka (FAO 2016, 71). Fish stock decline could lead to famine and poverty, and potentially mass migrations in search of food and jobs elsewhere (FAO 2016).

While Australia's latest foreign and defence white papers recognise the way in which illegal fishing challenges ecological, environmental, and economic security, the focus remains on these impacts *regionally*, and they are only assumed to have an indirect impact on Australia itself. However, illegal fishing is a crime that has a direct impact on Australian national security.

Illegal fishing poses security threats through linkage to maritime crimes

Illegal fishing vessels are implicated in various crimes that pose a threat to Australia's security. Fishing vessels are suitably 'disguised' in the seascape and even upon boarding a vessel, law enforcement may face difficulty ascertaining whether crew are engaged in illegal activity. Many fishing vessels are not legally required to be registered and therefore not subject to the same oversight as larger vessels (FAO 2017). There are considerable links between vessels fishing illegally, and fishing vessels engaging in other criminal behaviour. De Coning and Witbooi argue the importance of broadening the view of the potential links between illegal fishing and other maritime crimes, 'including document fraud, customs and tax evasions, human trafficking, drug trafficking, money-laundering and insurance fraud' (de Coning and Witbooi 2015, 213). Crime, like any other type of big business, requires diversification to be sustainable. Those already engaged in crime will willingly expand their operations into other crimes to support their ventures (de Coning 2011, 52). The links between illegal fishing and other types of organised crime with a maritime dimension are increasingly under examination, particularly the links between illegal fishing, smuggling (of narcotics, weapons, and people), and piracy (Bueger 2015; Chapso and Hamilton 2018; de Coning and Witbooi 2015; Mazaris and Germond 2018; Percy 2016a; Pomeroy *et al.* 2016; Pomeroy and Parks 2017; Sander *et al.* 2014). Illegal fishing vessels are involved in crimes that have serious national security implications, including maritime piracy, trafficking and smuggling, forced labour, irregular maritime arrivals, and illicit exit from Australia.

Illegal fishing played an important (if contested) role in maritime piracy off the coast of Somalia. Somali pirates themselves argued that their local waters were rendered barren through destructive fishing practices that ruined habitats for fish and lobster breeding grounds, and this narrative provides one explanation for the origins of Somali piracy (Middleton 2008). In response, Somali fishers caught and 'taxed' culprit foreign unsustainable fishers through violent extortion (Bueger 2013; Hansen 2011; Lindley 2015, 47–50)². The effectiveness of their extortion efforts led to an expansion into the high seas, where Somalia had no jurisdictional claim to fish, but where larger vessels that yielded better ransoms could be taken.

Somali piracy has many security implications, including its impact on trade flows through the globally significant Suez Canal; the use of weapons aboard vessels to protect against pirates; and the potential nexus with terrorist activity, in particular using a captured slow moving fuel vessels as a potential weapon (Lindley 2015; Percy 2016b). The security implications of Somali piracy explain the robust international

response, which culminated in three separate multinational groups patrolling the area. Despite its physical distance from Australia, the degree to which Somali piracy posed a security threat to Australia is demonstrated by the longstanding involvement of the Royal Australian Navy in counterpiracy (Percy 2016b).

There are demonstrated links between scarce fish resources and the growth of piracy in Malaysia, Indonesia and the Philippines (Jasparro and Taylor 2008). Decreasing fish resources are associated with increased crime and violence, including smuggling, trafficking, and piracy (Pomeroy *et al.* 2016, 97). While piracy in this area has not received as much attention in recent years, there is little doubt that piracy and its links with oil theft and other crimes pose challenges for this region (Hastings 2018). The links between fish scarcity, illegal fishing, piracy and other types of theft at sea form a dangerous nexus with potential insurgents, as we will discuss below. Piracy and illegal fishing have challenged and will challenge Australia's regional security.

Illegal fishing vessels are an ideal transport mechanism for all types of trafficking and smuggling. Small- to medium-fishing vessels are especially useful because they are common in Australia's regional waters and therefore hard to distinguish from legal vessels. Links between illegal fishing and the movement of drugs across borders are well established (Anyimadu 2013; UNGA 2008); drugs are often smuggled aboard vessels in frozen storage (Liddick 2014; de Coning and Stolsvik 2013). Illegal fishing vessels have been used as motherships for the transshipment of drugs between vessels and to refuel smuggling vessels (de Coning 2011, 4; Liddick 2014, 296). Fishers often resort to these crimes when they are unable to meet their livelihood through fishing, and so turn to activities such as small arms trafficking (Jasparro and Taylor 2008, 244). The vast nature of the seascape enables illicit activity to invisibly occur without the enforcement available on land.

People smuggling and trafficking are common in the fishing industry in two ways. First, illegal migrants may pay exorbitant fees to be inconspicuously transported aboard a fishing vessel to another location. People smuggling occurs when alternative migration channels may be unavailable. According to de Coning, the Asia to Australia route is one of four sea transit routes common among smugglers (de Coning 2011, 30).

Second, people are trafficked to work aboard illegal fishing vessels. The growing demand for fish, declining catches and rising costs of fishing have combined causing exploitation of migrant workers in response to these economic challenges (Marschke and Vandergeest 2016, 41). Forced labour of adults and children alike is a problem in the fishing industry (de Coning 2011). The scale is hard to measure because if an illegal fishing vessel is lost, there are often no records of those aboard (Percy 2015). An ILO report found that 25 percent of fishers aboard 'long haul' vessels (at sea for more than a month) were not working willingly (Marschke and Vandergeest 2016, 40). Death of fishers aboard these vessels is common. 59 percent of trafficked migrants aboard Thai fishing vessels have reported witnessing murder (EJF 2015a). There are similar reports of forced labour, death, and beatings from Indonesian fisheries (Chapsos and Hamilton 2018). Often, fishers' passports are confiscated and they are exchanged between vessels, keeping them at sea for long periods (Phelps Bondaroff, Reitano, and van der Werf 2015). Abuses appear to be more common in long-haul boats than in short-haul boats, where 25 per cent of labourers reported they were not working of their own volition (Marschke and Vandergeest 2016, 40). Advocates suggest that illegal fishing and

modern-day slavery are closely intertwined in Thailand, and that ending one illegal practice would end the other (EJF 2015b). Political and economic efforts to bring about change in the Thai fishing industry are underway and gaining momentum; however, it is important to note that exploitative conditions, including forced labour, in the fishing industry can be found even in well-regulated areas such as New Zealand and Ireland (Marschke and Vandergeest 2016, 41).

In the Australian context, fishing vessels pose an additional security threat as they are linked to refugee arrivals by sea. The creation of *Operation Sovereign Borders* in 2013, with the purpose of combating maritime people smuggling, clearly links migration with security (Australian Government Department of Home Affairs 2018). Operation Sovereign Borders, led by the Australian Defence Force is supported by Australian Border Force and the Australian Federal Police. Australia's policies on migration are often cited as a classic example of securitisation, where a political problem is treated as a security challenge in order to facilitate emergency politics and the suspension of ordinary rules (see for example Buzan, Waever, and de Wilde 1998; McDonald 2011). Australia's use of the military to control migration by sea demonstrates the degree to which the issue has been elevated to a security problem.

People smugglers targeted by Operation Sovereign Borders are linked to illegal fishing in two ways. First, they rely on fishing vessels for transport (Barker 2013). Tighter controls created by Operation Sovereign Borders, have created 'micro-ventures' where smugglers use small fishing boats to bring fewer people, in order to circumvent scrutiny (Benson 2017). Second, policies that control illegal fishing in Indonesia by burning vessels caught engaged in illegal activity may have pushed those illegally fishing into people smuggling to replace their lost livelihoods (Australian Broadcasting Corporation 2014).

The same maritime smuggling routes to bring people into Australia are also used to leave Australia without attracting law enforcement authorities. The 2016 case of the so-called 'tinnie terrorists' demonstrates that heightened passport controls and intelligence may encourage maritime routes to exit Australia. In this case, five men were arrested after towing a boat from Melbourne to Cairns, intending to join Islamic State fighters in the Philippines (Iaria 2017). Their passports had been previously cancelled on the grounds of potential threats to national security (Wroe and Gartrell 2016). If it becomes harder to leave Australia through conventional means, the same maritime routes that make Australia achievable accessible for people smugglers could be used for people wishing to leave without attracting official attention.

Illegal fishing is currently implicated in multiple maritime crimes posing security threats to Australia. In the future, illegal fishing could pose another challenge to Australian security through a potential nexus with insurgency and terrorism. Terrorist and insurgent groups rely on crime to fund their activities. One particularly effective way to raise funds is to engage in the illicit acquisition, receipt or smuggling of high value, easily accessible and sellable commodities. Examples include easily mined alluvial diamonds ('conflict' diamonds) in West Africa or opium in Afghanistan. Fish are precisely the sort of high value and marketable goods that can be easily smuggled and therefore effectively used to fund terrorist and insurgent groups (Fearon and Laitin 2003, 81). Poorly governed maritime spaces can facilitate crimes such as illegal fishing that could support insurgency (Pomeroy *et al.* 2016, 95). Australia's region already faces growing challenges related to insurgency in the Philippines. Australia sent military assistance to the Philippines in

September 2017, including training of the Philippine armed forces in urban counterterrorism and aerial surveillance (Cox 2018; Dziejczak 2017). Given that insurgencies use locally available resources to fund their activities, fish are an obvious source of potential funding. This phenomenon has been seen in Sub-Saharan Africa, further challenging already difficult economies (Heitman 2009, 49).

Legal frameworks for controlling illegal fishing

We have argued that illegal fishing presents two types of security problems: it is a problem of scarce resources, which affects environmental, economic and human security; and it poses traditional security threats. Common to both conceptions of illegal fishing is that it is an invisible problem requiring considerable resources to monitor and enforce. However, a more complete understanding of the enforcement difficulties related to illegal fishing requires a clear understanding of its criminal links. Like many transnational organised crimes, criminals shift their techniques in response to control. More crucially, the legal frameworks designed to deal with illegal fishing generally focus on the protection of the natural resource of fish; they are not focused on the crime of illegal fishing and therefore not focused on enforcement. The laws used to enforce illegal fishing are often difficult to apply. Focusing on illegal fishing as a crime with security implications rather than a resource problem throws the flaws of the legal frameworks designed to control illegal fishing into sharp relief.

The international community has made significant efforts to establish legal frameworks and institutions, standards and programs to ensure both the sustainable utilisation of fish stocks and reduction of illegal fishing over the last four decades (Lindley and Techera 2017). There is no single binding international treaty that covers all fish, nor one institution mandated to address fisheries crime. This has created a complex regulatory regime with some gaps and overlaps. The UN Convention on the Law of Sea (UNCLOS) establishes maritime zones permitting various types of behaviour. Within territorial seas and exclusive economic zones (EEZs) states have control over resources. On the high seas, no one state is sovereign and fisheries tend to be managed through regional fishing management organisations (RFMOs) comprised of littoral states and states that fish in that RFMO's waters.

UNCLOS is an extremely broad treaty encompassing many aspects of maritime law. It establishes general obligations on coastal, flag and port states to protect and preserve the marine environment including resources within it, and creates a cooperative framework for the suppression of maritime piracy and drug trafficking, as well as confirming the coastal states' right to board foreign vessels to respond to crimes affecting that state (United Nations 1982, Art 27). UNCLOS does not specifically refer to illegal fishing, although provisions relating to the EEZ are focused on establishing a 'total allowable catch' and fishing up to the 'maximum sustainable yield'.

Because illegal fishing often occurs on the high seas, where no one state is sovereign, any solution must be collective: states have utilised RFMOs as one solution to the problem of high seas enforcement. Some RFMOs collect and share basic information on illegal fishing vessels, and provide rules for inspections and enforcement, but there is considerable inconsistency and rarely are sanctions included. In the Indo-Pacific, different measures have been taken by different bodies and to various extents. In the Indian Ocean, two

RFMOs maintain lists of vessels engaged in illegal fishing, however these RFMOs and other flag state measures have not been adequate to regulate activities often due to lack of political will (Indian Ocean Tuna Commission 2018; Western and Central Pacific Fisheries Commission 2018). Data sharing between institutions is also a challenge. Some RFMOs share illegal fishing vessel lists as well as tracking data, and regions such as the EU create sanctions and penalties. In the Indian Ocean, the Indian Ocean Commission, partners with the EU to develop a regional fisheries surveillance plan aimed at reducing illegal fishing (Indian Ocean Commission 2018). In this way regional capacity is built collaboratively through inter-governmental organisations. In the Pacific states adopted a binding treaty to enhance collaborative surveillance efforts, the *Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region*.

The UN's Food and Agriculture Organization (FAO) Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing is the first and thus far only legally binding instrument focused on the issue and empowers port states to assist with enforcement including powers to board and inspect³. Although only recently in force, key Indo-Pacific states including Indonesia, Thailand and several Pacific Island states are parties.

The ability of these instruments to reduce illegal fishing is mixed. States have been 'low and slow' in their uptake and implementation of international legal instruments designed to control illegal fishing, and so enforcement is patchy. It is very hard to enforce illegal fishing without the participation of a wide number of states, because the regime can be so easily undermined by non-participation. Sometimes the legal agreements themselves contain geographical gaps. RFMOs are an incomplete legal patchwork covering the world's oceans: large areas of the high seas are not controlled by an RFMO. RFMOs are also species-specific. RFMOs thus have significant gaps in some areas and in some fisheries (Lindley and Techera 2017). Another quirk of RFMOs is that foreign fleets originating from states not party to the relevant RFMO are not always controlled by that RFMO; this is true of the Indian and Pacific Oceans near Australia.

This patchwork of legal instruments is very difficult to apply to enforce the law against a vessel suspected of illegally fishing. There are three specific challenges: first, the legal difficulty of getting permission to board vessels; second, deliberate attempts by vessel owners to conceal their illegal activity; and third, the ease with which illegal fishing transits between different legal zones of jurisdiction and parts of the ocean⁴.

The world's oceans are divided by UNCLOS into several different categories, each controlled to varying levels by state authorities. Within a state's territorial waters or EEZ, and in some RFMOs, a state can board a vessel suspected of illegal activity. On the high seas, the legal right for RFMOs to board and inspect a non-member state vessel is unclear. The practice has arisen of seeking approval to do so, as it is not possible to board a vessel without the where there is no appropriate RFMO boarding scheme, it is not possible to board a vessel without the permission of the flag state unless the vessel is suspected of piracy, slaving, or illegal broadcasting (Rayfuse 2005).

The international system of ship registration itself, even without deliberate intent to deceive, creates difficulties. Ships are often registered under 'flags of convenience' and these registries are often managed in third states. Owners of illegal fishing vessels are well-versed in the necessity of gaining permission to board, and accordingly many make it as challenging as possible to ascertain ownership, including disguising ownership

through a series of complex shell company arrangements. The ability to use secrecy laws to shield identities of vessel owners and beneficiaries can subvert law enforcement activity (de Coning 2011). Owners can deliberately alter their ship's appearance to make a criminal vessel appear innocent. Organised criminal groups may use phantom vessels, registered based on false information, or rebirth hijacked vessels, stripped of previous identifiers and re-registered anew. All these techniques occur in a situation where it is complex to work out who has authority to board, which laws apply, and which institutions are seeking to control illegal fishing.

Like many types of crime, illegal fishing stymies control efforts because it crosses, blurs and occasionally ignores national boundaries. Controlling transnational organised crime requires policing and other efforts in multiple jurisdictions. Often facilitated by corruption at the border, organised illegal fishing syndicates may conduct various forms of comparatively less serious crime to facilitate and fund a large narcotics haul (de Coning 2011), and these crimes can occur in multiple jurisdictions, on land, and at sea.

The legal framework that could be used to control illegal fishing is patchy, a quality reflected in a range of institutions that are used to deal with illegal fishing. Some institutions have a partial focus on fish among a number of issues, but with no mandate to consider crime; some are focused on crime, with a tangential interest in illegal fishing; and some are focused only on the environmental resource of fish. For example, the FAO's attempts to address illegal fishing have been stymied because it has no mandate to deal with criminal activities. The International Labour Organization has focused on eliminating forced labour in fisheries, as well as having a wider focus on human trafficking. The UN Office on Drugs and Crime has competency to respond to deal with transnational organised crime, but no specific focus on fisheries crime. The Convention on Biological Diversity considers trade in endangered species, including illegal fishing. The International Maritime Organization concentrates on vessel monitoring, but its vessel tracking recommendations do not comprehensively or compulsorily apply to fishing vessels⁵. There is no coordinating instrument between these institutions to align programmes of work, creating gaps in some areas and mismatched objectives in others. A focus on the crime of illegal fishing and its security implications could help fill in these gaps. As first steps, regional harmonisation of definitions of transnational organised crimes, sharing data and surveillance technologies, modernising outdated or non-existent laws, and when adequately codified, application of consistent penalties will make significant progress towards closing the existing gaps.

There are also significant regional gaps in fisheries enforcement that specifically affect Australia. There is no overarching Indo-Pacific regional body. In the Indian Ocean alone, state approaches to illegal fishing have been undermined by the geographic split between Africa and Asia. The Indian Ocean Commission has undertaken significant work on illegal fishing to improve monitoring and surveillance but its membership is limited to African states in the western Indian Ocean. IORA seeks to address the issue and has broader membership of littoral and island states, potentially providing a suitable vehicle for regional action across the entire Indian Ocean.

In the Pacific, the Pacific Community and Pacific Islands Forum Fisheries Agency each have broad membership and demonstrated coordination, for example, via the Niue Treaty. Australia's Pacific Patrol Boats Program has taken the lead in providing patrol vessels to Pacific Island states but has not done so in the Indian Ocean to date. The Pacific has also

benefited from ship-rider agreements in which permission has been given for foreign enforcement officers to ‘ride’ on board vessels in the region. The US Navy has utilised this effectively given their regular passage through those waters. Again the Indian Ocean has not benefited in the same way.

Focusing on the criminal threat posed by illegal fishing reveals the inadequacies of the legal and institutional frameworks designed to control it. These instruments create a rough patchwork of control designed to protect fish as an important natural resource. However, patchworks are by nature full of gaps, and criminals are especially good at exploiting gaps in regulation. Recognising the security implications of the crime of illegal fishing highlights that effective enforcement is vital.

Focusing on criminal security threats has important policy benefits

A focus on illegal fishing as a crime with significant security implications is important. The current approach, which focuses on protecting the natural resource of fish from illegal extraction, has not solved the problem. An effective solution to the problem requires reconceiving illegal fishing as not just as an economic and environmental resource issue but as a facilitator of broader maritime crime. This change in focus yields two immediate benefits: first, it highlights deficiencies in the legal regime applied to illegal fishing. As we have already argued, focusing on the crime of illegal fishing reveals that much of the law that might be applied to the problem is not designed for enforcement, and highlights the considerable gaps and problems with the current approach.

Second, focusing on the criminal-security implications of illegal fishing demonstrates inconsistent enforcement efforts in Australia’s maritime regions. In turn, this undermines Australian rhetoric about a joined-up approach to the Indo-Pacific and also challenges truly effective enforcement. Fish are a moving natural resource, and so they do not observe any kind of boundary; therefore, neither do illegal fishers. And yet, Australia and its partners approach illegal fishing differently in the Indian and Pacific Oceans. The Pacific Patrol Boats program and shiprider agreements that Australia has facilitated in the Pacific Ocean have not been implemented in the Indian Ocean. Australia’s maritime space is one ocean region, and the same illegal fishers operate in both oceans. For example, one illegal fishing vessel can move from the Southern Ocean to the Indian Ocean, as was the case with the illegal fishing vessel *Kunlun*, first intercepted near Antarctica by the New Zealand Navy and later intercepted by Australia near the Cocos Keeling Islands (ABC News 2015). If illegal fishing is understood as a more conventional security threat, then it affords the opportunity to make sure that national security is achieved by rolling out successful programs in the wider region.

Third, a focus on criminal enforcement demonstrates that novel, occasionally almost entirely left-field approaches, might be necessary to bring illegal fishing and its negative security impacts under control. Patagonian toothfish have been a major target of illegal fishing. Transnational organised criminals systematically fish these waters for large catches worth around €50 million (Burgen 2016). A crime-focused approach here reveals that a lack of effective enforcement has created vigilantism, wherein other actors enforce the law (see for example Chang 2018; Baker 2017, 25). In the Southern Ocean, the organisation *Sea Shepherd* has actively (and successfully) sought to stop the ‘Bandit 6’, six illegal fishing operating with impunity for more than 10 years. One of these

vessels, the *Kunlun*, had changed names ten times since 2008 to avoid capture and was allegedly linked to a Spanish crime syndicate. Sea Shepherd's activities ran parallel to a Spanish government and Interpol investigation that resulted in the arrest of six people, and was the first time the Spanish civil guard, Interpol and Europol cooperated together on illegal fishing (Burgin 2016). The fact that an international NGO drove this enforcement action reveals the considerable issues involved in conventional enforcement. These vessels were known violators of the law, and yet it took extralegal enforcement to spearhead a more conventional process that ultimately brought them to justice. The policing and legal processes that brought these vessels under control were conventional, but completely novel, involving new cooperation between different agencies. While the extra-legal approach may not be successful in all areas (and, obviously, extralegal action is not always desirable) it does demonstrate that criminal enforcement of illegal fishing yields results, and that this enforcement may have to take new forms, involving a more aggressive approach and the cooperation of organisations that have not previously worked together.

Longer-term benefits of a security approach to illegal fishing

Illegal fishing creates many security challenges for Australia, in particular because of its links to transnational organised crime. Countering illegal fishing, however, creates opportunities for Australia to enhance its responses to this problem and other maritime security issues.

Multinational cooperation on maritime security issues has been notably successful. Cooperation on Somali piracy brought together a large number of otherwise disparate states and reduced pirate attacks considerably (Lindley 2015; Percy 2016b). Percy argues that maritime security problems like piracy are Goldilocks problems: just serious enough to warrant international attention, but not so serious that they require the extensive intervention of national capitals. These problems are 'just right' for cooperation (Percy 2016b).

The security challenge of illegal fishing already facilitates international cooperation between Australia, its Indo-Pacific neighbours, and others. Illegal fishing, like maritime piracy, is a problem of the commons involving many states and therefore requiring a collective solution. For example, Spain pursued the *Kunlun*, despite its geographical distance from Australia. Maritime crimes in general bring together a large number of states, as an illegal commodity originates in one state, transits through others and across oceans before arriving at the destination state. Accordingly, there is a large pool of states to draw from in countering illegal fishing in Australia's maritime domain.

If Australia is seeking to work with new allies or cement existing relationships outside the region, countering illegal fishing provides an excellent starting point. As the experience of responding to Somali piracy demonstrates, states can effectively cooperate on maritime crime without the need to devise elaborate alliance structures, relying on existing resources already deployed given that navies are always 'at sea' and do not necessarily need specific deployment (Percy 2018). Given that Australia is already operating in all areas where cooperation on illegal fishing would be necessary, adding more international cooperation would be particularly low cost.

If Australia is committed to the 'Quad' partnership (Australia, India, the US, and Japan), illegal fishing presents an opportunity for cooperation. Countering illegal fishing is uncontroversial, it draws together the interests of all the players, and if successful,

could reduce the attendant security challenges posed by illegal fishing. Moreover, if Australia does not take the lead regionally in controlling illegal fishing, other powers may do so. China's enthusiasm for demonstrating its increasing maritime skill and power by controlling crime has already been demonstrated in response to Somali piracy (Minot-Scheuermann 2018; Percy 2018).

Conclusion

Treating illegal fishing as a natural resources problem has not yet yielded significant reductions in illegal fishing activity (Sander *et al.* 2014, 116), nor has it addressed the challenges of other maritime crimes linked to illegal fishing that create genuine security threats. If Australia brackets illegal fishing as an environmental or economic problem, it assumes that any challenges to Australia will be indirect. In fact, Australia does face security challenges from illegal fishing.

Better controlling illegal fishing will require better enforcement. A focus on the crime of illegal fishing highlights how inadequate the mechanisms that could be applied to illegal fishing remain. If Australia considers the direct security impacts of illegal fishing, our focus could be to improving enforcement through better regulation and new approaches to enforcement. In turn, enforcing illegal fishing opens up the possibility of deepening cooperation with existing partners and developing new avenues for future cooperation.

All this is not to say that treating illegal fishing as a security threat will be a perfect solution. As with any issue, there are some risks associated with securitisation. Sometimes, treating a crime as a security problem has resulted in that problem becoming more complex and more entrenched. For example, enhanced crime control of narcotics smuggling has been associated with criminals developing more elaborate techniques and forms of organisation, a phenomena also visible in piracy (Percy 2016a). However, illegal fishing is already associated with a number of crimes that have become more complex in response to control efforts, such as both narcotics smuggling and piracy, and so these effects may not be as severe. States already police the crimes associated with illegal fishing, but treating illegal fishing as a crime with security implications is a change of outlook that would enable a more effective and coherent approach to the problem.

Illegal fishing is a security threat. It threatens a scarce resource, the loss of which has severe ecological and human consequences. It is also a key component of many transnational and organised crimes, which in turn pose a security threat to Australia. Therefore, its control is a matter of considerable urgency. Illegal fishing has persisted because it is difficult to monitor, police, and enforce. However, Australia's approach to illegal fishing has focused almost entirely on the fact that fish are a scarce and essential resource that require protection, not on the broader ways in which the crime of illegal fishing poses a threat to Australia. Understanding how the crime of illegal fishing creates security challenges is an important wake-up call for security policy. It demonstrates the ways in which crime is connected, and poses significant security threats. It reveals the difficulties of utilising a regime not designed to enforce criminal activity to control crime. Considering the security impacts of the crime of illegal fishing also demonstrates that new approaches are necessary. There is too much regional inconsistency in Australia's response to illegal fishing. Illegal fishing may occur in different regions, but it is the same threat, often perpetrated by the same actors, and needs a truly Indo-Pacific approach.

Notes

1. Illegal fishing is included under the umbrella of what is commonly called IUU (illegal, unreported, and unregulated) fishing. This paper examines only illegal fishing. Methods of illegal fishing include harvesting of protected species, exceeding catch limits, utilising prohibited gear or equipment, or fishing in the waters of another state contrary to legislation. FAO 2016.
2. The extent of illegal fishing leading to piracy is contested. Somali pirates very rarely attacked fishing vessels as they are not strategically profitable via ransom negotiations, somewhat challenging the argument that piracy began through vigilante enforcement of fisheries crime (Hansen 2011); however, there is little doubt that Somali pirates claimed enforcing against fisheries crime was a key motivator.
3. This agreement can be found at http://www.fao.org/fileadmin/user_upload/legal/docs/037s-e.pdf
4. The complexity created by the legal regulation of the world's oceans is cited as an underlying cause of general political risk and potential conflict (Suárez-de Vivero and Rodríguez Mateos 2017).
5. Some RFMOs can mandate the use of tracking devices for fishing vessels, although tracking devices ordinarily only apply to SOLAS-class merchant ships.

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