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Exploring corruption in fisheries

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This paper explores corruption in global fisheries. While reducing corruption is critical for the effective management of the fisheries sector and the fulfilment of the UN's sustainable development goals (SDGs, and SDGs14 and 16 in particular), to do so, it is necessary to first have a systematic and comprehensive understanding of what corruption is and how it is manifested in the sector. There is literature on illegal, unregulated and unreported (IUU) fishing, but not much on corruption. The paper proposes an analytical framework and applies it with six revelatory cases to improve the conceptual clarity of corruption in fisheries. Specific corruption problems found in licensing, negotiating access agreements, lax enforcement, extortion, political corruption, money laundering and tax manipulation, human trafficking, etc. can therefore be better identified through this analysis, which lays a base for systematic responses to tackling corruption in fisheries and accordingly furthering the sustainable development of the sector.

KEYWORDS

corruption, fisheries, IUU fishing, SDGs, sustainable development, TASP framework

1 | INTRODUCTION

Fisheries are of vital importance to wellbeing and sustainability. Where there is illegality or corruption, wellbeing is diminished, sustainability is threatened, people go hungry and a small number of malefactors get very rich.

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Over the last six decades, global per capita fish consumption has risen from 9.9 to 19.2 kg. The industry also provides direct incomes for about 60 million people and for another 750 million indirectly (FAO, 2014; Ye, 2015). Fish and fishery products are essential components of global trade, with an annual growth rate of 3.9% in real terms from 1976 to 2010 (Ye, 2015). Besides vital contributions to economic sustainability and human wellbeing as such, effective management of the sector is also instrumental to facilitating the conservation and sustainable use of the ocean and other water resources for sustainable development, which in turn serves to the realization of other sustainable development goals (SDGs, see UNODC, 2019).

Despite its importance, effective management and hence the sustainability of the sector is often threatened by corruption. There is corruption in licensing, corruption in developing access agreements; there is poor enforcement of rules and regulations and sometimes bribery and extortion in monitoring and inspecting catches and supply chains. There is political corruption in unfair policy making, and there is illegal activity that goes unpunished due to corruption, such as use of forced labour, tax evasion and incorrect labelling and substitution of fish (e.g., Nunan et al., 2018; OECD, 2013; UNODC, 2019).

Corruption in fisheries is rarely covered in management or governance plans for the sector (e.g., Nunan et al., 2018). It is however increasingly recognized by policymakers as one policy challenge that may hamper the sector's management and sustainable development (UNODC, 2019). This adverse impact is further joined, and likely to be exacerbated, by other issues such as overfishing, slavery and organized crime (Hanich & Tsamenyi, 2009; OECD, 2013) and environmental risks such as climate change and ocean acidification which the sector is already facing. While some governments have been active in the Fisheries Transparency Initiative (FITI)¹ and despite the numerous international anti-corruption agreements,² corruption still persists in global fisheries.

Combating corruption in this sector is undoubtedly challenging, as high volumes of fish are caught, processed and sold in locations across different countries or even continents, "making the tracing of people, goods and financial flows more difficult" (OECD, 2013, p. 25). Yet apart from this objective difficulty, this paper argues that a key reason of weakness of existing solutions lies in an inadequate understanding of the problem, namely what types of corruption in fisheries occur, and this subsequently results in a mismatch between problems and solutions.

Through six revelatory case studies, our analysis suggest that corruption indeed has a myriad of shapes involving different types such as bribery, patronage and rent-seeking, covering different activities throughout the entire production (catching, transporting and selling) cycle, and spanning from local levels all the way to the international arena. Yet behind the rich diversity, most corrupt events reported in the literature belong to structural corruption that is embedded or entrenched as social norms, which are in turn deeply influenced by socioeconomic factors such as the perceptions of corruption or the financial conditions of enforcing officials (Etiegni, Irvine, & Kooy, 2017; Hanich & Tsamenyi, 2009). In light of this complex picture, the paper suggests the way forward with a more comprehensive and appropriate policy mix against corruption that takes into account the conditions of stakeholders on both giving and receiving ends of corruption who are the targets of these measures, an important aspect as emphasized by the policy design literature (Howlett, 2018).

The remainder of the paper is organized as follows. The next section presents the background by exploring the complexity of corruption in general and the phenomenon in the fisheries sector in particular and hence the need for a framework that fit its analysis. Section 3 presents our data and methods. Section 4 reports in detail the analysis of six revelatory cases. Section 5 discusses the findings, before concluding in the last section with implications and future research directions.

2 | BACKGROUND

2.1 | Complexity of corruption in fisheries

Commonly described as the abuse of public power for private gains, corruption is an age old phenomenon which has been part of business and government for millennia. Where corruption is present, it undermines trust, creates

disharmony between citizens and governments, weakens public administration and leads to a diminution in the quality and fairness of public services (Berkovich, 2016; Rothstein, 2011). While there is a significant amount of literature which explore the causes, symptoms and implications of corruption in general (see, for example, de Speville, 2010; Graycar & Prenzler, 2013; Heywood, 2018; Johnston, 2014; Klitgaard, 1988; Rose-Ackerman & Palifka, 2016; Treisman, 2000) and specifically, in areas like land use, public procurement or political elections; corruption in fisheries remains a topic that has received less scrutiny and analysis.

In general, corruption can be examined as a big picture activity. Here “structural” or “societal” causes of corruption refer to the effect of political regimes, different institutional models, and various historical and cultural factors. This involves politics, history, development and economic issues painted on a broad canvas. Another dimension involves events and behaviours that shape how specific transactions take place. Corrupt individuals can operate in a relatively low corrupt environment. There can be a rotten apple in a relatively clean barrel. On the other hand, the whole orchard could well be contaminated. The challenge is how to meaningfully cover both aspects in studying corruption in fisheries, a sector that has an ever-increasing global significance.

Corruption as a phenomenon is difficult to measure (Graycar, 2015). It does not appear in crime statistics, survey work often does not measure incidence or prevalence of corruption, and most often when it occurs, it is far from easy to get it exposed or reported (Bardhan, 1997, p. 1320; Banerjee, Mullainathan, & Hanna, 2012, p. 41). The prevalent focus of the fisheries sector, on illegal, unregulated and unreported (IUU) fishing (FAO, 2014), albeit a good starting point, fails to capture the nature of corruption in this sector in its entirety.

Indeed, the concept of illegality does not always overlap with that of corruption. It is only when illegal activities get deliberately ignored, or even encouraged and facilitated, by public officials for their private gains that corruption occurs. On the other hand, the implications of corruption in fisheries may be far wider and more grave than illegalities. To name a few, it will further weaken law enforcement, hamper compliance of environmental regulations, fuel illegalities, undermine good governance and compromise the legitimacy of fisheries co-management (Nunan et al., 2018; Sundström, 2013; Sundström, 2015). Whether it is IUU fishing or corruption, a similar set of structural vulnerabilities exist such as weak surveillance and enforcement or destitution of fishing communities affected by quota restrictions and declining stocks (OECD, 2013). Moreover, focusing exclusively on fighting crimes and strengthening law enforcement also misses the opportunity to explore how other types of policy instruments may work together with regulatory measures in combating corruption effectively.³

Importantly, in societies where corruption is the exception and a rare phenomenon, regulatory activities to curb or deal with corruption are different to those in societies where corruption is an everyday occurrence and part of the political and administrative fabric. In many western countries, corruption is seen as a transgression that can be dealt with by administrative and legal measures. In many poorer countries, however, corruption may instead be endemic and administrative measures are not the solution (Graycar, 2016). In the fisheries domain, fish are often more plentiful in waters controlled by poorer countries, yet much of the fish that is caught is for consumption in richer countries. There is a long supply chain, with many opportunities along the way for corruption (Sumaila, Jacquet, & Witter, 2017; UNODC, 2019).

Furthermore, it is important to analyse whether the corrupt events that take place are willing and consensual, or whether they occur with one party an unwilling participant. Where there is willing collusion for example, a bribe is offered and willingly taken and the legal processes subverted. Both parties are happy in this case. On the other hand, there are cases where one party is unwilling. For example, a fishing boat might bring a catch to port but is denied permission to unload it unless an official is given a payment, or an inspector will not weigh or inspect the catch unless a payment is made to him. In this case, the nature of the corruption is one of extortion in that due rights and process are being denied and can only occur if a corrupt official is paid off.

While not all corruption is the same, not all fisheries are the same. There are many varieties such as subsistence fisheries, artisanal fishing, industrial and commercial fishing which use a mix of technologies such as GPS locators, large haul equipment, trawls and long lines and which can be of modest scale or involve factory ships.

2.2 | Analysing corruption

To improve the conceptual clarity of corruption in fisheries and give due recognition to all these nuances mentioned above, this paper uses a framework developed to present a comprehensive and nuanced understanding of the phenomenon of corruption (Graycar, 2015). It focuses on Types, Activities, Sectors and Places (TASP). The key underpinning of the framework is the recognition of the need to move beyond treating the nation state as the unit of analysis, as most existing analysis seems to be doing, under an implicit assumption that any interventions will necessarily be of a macro and legal nature. However, corruption takes place at levels both below and above that of the nation state (which, as we shall see in the next section, is especially the case for corruption in fisheries). As such, it does not help the analysis to say that Denmark or the Netherlands are less corrupt than Zimbabwe, Iraq or Somalia. We would instead want to know if fisheries regulations are stronger or weaker in different localities, whether the opportunities for malfeasance are greater or weaker and whether regulations are enforced or not. It would thus be helpful to focus on corrupt societies, corrupt organizations or corrupt individuals, beyond the predominant focus on the nation state.

The TASP framework offers a timely and much-needed supplement and enrichment to this dominant approach by choosing the corrupt event as the unit of analysis, with the due recognition that corruption happens at these various levels under varying opportunity structures. Opportunities for corruption exist when there is specialized access, and when motivation is high and controls are weak. Corrupt officials make use of their personal ties and designated work roles to benefit themselves, and this justifies the analysis of opportunity structures as an integral part of corruption analysis.

More specifically, the framework posits that there are different TYPES of corrupt behaviour, such as bribery; creating or exploiting conflict of interest, trading in influence, extortion, misappropriation, abuse of discretion, etc. These types can be found in various activities, such as appointing personnel, buying things (procurement), delivering programmes or services, controlling activities (licensing / regulation/ issuing of permits), administering (justice for example). They occur in different sectors such as fisheries, health, justice, tax administration, energy, water, etc. and in different places. Table 1 outlines the framework and its component parts across these four dimensions.

TABLE 1 The TASP framework: capturing corruption in different dispositions

Type	Activities	Sectors	Places
<ul style="list-style-type: none"> • Bribery • Extortion • Embezzlement • Sexploitation • Self-dealing • Abuse of discretion • Misuse of information • Creating or exploiting conflict of interest • Patronage/ nepotism/ cronyism/, clientelism • Etc. 	<ul style="list-style-type: none"> • Issuing licenses or permits or concessions • Hiring people • Managing money • Administering justice • Buying things (procurement) • Delivering programs or services • Making things (construction / manufacturing) • Rebuilding things (after a disaster) • Etc. 	<ul style="list-style-type: none"> • Agriculture • Construction • Customs and immigration • Disaster relief • Education • Energy • Environment and water • Fisheries • Forestry • Health • Tax administration • Etc. 	<ul style="list-style-type: none"> • Work places • Localities • Regions • Countries • Etc.

The framework provides an analytical base for intervention by allowing us to better situate a corruption event for the purposes of analysis (for example, bribery, in the issuing of fishing licenses, in the fisheries sector, in the South Pacific). This is also the rationale of developing such a framework in the first place (Graycar & Sidebottom, 2012), as a new approach exploring how situational crime prevention (Clarke, 1997; Clarke, 2008) can usefully inform the analysis and prevention of corruption. This is especially significant given that the evidence base for interventions which have been effective and sustainable in reducing different types of corruption across different settings is limited (Heywood, 2018; Persson, Rothstein, & Teorell, 2013).

The framework has been used extensively across the globe in teaching anti-corruption. It has been used to explain different forms and contexts of corruption such as corruption in sport (Masters, 2015), corruption in local government (Masters & Graycar, 2016), in media reporting of corruption (Masters & Graycar, 2015), and in corruption in procurement (Graycar, 2019).

The next sections illustrate that a modified version of this framework will also help generate a better and more nuanced understanding of corruption in fisheries.

3 | DATA AND METHOD

In order to organize and synthesize existing evidence of corruption in the fisheries sector and generate fresh insights we first conducted a comprehensive key word search of “corruption” and “fisheries” of academic papers on Scopus.⁴ The result is a list of 23 journal articles, among which we further excluded the irrelevant ones.⁵ This leaves us with 17 journal articles that substantively covered the issue of corruption in fisheries in a particular country or region (Appendix 1), most of which are cited and listed in the references.

We acknowledge that this is a relatively small literature base, which may in turn be reflective of the less than adequate attention yet to be paid to this important topic. To complement that, we also searched and consulted other secondary sources available, such as media coverage, policy briefs and reports from international and non-governmental organizations, including but not limited to recently-issued documents such as the *Corruption Perception Index 2019 Report* or *Rotten fish: A guide on addressing corruption in the fisheries sector* (Transparency International, 2020; UNODC, 2019). Taken together, it is hoped that the rich variety of cases across different geographical areas and examined through the lens of various academic disciplines can partially compensate the small size of the literature, therefore providing a satisfying “case bank” from which our six revelatory cases are chosen.

The cases, summarized in Table 2 and reported in more details in the next section, are ultimately selected based on the availability of existing literature (how much we already know) and the salience of the case (why corruption of fisheries is important here). While most cases are situated in countries which are perceived to be highly corrupt, it can be seen from the cases that actors in these corruption activities may at times be companies and officials from developed countries that are commonly perceived to be having low levels of corruption. Hence, a more in-depth and systematic approach to understanding the complexities and nuances in corruption of the fisheries sector through those cases is deemed as an essential first step to better design and calibrate effective anti-corruption strategies.

Before presenting our findings in the next section, it should be noted that the TASP framework applied here is slightly different from its original version reported in Section 2. Notably, the “S” here refers to the stages rather the sectors. All of the cases under analysis are obviously in the fisheries sector, which is characterized by a full production cycle or value chain (OECD, 2013). “Stage” thus constitutes an important dimension in which the shape of corruption and its varieties can be meaningfully captured. Accordingly, it is considered an appropriate substitution for “sector” in this paper.

TABLE 2 Applying the modified framework to analyse corruption in the fisheries sector

Type	Activity	Stage	Place	Example
Bribery; rent-seeking; patronage; clientelism; abuse of discretion	Licensing of fishing vessels: Officials treated handsomely or receiving direct payments by foreign fishing companies in turn for licensing favours, including: <ol style="list-style-type: none"> 1) issue of fake license; 2) issue license to particular group; 3) receive bribery to give certain fishing vessels favourable treatment (e.g., to operate without license or in prohibited areas; negotiate a favourable quota etc.). 	Before catching	(trans)national: Licensing officials (usually "one-man" process) versus private and foreign license-seekers	Licensing bribes in the Pacific Islands (case 1)
	Access agreement negotiation: Provision of generous benefits during and after negotiation.	Before catching	(trans)national: Negotiating authority (usually one agency or small group too) versus foreign government/ industry/ enterprises	Bribery of senior officials in exchange for favourable access agreement in the Pacific Islands (Case 2)
	Lax enforcement: <ol style="list-style-type: none"> 1) inspectors offered fish and favours for turning a blind eye to infractions or serving as informants of government actions (e.g., allowing catching to go beyond negotiated or designated quota, with usage of prohibited gear); 2) officials have financial interest in ensuring vessel infractions not reported and "their boats" favoured; direct involvement in poaching; 3) inspectors fail to take action on kin. 	During catching	Local: Enforcement officer (from government or co-management executives) versus fishermen/ companies	Bribery of officials and members of co-management bodies in exchange for inaction on or direct involvement in rule-breaking fishing activities or patronage in South Africa, Lake Victoria region, the Pacific Islands and Northeast Asia (Case 3)
	Extortion: <ol style="list-style-type: none"> 1) denial of access without paying a corrupt fee 2) imposition of unregistered fines and confiscation of personal goods (and return on condition of payment) 	During catching	Local: Enforcement officer versus fishermen	Condition favour or punishment avoidance on bribery payment in South Africa, Lake Victoria region or the Pacific Islands (Case 4)

(Continues)

TABLE 2 (Continued)

Type	Activity	Stage	Place	Example
	Political corruption and patronage: 1) politicians condone illegal fishing during or towards election so as to amass votes 2) fisheries officers intervene in BMU committee elections to get people onto the committee that they can work with to maintain bribes	During/ towards election	Local, with national/ regional ramifications Politician versus fishermen as voters Fisheries officers versus BMU committee member candidates	Patronage or clientelism before or during election in BMU Committee election in Kenyan side of Lake Victoria (Case 5)
	Corruption + crime: 1) income tax and social security fraud: Issue false residence certificates to help crew avoid tax and social security contribution to fishing country. 2) migrant permission: Issue false identity papers to unauthorized migrant fishermen; allow undocumented workers to work as forced labour in fisheries 3) money laundering of fishing companies or fleets in tax havens	After/ before catching Before catching After sale	Residence certificate issuing officer versus fish crew; Migration officer versus migration-seekers Local, with international ramifications	Collusion between crew and destination officials for false residence certificates to evade tax; bribing immigration officers or law enforcement authorities in Guinea-Bissau or Thailand to allow for illegal human trafficking or forced labour; money laundering through shell companies in Icelandic company Samherji's bribery case (Case 6)

Source: Authors' summary of Hanich & Tsamenyi, 2009; Etegni et al., 2017; Nunan et al., 2018 among others

4 | ANALYSIS OF SIX REVELATORY CASES

Case 1: Licensing

Corrupt activities in licensing usually happen before catching, because holding an authorized license is a prerequisite for carrying out relevant activities at sea. Such activities occur mostly at the national level between licensing and negotiation officials on one hand and license and access seekers on the other. But the latter can also be foreign enterprises, in which case these activities then transcend to the international arena.

For instance, in the Pacific Islands, a region heavily dependent on ocean and coastal fishery resources yet suffering from significant prevalence of corruption (according to indicators such as the Corruption Perception Index), the licensing officials are reported to be “treated handsomely... by foreign companies in return for licensing favours” such as license fraud or licensing private vessels that do not show up on the government books (Hanich & Tsamenyi, 2009, p. 388). When the licensing bribes are paid in cash, the amount may then be diverted by the bribe-takers (i.e., ministers and senior fisheries officials) into their private bank accounts overseas (Hanich & Tsamenyi, 2009, p. 388).

Furthermore, it is worth noting that bribes may even come from foreign companies whose countries of origin are rich and considered to be corruption-free. For example in late 2019, it was reported that Samherji, a fishing conglomerate from Iceland—a country that is consistently ranked as one of the least corrupt or corrupting countries in the world according to the Corruption Perception Index Appendix had “allegedly bribed government officials in Namibia and Angola for rights to massive fishing quotas” (Transparency International, 2020, p. 24).

Case 2: Access Agreement Negotiation

Like licensing, corruption in access agreement negotiation also occurs before catching and at the national and international levels, except that access seekers can also be foreign government and industrial representatives. In terms of the formats of bribery, lavish accommodation, entertainment and extended holidays are similarly found to be given to senior officials in exchange for favourable access agreements in the Pacific Islands (Hanich & Tsamenyi, 2009).

Both scenarios of corruption are further complicated by the fact that license payments, foreign fishing access agreements, and aid funding form a significant part of national budgets and revenue sources of those vulnerable fishing states in that region (Cross, 2016). Reliance on these sources of revenues in turn provides opportunities for those foreign governments to bribe officials or promise aid flows on conditions that those small island countries vote for them on international platforms to advance their interests.⁶ As the licensing and negotiating power often rests with only one department or even one man, whose procedures are often also secretive and lack transparency, it is easy for these corrupt activities to go ahead undetected (Hanich & Tsamenyi, 2009).

Case 3: Lax Enforcement

Unlike the previous two cases, corruption involved in lax enforcement happens more at the local level in monitoring and inspection during the catching period. It is nonetheless noted in the case of South Africa, another country that is heavily dependent on the marine fisheries for export earnings and local employment, that bribes to inspectors can happen both during catching and in other situations just “to establish a mutual relationship” (Sundström, 2013; Sundström, 2015).

On a lower scale, either money or non-monetary favours such as fish product or tickets to entertaining events get exchanged for the inspectors' turning a blind eye to violations and infractions of rules and regulations, regardless of the consequences on environmental and other forms of sustainability such violations may bring about. These inspectors are sometimes even paid to actively serve as informants and leak information to those violating regulations about upcoming patrol or secret enforcement operations (Eteigni et al., 2017; Hanich & Tsamenyi, 2009; Sundström, 2015).

A typical case in this category was reported in 2002, where directors from a company called the Hout Bay Fishing Industries Limited in South Africa were said to have paid US\$53,030 in total on 338 separate occasions to the inspecting fishery control officers so as to “ensure passage of the over-harvested fish products through the landing port” (Regional Court Cape Town, Case number 14/223/2002, cited from UNODC, 2019, p. 19).⁷ The directors and the bribe-taking officers have been punished with both fines and suspended sentences.

In regions surrounding Lake Victoria of East Africa, the second largest fresh-water body in the world, which is characterized by the small-scale inland fisheries, bribe takers are not confined to government officials only. Governance of the fisheries sector in the region is characterized by a co-management system, whose key set-up is the Beach Management Units (BMUs). Together with government fisheries departments, they work to implement government regulations such as controlling entry to the fishery and censoring practices defined as illegal (Etiegni et al., 2017). Not surprisingly, lax enforcement described above is also observed in the case of BMU executives. The bribery for serving as informants on impending patrols, for example, is known as “the protection fee.” It is also reported that BMU executives “would ask the offender to pay some agreed amounts so that the case is not forwarded [to the government fisheries department]” (Etiegni et al., 2017). There is also patronage as BMU executives are observed to fail in taking actions on kin violating the regulations.

Of course, such bribery cases do not occur in the Southern Hemisphere or developing countries only. In 2010, four Japanese fishing firms were found to have paid Russian border guards more than US\$ 50,000 in 3 years “to buy their tacit permission for catches exceeding quotas.” Interestingly, when speculating the rationale for bribery, it was mentioned that this may have to do with “quotas decided through bilateral Japan-Russia fishery negotiations [being] decreased in recent years” (Asia One News, 2010).

On a higher scale, corrupt inspectors may themselves have the financial interest in making sure that “their boats” get favoured (Hanich & Tsamenyi, 2009). Officials in South Africa and BMU executives in Kenyan Lake Victoria were even found to be directly involved in illegal fishing (Etiegni et al., 2017; Sundström, 2015). In both cases, there exist a vicious circle between corruption and illegal activities. As sharply put by Nunan and her colleagues (2018, p. 73), corruption “provides a way for fishers to sustain illegalities and avoid penalties and imprisonment”; in turn, “illegalities provide opportunities for many stakeholders to gain financially.”

Case 4: Bribery Extortion

Similar to corruption involved in lax enforcement, bribery extortion also happens mostly at the local level during inspection. The difference between the two is that unlike the former which may be initiated by either the fishermen or the inspectors, the latter always starts with the corrupt intention of the bribe takers. Corruption in the form of bribery extortion includes the acceptance of unregistered fines and confiscation of personal goods, which are returned on condition of payment (Cross, 2016; Hanich & Tsamenyi, 2009; Nunan et al., 2018). However, it should be noted that the favour does not always get returned in the case of bribery extortion. For instance, in the Kenyan side of Lake Victoria, fishermen reported that their equipment was not returned to them even after the money was paid to the extorter (Etiegni et al., 2017). The region has also observed that confiscated equipment is sometimes sold by the officers to other fishermen from a different site (Nunan et al., 2018).

Case 5: Political Corruption

Political corruption happens mostly before or during elections. One example mentioned in the literature is with regard to the BMUs in the Lake Victoria region. Since these networks and committees have representations all the way from sub-county to national and regional levels, the implications of such corruptive activities are no longer confined at the local enforcement level (Etiegni et al., 2017).

While members in BMU's executive committee are not paid a high allowance, the membership is nevertheless seen as offering opportunities of corruption given the authority of the BMU (Etiegni et al., 2017). Since the members of BMU's Executive Committee are decided based on elections, the election process has further opened up opportunities for political corruption and patronage. At least in the case of Kenya, fisheries officers are reported to have intervened in the election of BMU committee members to get people onto the Committee that they can work with to maintain bribes. Political corruption can also happen on a broader scale during or towards the general elections, as it is perceived that politicians will normally "condone illegal fishing ... in order to amass votes" from the fishers (Nunan et al., 2018, p.69).

Case 6: Corruption Coupled with Other Crime

While corruption itself is criminalized in most countries, it needs to be distinguished from other forms of crime or illegality because, as mentioned, the strategies of tackling them are different. Having said so, the same structural vulnerability behind the two phenomena means that they can at times go hand in hand. Indeed, the empirical study of Agnew et al. (2009) also finds the relationship between illegal fishing and Corruption Perception Index to be significant throughout Africa, Europe and Asia.

The critical condition for coupling here is whether the bribe takers (corrupt government) do so willingly. To illustrate, when tax is evaded and the government essentially is extorted, then the resultant harm on the government's financial sustainability through revenue decline is happening without its knowledge. Similar logic applies to the exceeding of the quotas or the falsely documented catches. However, if government officials in these taxation or law enforcement departments are well aware of these evasive and law or regulation-breaking activities and let them occur willingly, then there is collusion between government officials and the fishermen. It is in the latter situations that corruption is coupled with other illegal or criminal activities.

At least three examples are mentioned in the literature in which corruption is also involved in other criminal activities. The first is in the domain of tax crime. Unlike other corrupt activities that happen before or during catching, those related to tax crime usually occur after catching with regard to the evasion of important export duties on fish, fraudulent claims for VAT repayments, failure to account for income tax on fishing profits and so forth (OECD, 2013, p. 26). In a de-identified case on income tax and social security fraud reported in OECD, tax officials in country A were presented by the crew with residence certificates of country B, in which the ship had spent only a few hours. That these false residence certificates were issued suggests that there may be collusion between the issuing officials and the crew in which bribery was involved (OECD, 2013, p. 26).

The second example is in the domain of illegal or even forced migration. For instance, it was reported in an anthropological case study of Guinea-Bissau that bribes were paid by migrant workers in order to get false identity papers to be eligible for fishing (Cross, 2016). Media coverage of forced labour or "sea slaves" in Asia has similarly accused law enforcement authorities of recipient nations of taking bribes from human traffickers "to allow safe passage across the border" (Urbina, 2015).

Finally, a third example refers to the money laundering of fishing companies. In the case of the Icelandic company Samherji's bribery for massive fishing quotas mentioned earlier, it was further reported that the company established shell companies in tax havens and used a Norwegian state-owned bank to "launder the proceeds of corrupt deals" (Transparency International, 2020).⁸

5 | DISCUSSION

5.1 | Capturing the complexity of corruption in fisheries

The above analysis shows that corruption is far from a monolithic concept happening in one form or at one time/space. Rather, it has a myriad of shapes according to the different types, activities, stages and places involved. In

addition to offering better conceptual clarity, this more nuanced picture also illustrates the complexity of the corruption phenomenon in the fisheries sector.

One aspect that is worth particular attention is the regularity or embeddedness of corrupt events. They can be situational in the sense that rules and regulations are in place, with corruption being criminalized and not generally tolerated. In other words, here corruption is not the norm but the exception. Whereas this may characterize the situation in rich countries that have low corruption environments (Graycar & Masters, 2018; Graycar & Monaghan, 2015), corrupt events in most of the fishing states summarized above are structural. They are embedded into a culture, society or country with substantial path dependence from the history (e.g., Van Sittert, 2015). Sometimes there is broad acceptance. Sometimes there is unease and resentment about the prevalence of the activities, but is nevertheless constrained by a tendency to avoid intimidating or social exclusion, maintain social cohesion, or when corruption is already seen as the norm or, in the words of Sundström (2015), a “common knowledge” (Etiegni et al., 2017).

Distinguishing between these two shapes is important as the strategies of tackling them can be quite different. To combat structured corruption not only requires measures scratching its surface, but policymakers should also target or at least fully comprehend its embeddedness within the culture and society. As such, existing measures against IUU through greater transparency in documentation or tighter regulation have limited success exactly because they only tackle part of this complexity. This is not to deny the importance of these crucial first steps, but their effectiveness shall be enhanced with other complementary measures.

To elaborate, one reason of their limited success is that in spite of the rules and regulations in place, they are not always strictly enforced. In many occasions, the EU, the FAO, the UN and the World Bank work with nation states to sign up to treaties and enforce them. The *United Nations Convention on the Law of the Sea* (UNCLOS) provides a legal framework for the conservation and sustainable use of the oceans. The *United Nations Convention Against Corruption* (UNCAC) also provides for a variety of anti-corruption measures. Against this backdrop, a decade ago there were already numerous environment and trade related instruments and agreements on fishing, including 36 international instruments, 206 regional conventions and policy measures, and 87 bilateral agreements (Palma, Tsamenyi, & Edeson, 2010).

Most nations have signed up to the UNCAC and nearly all have outlawed illegal fishing. Therefore, what is required are not more laws or treaties, but better enforcement, especially as existing enforcement endeavours are often found to suffer from lack of political will, or at times, lack of resources. On the other hand, it should also be noted that law enforcement is not the only instrument to combat corruption. There is a strong literature on collective action, compliance measures, social capital, the building of trust (these approaches are explored in: Johnston, 2012; Klitgaard, 2015; Larmour, 2012; Mungui-Pippidi, 2015; Petrie, 2014; Philp, 2017; Pyman, 2020; Rose-Ackerman, 2018). These can be applied in various settings and are important anti-corruption tools that can be applied in the fisheries domain.

From the perspective of bribe-takers at the local level, the perception of their superiors at the higher-level governments as corrupt yet rarely punished, creates a sense of unfairness or acquiescence, which is further joined by a sense of demotivation as honest behaviour is not rewarded professionally (Etiegni et al., 2017; Sundström, 2013; Sundström, 2015). In the meantime, financial incentives are also at play as local field officers are often very poorly paid (Roy, Alam, & Gow, 2013; Sundström, 2015). Etiegni and colleagues (2017, p. 1567) have put a number to it, when describing that “protection fee ... represents on average 50% of an officer's average monthly basic salary”, whereas “this amount can be made by an individual beach seine owner engaged in a good day of beach seining.” This also suggests some deeply entrenched inequality behind the financial incentives, whereas the resource constraints for them to carry out their duties effectively may further exacerbate their incentives by deepening a sense of disempowerment. For example, small Pacific Island states might have only one small fisheries inspection vessel, and that could not pursue or apprehend a large factory fishing vessel.

Perception of corruption and erosion of trust is also visible from the perspectives of both the bribe takers and the payers in petty corruption. It is reported in South Africa that perception of corrupt inspectors taking bribes from other fishermen seems to have broken a norm of fairness. The perception of being friends with the inspector and

the subsequent expectation that “he is not in the position to give fines” is, on the other hand, based on the norm of social ties. Both perceptions would motivate non-compliance which may induce a fresh round of corruption. As for large-scale or grand corruptions, the perception of it has further triggered a sense of inter-class inequality when one fisherman described that trawlers gaining favour while the poor are supposed to be honest made him feel “that our regulations are just a new apartheid” (Sundström, 2013, p. 466).

5.2 | Paving the ways forward

Grasping the complexity of corruption in fisheries through the our analysis in turn calls for a more comprehensive mix of anti-corruption measures that go beyond mere, and often times weakly enforced regulations. A preliminary starting point is to refer to Pyman's analysis on the *Curbing Corruption* website.⁹ The analysis has listed a broad range of measures combating corruption in the sector, including but not confined to the following four categories: rule of law measures, policing and law enforcement, transparency, accountability and traceability, and fully documented fisheries (FDF).

It should be acknowledged that both these individual measures and their integrated usage would require considerable national determination backed by multilateral and transnational initiatives. A full-fledged discussion of how such policy mix can be developed is thus well beyond the scope of this paper. Having said so, using the TASP framework can still help considerably with diagnosis and accordingly pave the way for better policy responses.

In addition to the legal approach (the signing of treaties and passage of legislation) and the strengthening enforcement (discussed above), transparency, accountability and traceability are also significant tools in the anti-corruption arsenal. Ensuring that licensing agreements are made public and catch information is displayed on websites is a first step. Tracing the provenance of fish is important to buyers, and ultimate consumers, and being more open about catch and farming methods can be dealt with by procedural guidelines. Following the success of Transparency International as an anti-corruption NGO, various nations have come together to establish the Fisheries Transparency Initiative (FITI) which is casting a watchful, civil society eye on fisheries.

Fully Documented Fisheries (FDF) can be used as another facilitator of and incentive for better practice. This involves documenting catches better, using cameras to monitor catches, and in return these fishers are allowed larger quotas if the report is done accurately and fish sustainably.

Any well-rounded overall strategy would involve bringing together many stakeholders, multilateral organizations, industry organizations, nation states, civil society, and all would need to work harmoniously and with goodwill. This is not an easy prescription, as the interests vary enormously. Political will, good data, transparent transactions and strong enforcement all need to come together. One impetus could come through efforts to achieve the UN's Sustainable Development Goals (SDGs), especially Goal 14, Life Below Water, and Goal 16, Peace Justice and Strong Institutions.¹⁰ Realizing these goals may necessitate uniting local sustainable fishing traditions with modern technology, and developing focused and inclusive aquaculture.

6 | CONCLUSION

Policymakers in the developing world can work together to curb corruption in fisheries. This challenge is not well addressed in the design and implementation of existing anti-corruption policies. It is important because reducing corruption is critical for the effective management and sustainable development of the fisheries sector as well as the fulfilment of other SDGs, especially against “a backdrop of decreasing fish stocks and high demand for seafood products”.¹¹ Despite commitment to combatting corruption at national and international levels, by focusing on IUU fishing, interventions need to be expanded on the one hand and more targeted on the other. Concepts of IUU fishing and corruption in fisheries, are related but are not entirely the same.

In order to tackle corruption in fisheries, we argue that it is necessary first to gain a clearer understanding of what corruption is in this sector. This paper aims to enhance such conceptual clarity by applying a systematic framework. Under this framework, we are able to capture the shape of corruption in fisheries by mapping out the different types and activities involved while also zooming into their different levels and stages in the production cycle. This illustrates the complexity of the phenomenon behind the monolithic label of corruption. Accordingly, concentrating on regulating IUU fishing in many ongoing national and international initiatives, while necessary, addresses only part of this complexity. Such measures are further constrained by the lack of implementation capacity in some developing countries that are dependent on the sector. The detailed mapping presented in the analysis also has practical relevance, as it points to complementary anti-corruption measures related to different types, activities, stages and levels in a more holistic manner. When combined with existing measures against IUU fishing, a more comprehensive policy mix can be generated that can tackle the different dimensions of corruption in the fisheries sector. Last but not least, lessons learned about corruption in this sector may also be valuable to other common pool resources or international commodity.

ENDNOTES

¹<http://fisheriestransparency.org/> Accessed April 19, 2020.

²For a brief summary of selective documents, see for instance. <https://guides.ll.georgetown.edu/c.php?g=363494&p=2455875> Accessed April 19, 2020.

³Alternative measures include, for instance, the use of technology or e-government in combatting corruption in general (Bertot, Jaeger, & Grimes, 2010), or the use of performance-related pay in South Africa's fisheries sector (Sundström, 2019).

⁴To ensure complete coverage, we use the format "fish*" to search not only the keywords but also titles and abstracts.

⁵These include the pieces which used the word "fish" figuratively (e.g., catching the "big fish" in corruption), in engineering studies (e.g., autonomous robotic fish), or interpreted the word "corruption" as "decay" (e.g., "corruption of memory).

⁶The example of Japan is mentioned in Sumaila, Jacquet & Witter (2017).

⁷Compared with the first two cases, the stake of corruption here is usually considerably lower. To put the figures into perspective, "A 2005 audit of the Solomon Island Department of Fisheries and Marine Resources revealed [that the estimated] losses due to corruption and fraud in relation to fishing licenses in the region amounted to US\$ 9 million" (cited from UNODC, 2011, p. 113).

⁸See also <https://stundin.is/grein/9920/?sfns=mo>.

⁹<https://curbingcorruption.com/sector/fisheries/>.

¹⁰See for instance: <https://www.worldfishcenter.org/landing-page/worldfish-and-sustainable-development-goals>. For SDGs in general, see <https://sustainabledevelopment.un.org/sdgs>.

¹¹<https://curbingcorruption.com/sector/fisheries/>.

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