



# Towards a new 'fisheries crime' paradigm: South Africa as an illustrative example <sup>☆</sup>



Eve de Coning<sup>a</sup>, Emma Witbooi<sup>b,\*</sup>

<sup>a</sup> The Norwegian National Advisory Group against Organised Fisheries Crime and IUU Fishing (FFA), Norway

<sup>b</sup> Nelson Mandela Metropolitan University, South Africa

## ARTICLE INFO

### Article history:

Received 22 June 2015

Received in revised form

23 June 2015

Accepted 23 June 2015

Available online 10 July 2015

### Keywords:

Fisheries crime

Illegal fishing

South Africa

Africa

## ABSTRACT

This article discusses the shift from regarding illegal fishing as a fisheries management problem towards viewing it as 'fisheries crime', locating it within the South African and broader African context. It introduces the new fisheries crime paradigm, identifying the reasons for its emergence and outlining the legal challenges and opportunities that it presents in efforts to halt illegal fishing with reference to South Africa as an illustrative African example.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

### 1.1. Overview of the problem

Fish and fishery products are the most traded food commodity globally and are of great importance to developing countries, in some cases representing more than half of the total value of traded commodities. For many developing nations, fish trade therefore represents a significant source of foreign currency earnings in addition to the sector's important role as a generator of household income and employment [1]. A recent United Nations Food and Agriculture Organisation (FAO) study estimates that the value added by the marine fisheries sector in Africa amounts to just under USD 15 billion, a significant 0.70% of the GDP of all African countries [2]. Worryingly, however, Africa's export of fish and fishery products has not shown significant improvement in the past decade, a trend attributed to an increasing rise in illegal activities in Africa's Maritime Domain [2]. Fish remains a vital contribution to the food and nutritional security of over 200 million Africans and provides income for over 10 million [3]. Yet globally fish stocks are severely over-utilised; 85% of such stocks worldwide are now over and fully exploited. Of this, 53% are fully exploited, meaning that these fisheries cannot be expanded [1].

Illegal fishing is a key contributor to overfishing yet despite

significant effort worldwide to date to stem illegal fishing it has continued unabated. It is estimated that each year between USD 11 and 23.5 billion is lost to illegal fishing, the majority of fish being stolen from the maritime zones of developing countries, with West African waters estimated to have the highest rates of illegal fishing globally. The illegal catch in the Eastern Central Atlantic alone is currently estimated to be worth between USD 828 million and USD 1.6 billion annually [4;5]. The African Union's 2015 'Integrated Maritime Strategy' recognises the devastating impact of illegal fishing on the continent and supports imposing measures to actively deter such activities [3]. Illegal fishing is further cited by the FAO as one of the greatest threats to marine ecosystems, 'undermining national and regional efforts to manage fisheries sustainably and conserve marine biodiversity' [1]. In fact, its adverse impact is extensive, ranging from biological to economic and extending into the political domain. The recent joint UNEP and INTERPOL 'Environmental Crime Crises' report describes illegal fishing as comprising a 'rapidly rising threat to the environment, to revenues from natural resources, to state security, and to sustainable development' [6].

Illegal fishing refers not only to the actual harvesting of fish, but encompasses all aspects and stages of the capture and utilisation of fish [1]. Accordingly, it involves a multitude of persons, corporations and government agencies, ranging from the fishers themselves, to the masters of the fishing vessels, to the vessel owners, to vessel financiers and insurers. Commonly, these key actors are of different nationalities – for example, the vessel may be registered in one state, the vessel owner domiciled in another

<sup>☆</sup>The views expressed are the authors' own and do not necessarily represent those of any present or former employers.

\* Corresponding author.

and the fishing crew originating from yet numerous other jurisdictions. By their nature illegal fishing operations are thus almost always transnational. In order to be successful, that is, profitable, and avoid detection detailed and careful organisation of these fishing operations is a necessity. It is therefore not surprising that many illegal fishing operations form links with, and become part of, broader transnational organised criminal networks.

### 1.2. The South African situation

In South Africa, illegal fishing takes place in both the commercial sector as well as in small-scale fisheries. Poaching in the abalone sector provides an apt example of the latter category. The abalone fishery in South Africa is recognised as one of the most difficult fisheries to manage [7] due to a combination of factors including its inshore nature, the adverse impact of ecological factors on its stock, its high value and, importantly, the increasing organised black market trade in abalone since the 1990s [8]. The combined effects of these factors led to an 88% decrease in the total allowable catch (TAC) of the species from the 1995/1996 season to the 2007/2008 season and culminated in the complete closure of the fishery in 2008 [9]. Attempts to curb illegal harvest in this sector have been largely unsuccessful not least in part due to the problematic socio-political history of abalone rights in the country in terms of which traditional fishers were deprived of legal harvesting rights under the former Apartheid regime [10,11]. Further, links with organised criminal networks, with resultant entrenchment of criminal elements in local fishing communities, have complicated the matter, demanding that solutions be sought outside the normal fisheries management sphere. Initial efforts, which focused primarily on bolstering enforcement, were subsequently supplemented by increasingly progressive (at least theoretically) access policies that sought to facilitate community involvement in, and (partial) ownership of, the management of coastal resources.

A well-known example of organised illegal fishing activity in the commercial sector off the South African coast is the subject matter of the Bengis case [12]. The case involved the gross over-harvesting of rock lobster in terms of domestic law and the violation of the US Lacey Act 1900 for illegal import of the lobster into the United States in contravention of South African fisheries law. On 14 June 2013 the US District Court of the Southern District of New York ordered Bengis and his accomplice Noll to pay just under US\$ 22.5 million in restitution to South Africa for the West Coast Rock Lobsters they illegally harvested from the South African coastal waters between 1987 and 2001. The case is noteworthy from a jurisprudential perspective (with regards to, for example, the issue of state ownership of marine resources and the quantification of damage arising from loss of natural resources) as well as acting as a showcase for the potential benefits of a synergy between investigative police work and fisheries enforcement officials in tackling illegal fishing activities [13].

## 2. The illegal fishing paradigm to date

By far the most dominant paradigm to date internationally and in South Africa has been to address illegal fishing through an IUU (Illegal, Unreported and Unregulated) fishing lens. This paradigm regards transgressions of fisheries-related laws and rules as (primarily) an administrative law matter and seeks to prevent such behaviour by strengthening fisheries management and conservation rules and stepping up compliance via increased monitoring, control and surveillance (MCS) of vessel activities and complementary port state measures.

In practise, 'IUU fishing' is a catch-all term used to describe all

instances of evasion and avoidance of global and domestic fisheries management and conservation regulations within and beyond national jurisdiction. Legally speaking, the term 'IUU' fishing was officially coined in the FAO's International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) [14]. It is important to note that within the term 'IUU fishing' the sub-categories of 'unreported' and 'unregulated' fishing are clearly distinguished from that of 'illegal' fishing, leading to the logical conclusion that not all 'IUU fishing' activity is illegal [15]. 'Illegal fishing' refers to fishing in the jurisdictional waters of a state without that state's permission or in violation of its laws and regulations or in the area of competence of a Regional Fisheries Management Organisation (RFMO) in a vessel flagged to a state which is a member of the body, or a co-operating state, in violation of the RFMO's conservation and management measures. Not all forms of illegal fishing are regarded as criminal offences [16]; only those forms of illegal fishing that are expressly cited in domestic law will fall into this category. Additionally, various activities associated with otherwise non-criminal illegal fishing, such as corruption in the issuing of access rights, may be classified as criminal. So, for example, a vessel may be legally fishing on the face of it in accordance with the terms and conditions of a fishing licence but, on further investigation, it may be revealed that a corrupt official issued the fishing access rights that preceded the granting of the licence. 'Unreported fishing', on the other hand, is not concerned with illegally caught fish per se but, rather, fishing activities that amount to circumvention of either national laws or regulations by misreporting or non-reporting on fishing activities to the relevant national authority (for example, with regards to by catch, discards, landings or transshipment or irregularities regarding keeping of logbooks) or are in contravention of the reporting procedures of an RFMO. 'Unregulated fishing' refers to fishing in the area of an RFMO by vessels without nationality or flying the flag of a non-party state in a manner inconsistent with the RFMO's conservation and management measures or in areas or for fish stocks in relation to which there are no applicable conservation or management measures in a manner inconsistent with state responsibilities for the conservation of living marine resources under international law. This would include, for example, small-scale or artisanal fishing in waters where no fisheries management system is in place and thus no access control operates and fishing on the high seas by vessels flying a flag of convenience. To complicate matters, the term 'illegal fishing' is (confusingly) frequently also used in literature and international documents as an abbreviation referring to the broad range of fishing activities covered by the IUU concept.

Fish and fishery products play a critical role in global food security and nutritional needs of people in developing and developed countries (discussed further below in the context of the right to food) [1]. Tackling IUU fishing, in the context of ensuring the sustainable use of marine resources towards greater food security, falls internationally under the mandate of the United Nations Food and Agriculture Organisation (FAO). The FAO has traditionally taken the lead role in facilitating the negotiation of key international hard and soft law instruments geared at tackling IUU fishing via fisheries management regimes. The most important of these agreements include the 1993 FAO Compliance Agreement [17], the 1995 FAO Code of Conduct for Responsible Fisheries [18], with its ambitious aim of setting international standards and norms for the management and use of fisheries, and the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) [19]. As endorsed by the IPOA-IUU (para 66) and the FAO's Responsible Fish Trade Guidelines supplementing the 1995 Code of Conduct for Responsible Fisheries [20] trade and market measures to prevent illegally

caught fish from being traded or imported have also been employed, such as catch certification and trade documentation schemes (eg the catch documentation scheme pertaining to the Patagonian toothfish). Although these measures have enjoyed some success their overall effectiveness remains uncertain [21] and their potential for conflict with the international trade regime has been illustrated (see the EU–Chile Swordfish dispute) [22,23]. All of these instruments, and the measures taken under them, are underpinned by the basic tenets of the United Nations Convention on the Law of the Sea (UNCLOS) [24] which endorse the use of the maximum sustainable yield model in the context of a zonal, property rights based approach to effective fisheries management. As noted at the outset, illegal fishing remains rampant; harnessing the management tools promoted in these instruments has thus clearly been insufficient to address the problem.

### 3. The fisheries crime paradigm

#### 3.1. Sowing the seed of change

In the most recent State of World Fisheries and Aquaculture Report, one discerns a change in tack in the language of the FAO. There is an express broadening the scope of what is understood as falling within the ambit of illegal fishing – ‘It is found in all types and dimensions of fisheries, occurs both on the high seas and in areas under national jurisdiction, concerns all aspects and stages of the capture and utilisation of fish’ [1]. Further, the FAO acknowledges, for the first time, the inability of the current fisheries management-rooted paradigm to address illegal fishing alone, noting that ‘[t]he realities of corruption and organised crime, which add complexity to the task of combating IUU fishing, need to be addressed through *supplementary means extending beyond the realm of fisheries control and enforcement*’ (emphasis added) [1].

What has brought about this shift in thinking? One of the key drivers is arguably that the methods employed to date, steeped in the IUU fishing approach, have simply not yielded significant success; in fact, the 2014 FAO Report notes that, rather than declining in response to concerted enforcement efforts, rates of illegal fishing have in fact escalated in the past 20 years [1]. What has the reasons for this been? There is an increasingly strong argument that the problem is fundamental, namely, that the IUU approach in important respects misdiagnoses the problem as an ‘illness’ within the fishing industry only rather than broadening the ambit to include a clearly recognisable fundamental failure at the level of international fisheries management, regulation and enforcement systems [25]. This has severely hampered law and policy makers in their efforts to find sustainable solutions to the problem. One of the key consequences of this misdiagnosis has been to view the issue as a purely fisheries management problem, focusing attention almost exclusively on fishing vessels’ activities at sea and in port and the fish on board these vessels rather than on the individual persons engaged in activities in the fishing sector. Accordingly, fisheries authorities are vested with limited powers, namely to inspect vessels at sea and in port, but not to investigate individuals who may be part of the criminal organisations behind the vessels’ activities, and have use only of limited tools, such as imposing fines, denying entry to port, and detaining and blacklisting recalcitrant vessels. A necessary shift, from a fisheries crime law enforcement perspective, is to recognise that it is *persons*, not vessels, that commit crime and to date those involved in illegal fishing have proved largely resilient to the use of those powers and imposition of such penalties. The argument thus is that unless the tools to uncover and penalise illegal fishing are used strategically as part of a well-informed and coordinated cross-border intelligence-led law enforcement operation, they are

simply too weak and haphazard to have a deterring impact.

At a basic human rights level, with fisheries resources one of the main sources of animal protein worldwide – providing nearly 16% of the world’s total intake of animal protein and almost 20% of average per capita intake of animal protein for more than 1.5 billion people [26,27] – illegal fishing is identified as a direct threat to the food security of coastal communities. The importance of curbing illegal fishing to prevent its further adverse impact on food security and coastal livelihoods was highlighted by Olivier de Schutter, the (then) UN Special Rapporteur on the Right to Food, in 2012 [28] and identified in the 2014 African Progress Report [29]. Specifically, in the context of discussing the detrimental practise of ‘ocean grabbing’ which includes ‘the diversion of resources away from local populations’, de Schutter highlighted the fact that ‘(w)ithout rapid action to claw back waters from unsustainable practises, fisheries will no longer be able to play a critical role in securing the right to food of millions’ [28]. Further, there is increased recognition that the adverse effects of illegal fishing are also political, subverting fisheries management and the rule of law and thus undermining domestic and regional stability. In fact, the African Union’s Integrated Maritime Strategy identifies illegal fishing as one of the key threats to and vulnerabilities in the African maritime domain [3] and the 2014 Africa Progress Report highlights the billions lost to illegal and ‘shadowy practises’ in fishing on the African continent [29].

#### 3.2. A shift in gear

As mentioned above, the FAO, in its 2014 Report, noted the need to draw on ‘supplementary means extending beyond the realm of fisheries control and enforcement’ in the fight against illegal fishing. What does this mean in practise? It is arguable that this alternative ‘realm’ comprises the criminal law and procedure sphere and that the ‘supplementary means’ referred to constitute the additional investigation and enforcement tools that this realm brings to the problem-solving table. Ideally, illegal fishing should thus be addressed from the realm of a comprehensive legislative and criminal justice system that takes adequate cognisance of the issues surrounding fisheries crime and that, accordingly, comprises the necessary legal and institutional tools, as well as appropriately trained personnel, to ensure effective compliance, enforcement and sanctioning of the full range of illegal fishing activities.

This approach has its origins in observations, research and reports that have emerged in recent years highlighting the close resemblance to and link between habitual forms of illegal fishing activities and transnational organised crime. Most recently, the 2014 African Progress Report called on the global community to recognise IUU fishing as transnational crime [29]. This sentiment is the culmination of similar views echoed in various other international fora including the United Nations General Assembly (UNGA), which has passed various Resolutions on Oceans and Law of the Sea and on Sustainable Fisheries since 2008 highlighting the need to explore the nexus between organised crime and illegal fishing [30]; INTERPOL, which launched Project Scale in 2013 to detect, suppress and combat fisheries crime including a Fisheries Crime Working Group to develop the capacity, capability and co-operation of member countries to effectively address fisheries crime; and the United Nations Office on Drugs and Crime (UNODC), which commissioned a comprehensive study into transnational organised crime in the fishing industry in 2011 [15],<sup>1</sup> the

<sup>1</sup> The Commission on Crime Prevention and Criminal Justice (CCPCJ) Resolution 20/5 in 2011 explicitly mandated the UNODC to provide ‘technical assistance’ to member states in implementing the United Nations Convention on Transnational Organised Crime ‘in order to more effectively combat transnational organised crime committed at sea.’

findings of which were endorsed by various UNGA Resolutions [31;32] and the 2011 Commission on Crime Prevention and Criminal Justice Resolution [33]. The UNODC report highlighted the particular vulnerabilities of the fishing industry to transnational organised crime and other forms of criminal activity, a vulnerability which seems to stem from the lack of oversight, regulation, awareness and societal interest (including cultural factors) in marine living resources. These vulnerabilities include the global reach of fishing vessels and their legitimate presence at sea, which create opportunity and legitimate cover for criminal activities. Particularly problematic is the general absence of governance and rule of law in the fishing industry reflected in the insufficient at sea surveillance of vessel movements and transshipments and the lack of transparency regarding the identity of the beneficial owners of vessels. The inability or unwillingness of some flag states to enforce their criminal law jurisdiction was also underscored. The report further emphasised that diminished quota restrictions and declining fish stocks in many regions of the world have deprived fishers of their livelihoods and of a vital food source rendering them vulnerable to recruitment into related criminal activities [15]. Overall, the report highlighted the pressing need to examine the issue of illegal activity in the fishing industry not only using the traditional fisheries management lens but also from a criminal law angle.

Combined, these reports and statements have contributed towards the emerging prominence internationally of a perspective that redefines 'illegal fishing' as a form of criminal activity and considers the policing, law and policy implications of using transnational and domestic criminal law and procedure to strengthen fisheries law enforcement. This reflects a significant paradigm shift away from viewing illegal fishing as an administrative law challenge only to also recognising that it can take the form of crime, frequently involving large amounts of money and often intimately linked to other 'traditional forms of crime such as corruption, document fraud, illicit drug trafficking and human trafficking, and can take the form of transnational organised crime. At a practical level, the link between the fishing industry and transnational organised crime is two-fold. On the one hand, major transnational organised criminal groups may be involved in fisheries crime (for example, abalone poaching in South Africa). On the other hand, seemingly compliant transnational fishing operators may engage in parallel criminal fishing activities, usually obscured by multi-level business operations, commonly comprising the laundering of illegally caught fish by mixing them with legal product or selling them through legitimate trading relationships [15;21;34;35]. Examples include the illegal Patagonian toothfish fishery in the Southern Ocean and the underreporting of Southern Bluefin tuna catches.

Recasting illegal fishing as fisheries crime presents some key advantages when it comes to investigating fisheries crimes. One main advantage, which has been absent in fisheries management approaches to date, is the avenues for cross-border information sharing and intelligence analysis. Here, INTERPOL can play an important role together with mutual legal assistance agreements and tax information exchange treaties between states. This approach also, of course, raises several challenges. First, while a few states today already recognise illegal fishing as a criminal offence (for example Norway and various African countries such as Ghana, Nigeria and South Africa) most do not and may be reluctant to do so due, in part, to the shift in the entrenched roles of government institutions in fisheries management, in terms of mandates and budget allocations, that it would necessitate. More specifically successful fisheries crime investigations require committed inter-agency coordination and cooperation between police, prosecution and fisheries authorities as well as maritime-, harbour-, coastal-, labour-, tax- and customs agencies. Second, a shift to a

transnational organised fisheries crime perspective would cast states' jurisdiction over activities at sea in a new light. For instance, whereas illegal fishing on the high seas has to date been addressed via prescriptive and enforcement jurisdictions of flag states, fisheries crime is a broader concept, involving offences including corruption, document fraud, tax and customs fraud, some of which are continuous or land based and therefore grant more states potential jurisdiction to investigate and prosecute criminal behaviour.

#### 4. The approach to addressing illegal fishing in South Africa

South African fisheries management has traditionally largely mirrored the conventional international approach underpinned by UNCLOS (as outlined above). In accordance with this approach, single-species quotas of the TAC are allocated in the various sectors (commercial, recreational and small-scale) with access rights to portions thereof assigned to individual fishers [36]. At a legislative and policy level, illegal fishing has thus been understood as that range of activities that evade and circumvent rules concerning the management and conservation of fish stocks. Some of these activities also constitute a 'crime' under national law. Which actions are classified as criminal is determined with reference to the national fisheries law, the key statutes being the 1998 Marine Living Resources Act (MLRA) [36] and its regulations, read in conjunction with the more general 1998 National Environmental Management Act [37], which together provide the core basis for administrative and/or criminal enforcement and penalties depending on the particular fisheries offences in question.

South Africa is relatively unique in that the violation of almost all of the provisions of the MLRA amount to a criminal offence and attract a penalty of a fine not exceeding ZAR 2 million or imprisonment not exceeding 2 years (section 58(1)) [36]. This includes, for example, undertaking any fishing or related activities in contravention of section 13 (concerning permits) and violation of conditions attached to fishing rights and permits (section 58 (1) (a) (i) and (ii) [36]). In fact, standard administrative enforcement tools, in the form of notices and directives, are not provided for in the legislation although a procedure is available for cancellation or suspension of licences. Certain stipulated offences may only attract a fine, not imprisonment, including non-compliance with provisions concerning prohibited gear, interference with and storage of gear and the use of driftnets. Further, imprisonment as a sentencing option is excluded in the case of contraventions of international conservation and management measures (in accordance with article 73(3) of UNCLOS).<sup>2</sup>

Fisheries Control Officers, appointed under section 9 of the MLRA, are the primary officials empowered to act under the legislation. Fisheries Control Officers are deemed to be 'peace officers' as defined in Section 1 in the Criminal Procedure Act [38]; they are granted extensive compliance and enforcement powers under section 51 of the MLRA, including, with a warrant, the ability to enter and search any vessel, vehicle, aircraft or premises or seize any property [38]. Without a warrant they retain extensive powers that include arrest of any person on reasonable grounds of

<sup>2</sup> Article 73(3) is particularly relevant in the context of attempting to address organised fisheries crime as it potentially limits the ability of coastal states to engage in mutual legal assistance under the United Nations Convention on Transnational Organised Crime (UNTOC) with regards to fisheries crimes committed within EEZs. This is due to UNTOC's definitional requirement that the offence be a 'serious crime' punishable by a maximum prison term of four years or a 'more serious penalty' (article 2(b)). This does not impact other actors with jurisdiction in this regard, however, (such as the flag state) and can be circumvented by, for example, mutual agreement between states to this end.

suspicion for having committed an offence under the Act (section 51(2)–(3)) [38]. Certain powers fall beyond their ambit, however, and lie within that of the South African Police Service (an example being the power to establish roadblocks); cooperation with the police is thus required in these instances. As discussed below, a key element of future success in addressing illegal fishing from a fisheries crime angle will be increased, consistent cooperation between police and fisheries authorities, as well as other pertinent authorities. Ultimately, Fisheries Control Officers' powers are constrained by the Constitution of the Republic of South Africa [39].

Although the National Environmental Management Act is not directly concerned with fisheries it includes a number of relevant provisions. One particularly noteworthy (and arguably under-utilised) provision (section 34(1)–(3)) empowers prosecutors to apply for costs from persons convicted of criminal offences cited in schedule 3 arising from loss or damage caused by the offence committed 'to any organ of state or other person' including costs of 'rehabilitating the environment' [37]. MLRA offences cited in schedule 3 of the Act include possession of prohibited gear and contravention of international conservation and management measures.

Efforts to prevent the violation of fisheries rules are thus, ultimately, primarily the responsibility of Fisheries Control Officers who form part of the Monitoring, Surveillance and Control component of the Fisheries Directorate within the Department of Agriculture, Forestry and Fisheries (DAFF). Generally speaking the primary traditional governmental response to illegal harvesting domestically has been to step up compliance and enforcement efforts. In the abalone sector, for example, this included the establishment of dedicated environmental courts (in late 2003) and increased, visible inshore patrolling. Despite clear evidence of an organised crime element fuelling the illegal abalone poaching from the 1990s onwards [8], enforcement efforts nevertheless remained largely rooted in a fisheries management response [40]. The result was case-by-case inspections favoured over intelligence-led investigations resulting in the pursuit of short-term success via the successful prosecution of 'foot soldier' poachers as opposed to tracking down foreign buyers and key individuals in the associated criminal networks, such as drug trafficking [41–43]. Combined with poor community buy-in, arising from the lack of legitimacy of the fisheries management arrangements due to historical socio-political factors, and weak inter-agency co-ordination between the police and fisheries authorities, the result was an inability to make serious inroads into curbing illegal abalone harvesting [43,9].

In line with international developments, however, one can identify a realignment of thinking in the last few years with regards to how illegal fishing is viewed and tackled in South Africa. Championed by various key individuals within the DAFF, the criminal justice system and academia, there has been an increasingly strong drive to re-assess the nature of illegal fishing and its position in relation to transnational organised criminal activities with a view to successfully eradicating it. This is no doubt fuelled, in part, by the successful prosecution of the key actors in the Bengis case (described above) [12], which illustrated, for the first time from a compliance perspective, the importance of focusing on the investigation of corporate syndicates in fisheries and showcased the value of cross-border information sharing and intelligence analysis, and highlighted how the law can optimally be used to secure successful prosecution and sentencing, including securing restitution. The case also potently highlighted both the prevalence of organised crime in South African fisheries and illustrated, from a socio-economic perspective, how such criminal activities 'rob' ordinary South African citizens. The exorbitant profits pocketed by the criminals, the staggering amounts of rock

lobster pillaged and the resultant adverse impact on the state of the species' stocks, and the consequential knock-on effect, namely, depriving other legitimate users of access rights to the species, were laid bare and garnered a previously unknown sense of public outrage at the fisheries crime committed.

Recent fisheries crime initiatives have included concerted effort from within the DAFF to focus on investigative techniques when handling illegal fishing activities with a view to looking beyond regarding them as isolated minor offences but, rather, facets of potentially broader, organised illegal operations. To this end, increased cooperation by the MSC unit with the police, in particular the Directorate for Priority Crime Investigation (the 'Hawks') has been encouraged [44]. Underpinned by, and in collaboration with, on-going cooperation with INTERPOL's Fisheries Crime Working Group and PescaDOLUS (an independent international fisheries crime research network), the DAFF is also seeking to facilitate capacity-building within both its own department and involving personnel in the criminal justice system along the line of an intelligence-led investigatory compliance and enforcement approach to dealing with fisheries offences. This would include skills ranging from improved evidence-gathering to facilitate successful criminal prosecution, to enhanced inter-agency cooperation and information sharing [45]. This feeds into the Department's recent internal Integrated Fisheries Security Strategy, which is grounded in promoting and strengthening inter-agency cooperation and collaboration in addressing illegal fishing domestically.

## 5. Unpacking 'fisheries crime'

There is currently no accepted legal definition of 'fisheries crime'. At the UN General Assembly level, dating back to 2008, focus was directed on the potential nexus between international organised crime and 'illegal fishing'. In exploring this link, the 2011 UNODC-commissioned Report (discussed above) elected to use the term 'marine living resources crime', a concept that refers to 'criminal conduct that may impact negatively on the marine living environment' [15]. This concept, too, is at the heart of a recent 2013 WWF drive towards universal enforcement jurisdiction over criminal harm to marine living resources [46]. Marine living resources crime, alongside illegal fishing, are often subsumed under the heading of 'environmental crime', which can broadly be defined as 'criminal conduct that may have negative consequences on the environment ...contraventions of pre-existing laws sanctioning illegal conduct with criminal penalties, typically based on environmental management regulations' [15]; see also [47,48]. Related, and honing in on the inherently transnational nature of fisheries crime, illegal fishing can be located within the broad category of 'transnational environmental crime', alongside, inter alia, illegal logging, wildlife trafficking and illegal trade in hazardous waste; there is a growing body of research espousing the potential value of using financial intelligence towards successful prosecution of such crimes, particularly in the Asia-Pacific region [49,35].

There remains a pressing need for the development of an analytically sound definition of 'fisheries crime'. It is useful here to focus on how 'fisheries crime' manifests itself in practise. In other words, as a phenomenon, what is 'fisheries crime'?

As a starting point it is helpful to look at the extent to which fisheries crime is associated with other 'traditional' crimes such as human trafficking, document fraud, drug trafficking, corruption, tax and customs evasion. The 2011 UNODC report comprehensively identifies and discusses the nature of key links between the fishing industry and forms of transnational organised crimes. The fundamental finding is that criminal activity in the fishing industry is frequently intricately associated in one way or another with one or

more of these established categories of transnational organised crimes be it transnational fishing operators laundering illegally caught fish through fraudulent catch documentation; fishers trafficked for the purpose of forced labour on board fishing vessels or fishing vessels used for the purpose of illicit traffic in drugs [15]. Importantly, fisheries crime refers not only to actions directly related to the capture and processing of the fish but also ‘standard’ offences that may take place both up- and down-stream on land as well as at sea. These include corruption, in relation to, for example, registration of vessels, and document fraud (for example, catch certificates and customs declarations) and tax evasion [15].

In sum, fisheries crimes can thus be defined as those criminal offences defined as such in domestic law (including, but not limited to, such offences in marine living resources acts) committed within the fisheries sector, with the ‘fisheries sector’ referring to the entire value chain from vessel registration to the sale of the commodity. It follows that we are thus not only concerned with ‘illegal fishing’ per se (that is, the extraction of marine living resources in contravention of law, which is the current concern of the mainstream fisheries management discourse), but a whole range of criminal offences, including document fraud, customs and tax evasions, human trafficking, drug trafficking, money-laundering and insurance fraud.

## 6. Enforcement implications of classifying illegal fishing as ‘fisheries crime’

### 6.1. Internationally

How would regarding illegal fishing activities as a ‘crime’ fit in with the international regulatory environment, in particular, relevant international agreements? At the heart of the question is the issue of jurisdiction. As noted above, illegal fishing has traditionally been regarded as primarily a fisheries management issue addressed via agreements concluded under the auspices of the FAO while transnational crime falls under the mandate of the UNODC, the guardian of the United Nations Convention Against Transnational Organised Crime (UNTOC). While the scope of the UNTOC Convention does not expressly include fisheries-related crime, it defines the transnational element of organised crime, which may also be applied to fisheries. UNODC now includes fisheries crime within its Wildlife and Forestry Crime Programme. The FAO too, as noted above, is broadening its traditional stance and embracing the need to look beyond the traditional administrative realm to criminal law in combatting illegal fishing. How synergy between the mandates of these two agencies is to be achieved in practice is not yet clear, however. Similarly, at the domestic level, addressing crime in fisheries will require co-operation between a number of institutions and departments such as fisheries, customs, immigration, police and defence (the navy), as highlighted above. Likewise, it will be key for all stakeholders to be clear on the ambit of their respective mandates, on which spheres within their respective mandates they can/should cooperate and on how synergy in this regard can best be achieved towards tackling fisheries crime. At a practical level, using the illustrative example of illicit drug trafficking involving a fishing vessel, it comes down to the question of ‘whose responsibility it is to respond to an incident involving cocaine trafficked by a fishing vessel? Is fishing vessel control still the issue here, or is this mainly a security threat?’ [50].

So, what are the particular enforcement challenges one can identify with regards to transnational fisheries crime? A common problem is that the vessels involved in fisheries crime are often registered in flag states that are unable or unwilling to exercise their (criminal) law enforcement jurisdiction (these vessels fly

what are known as ‘flags of convenience’) [15,21,51]. Given that flag state jurisdiction is paramount on the high seas and remains relevant in coastal states’ waters this leads to the practical problem of who (ie which state) is going to take responsibility for pursuing the case and prosecuting the offenders? In the event that the flag state does accept responsibility the next challenge is the requirement of extensive cooperation between the various authorities (including, as the case may be, fisheries, police and customs) on both sides in order to bring the offenders to book. As noted above, recasting illegal fishing as fisheries crime raises opportunities for non-flag state jurisdiction over fisheries offences at sea, such as state jurisdiction over nationals and continuous offences, the exercise of which may be facilitated by cross-border information sharing and intelligence analysis.

A further related problem is the lack of transparency, or the secrecy, regarding vessel ownership with some countries allowing fishing vessel owners to remain anonymous through the registration of, for example, front companies with no assets in the flag state country. The real ‘beneficial’ owner is thus extremely difficult to locate due to the existence of numerous corporate structures and owners spread over various jurisdictions [15], which enables illegal fishing operators to ‘hide their assets behind impenetrable corporate structures’ [21]. This severely hampers law enforcement investigations, prosecution of persons involved in transnational organised fisheries crimes and the imposition of sanctions [15]. Again, transnational information sharing is vital in this regard; mutual legal assistance agreements and tax information exchange treaties entered into between states can play a key role here.

### 6.2. South Africa as an example in the broader African context

Domestically, as outlined earlier, fisheries management traditionally falls within the domain of the DAFF and, at a day-to-day level, it is primarily Fisheries Control Officers who are tasked to ensure compliance and enforcement with fisheries rules. Organised crime, on the other hand, falls squarely within the mandate of the national police force (the South African Police Service) and is regulated by various laws, the key statute being the 1998 Prevention of Organised Crime Act [52]. Traditionally, there have been few coordinated enforcement efforts between the two agencies with regards to crime in the fisheries sector. This was illustrated aptly by the failed efforts to curb the scourge of abalone poaching along the coastline – despite clear evidence of involvement of organised criminal groups (mostly Chinese) in poaching abalone off the coast [8,41–43], the dominant compliance approach was driven by a fisheries management discourse, namely to ‘keep the resource in the water’.

Law enforcement operations in terms of a new fisheries crime paradigm will necessitate a mind-shift on the part of the main agents involved in fisheries compliance including Fisheries Control Officers, police and port state inspections, from a narrow focus on securing quick convictions for violations of fishing rules to an awareness of the possibility that individual offenders may be part of a broader organised criminal network. It will be important for all agents to be well-versed in their specific powers and duties in terms of all potentially applicable legislation, that is, not only fisheries law but also key criminal statutes such as the Criminal Procedure Act and the Prevention of Organised Crime Act. Accompanying this, they will need to develop the ability to ascertain when it is appropriate to shift from an inspection-based approach to a particular violation to an investigative mode. Additionally, authorities will need to be sufficiently familiar with the criminal procedure system to facilitate successful criminal prosecution (including, for example, with regards to evidence-gathering, witness statements). Coordination and cooperation between the respective departments (including the DAFF and the Department of

Transport and Public Enterprises, with regard to ports), agencies (such as the South African Maritime Safety Authority and the South African Revenue Service, under which Customs and Excise fall), the South African Police Service and individuals on the ground will be vital in order to ensure effective and timely information exchange and to avoid duplication of work.<sup>3</sup> Capacity-building is likely to prove key in facilitating these changes. As noted earlier, the MCS fisheries division in the DAFF has embraced the value of shifting to such an approach and is actively working towards securing appropriate capacity-building education and training. At the same time, on the ground, it has made strides towards implementing a fisheries crime approach via, for example, encouraging and interaction and cooperation with the police in individual fisheries cases.

The successful prosecution of key actors in the Bengis case [12] provides an excellent illustrative example of the potential value of domestic and cross-border inter-agency cooperative investigation and enforcement efforts towards addressing fisheries crime [13]. The fisheries crime paradigm has some way to go before it is formally entrenched in South Africa but there is increasing acceptance of its validity and a growing number of examples of its implementation with regards to specific cases. Currently, 19 individuals in the Western Cape High court are facing 534 charges arising from contraventions of the MLRA and the Prevention of Organised Crime Act, including illegal possession of abalone, racketeering and corruption in the context of an alleged abalone syndicate [53]. The case is an example of cooperative agency efforts to address crime in the fisheries sector involving, amongst others, the Hawks and the DAFF.

To date, at a regional and continental level, the new fisheries crime paradigm remains on the fringes of discussions surrounding efforts to address illegal fishing and, more specifically, the development and strengthening of legal frameworks towards this end. To the extent that there has been a focus on the criminal aspect of maritime matters it has largely been in the context of seeking to curtail piracy and address related maritime security matters. An illustrative example is the recently adopted 2013 'Code of Conduct Concerning the Prevention and Repression of Piracy, Armed Robbery against Ships, and Illegal Maritime Activities in West and Central Africa', crafted by the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS) and the Gulf of Guinea Commission (GGC), which builds on the Memorandum of Understanding on the Integrated Coastguard Function Network in West and Central Africa (2008). The Code includes a focus on 'transnational organised crime in the maritime domain' under which it subsumes various activities including IUU fishing without a recognition of the criminalities associated with illegal fishing.

It is thus not surprising that the African Union's Integrated Maritime Strategy does not expressly endorse a fisheries crime approach to tackling illegal fishing but, rather, its provisions concerning illegal fishing are rooted in the traditional IUU approach (see section 36) [3]. Given its broad, framework nature, it nevertheless provides a receptive legal basis for implementing the new fisheries law enforcement paradigm on the continent. Ideally, a first important step towards embracing this paradigm will be for coastal states to ensure that illegal fishing activities are expressly criminalised in their domestic fisheries laws and/or penal codes and that provision is made for adequately severe sanctions. A further important legislative step, from a compliance perspective,

will be to ensure that national fisheries laws expressly bind flag states by their duties under international law regarding registration and control of their fishing vessels' activities. The importance of cooperation between, as a starting point, those authorities and agencies traditionally involved in fisheries management matters and key players in criminal law enforcement (such as the police) will also be paramount. The potential crucial role of capacity-building in this regard and, more generally, towards better understanding of the challenges and benefits of a fisheries crime approach, is underscored by current efforts by relevant agencies in South Africa.

## 7. Conclusion

This article presents an emerging new approach to addressing illegal fishing that seeks to posit these activities within the broader realm of crime and criminal justice. It is not a paradigm designed to supplant the traditional fisheries compliance methods but, rather, to supplement and strengthen its likelihood of success in tackling illegal fishing worldwide via harnessing the additional tools offered by a criminal law approach. The article explains the origins of the fisheries crime paradigm, highlighting, in particular, the inability of the traditional model to date to curb illegal fishing and points out that this might be remedied by taking a broader view of illegal activities associated with the fishing sector and drawing on the strength of a more crime-based investigative approach to the problem. Throughout, reference is made to the South African context as an illustrative example on the African continent to highlight both the need for a new approach to fisheries compliance measures and the potential for increased success if a cooperative, inter-agency approach is taken in addressing fisheries crime. South Africa is recognised as a pioneer amongst fishing nations in its progressive understanding of the nature of fisheries crime and its efforts to make capacity-building a priority with regards to educating relevant state agencies and improving enforcement efforts. The South African scenario can thus arguably serve as a practical example to other African states of how a state might proceed with implementing this paradigm at ground level. In this regard, it usefully exposes some of the challenges that will likely arise in doing so and how one might address these, and-with reference to case law (such as Bengis)-poignantly highlights the potential benefits of such an approach. Following South Africa's progress will likely assist other African states in identifying the potential 'best' path suited to their own context and needs towards adopting a fisheries crime approach domestically.

To conclude, this article also highlights that the fisheries crime paradigm is still in its infancy. Much work still needs to be undertaken towards developing a clear understanding of the legal term 'fisheries crime' and much remains to be learnt about the nature of fisheries crime and how addressing it may require different approaches depending on the fishing sectors in which it occurs given the broad spectrum of fisheries crimes. In particular, with reference to the South African context, it will be interesting to explore how this paradigm might operate in relation to illegal fishing in the small-scale sector as opposed to violations in the commercial sector.

## Acknowledgements

The authors wish to acknowledge the valuable and insightful input and contributions made by the members of the PescaDOLUS network of experts on fisheries crime, and in particular, Gunnar

<sup>3</sup> The importance of inter-agency cooperation in enhancing compliance and enforcement with regard to organised fisheries crime in Australia was highlighted in J Putt and K Anderson 'A National Study of Crime in the Australian Fishing Industry' Research and Public Policy Series No 76, Australian Government, Australian Institute of Criminology (2007).

Stølsvik, project leader of The Norwegian National Advisory Group against Organised Fisheries Crime and IUU Fishing (FFA). Any errors are the authors' own.

## References

- [1] United Nations Food and Agriculture Organisation (FAO) The State of World Fisheries and Aquaculture: Opportunities and Challenges, Rome (2014).
- [2] The Value of African Fisheries. FAO Fisheries and Aquaculture Circular No. 1093, FIPS/C1093 (En). Rome (2014).
- [3] African Union '2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy)' AU, (2012).
- [4] D. Agnew, J. Pearce, G. Promad, T. Peatman, R. Watson, J. Beddington, T. Pitcher, Estimating the worldwide extent of illegal fishing, *PLoS ONE* 4 (2) (2009) e4570, <http://dx.doi.org/10.1371/journal.pone.0004570>.
- [5] Environmental Justice Foundation Pirate fishing exposed: the fight against illegal fishing in West Africa and the EU. EJF (2012) (<http://ejf.org/sites/default/files/public/Pirate%20Fishing%20Exposed.pdf>).
- [6] NellemannC., HenriksenR., RaxterP., AshN., MremaE., editors. The Environmental Crime Crisis – Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources. UNEP; 2014.
- [7] G.M. Branch, B.M. Clarke, Fish stocks and their management: the changing face of fisheries in South Africa, *Mar. Policy* 30 (2006) 3–17.
- [8] M. Hauck, N.A. Sweijd, A case study of abalone poaching in South Africa and its impact on fisheries management, *ICES J. Mar. Sci.* 56 (1999) 1024–1032.
- [9] S. Raemackers, M. Hauck, M. Bürgener, A. Mackenzie, G. Maharaj, E.E. Plaganyi, P.J. Britz, Review of the causes of the rise of the illegal South African abalone fishery and consequent closure of the rights-based fishery, *Ocean Coast. Manag.* 54 (2011) 433–445.
- [10] M. Isaacs, Small-scale fisheries reforms: expectations, hopes and dreams for a better life for all, *Mar. Policy* 30 (1) (2006) 51–59.
- [11] M. Sowman, Subsistence and small-scale fisheries in South Africa: a ten year review, *Mar. Policy* 30 (2006) 60–73.
- [12] United States of America v Bengis (2013) WL 2922292.
- [13] J. Glazewski, *Int. J. Mar. Coast. Law* 19 (2014) 173–183.
- [14] FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing Rome (2001).
- [15] United Nations Office on Drugs and Crime (UNODC). Transnational Organised Crime in the Fishing Industry. Focus on: Trafficking in Persons, Smuggling in Migrants, Illicit Drug Trafficking. UN, Vienna; 2011.
- [16] E. de Coning, G. Stølsvik, Current Legal Developments: United Nations Office on Drugs and Crime, *Int. J. Mar. Coast. Law* 28 (2013) 189–204.
- [17] FAO, Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas. (FAO Compliance Agreement), FAO, Rome, 1995.
- [18] FAO Resolution 4/95, 1995.
- [19] FAO, International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, (IPOA-IUU), FAO, Rome, 2001.
- [20] F.A.O. Technical Guidelines for Responsible Fisheries: Responsible Fish Trade' No 11 FAO Rome (2009). ISSN 1020-5292.
- [21] High Seas Task Force Closing the net: stopping illegal fishing on the high seas. Final Report of the Ministerially-led Task Force on IUU Fishing on the High Seas (2006).
- [22] Case concerning the Conservation and Sustainable Exploitation of Swordfish Stocks in the South-Eastern Pacific Ocean (Chile /European Union), 20 December 2000, ITLOS Case No. 7 and WT/DS 193/1, 'Chile—Measures Affecting the Transport and Importation of Swordfish' Request for Consultations by the European Communities and WT/DS 193/2, 'Chile—Measures Affecting the Transit and Importation of Swordfish' Request for the Establishment of a Panel by the European Communities.
- [23] E. Witbooi, Illegal, unregulated and unreported fishing on the high seas: the Port State Measures Agreement in context, *Int. J. Mar. Coast. Law* 29 (2014) 290–320.
- [24] United Nations Convention on the Law of the Sea, 1982, UN Doc A/CONF 62/122.
- [25] D. Vidas, IUU fishing or IUU operations? Some observations on diagnosis and current treatment. CCAMLR Symposium, 5–8 April, Universidad Austral de Chile, Valdivia, Chile (2005). ([http://www.antarctica.gov.au/\\_data/assets/pdf\\_file/0003/22692/ml\\_386285768171296\\_ccamlr20symposium20volume20220session202.pdf?](http://www.antarctica.gov.au/_data/assets/pdf_file/0003/22692/ml_386285768171296_ccamlr20symposium20volume20220session202.pdf?)).
- [26] United Nations Environment Programme (UNEP). Avoiding Future Famines: Strengthening the Ecological Foundation of Food Security through Sustainable Food Systems. A UNEP Synthesis Report. UNEP, October 2012 (<http://mahb.stanford.edu/wp-content/uploads/2013/02/2012-UNEP-Avoiding-Famines-Food-Security-Report.pdf>).
- [27] High Level Panel of Experts (HLPE). Sustainable fisheries and aquaculture for food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome 2014 (<http://www.fao.org/3/a-i3844e.pdf>).
- [28] United Nations General Assembly. Fisheries: Interim Report of the Special Rapporteur on the Right To Food. Sixty-seventh session, Item 70 (b) of the provisional agenda, Promotion and protection of human rights: human rights questions, including alternative approaches for improving the effective enjoyment of human rights and fundamental freedoms. A/67/268.
- [29] African Progress Panel. Grain, fish, money. Financing Africa's green and blue revolutions. Africa Progress Report. 2014 (<http://www.africanprogresspanel.org/publications/policy-papers/2014-africa-progress-report/>).
- [30] UNGA Resolution 63/112 (5 December 2008) UN Doc A/RES/63/112.
- [31] UNGA Resolution 67/79 (30 April 2013) UN A/RES/ 67/79.
- [32] UNGA Resolution 68/71 (25 November 2013) UN Doc A/68/71 /L. 19.
- [33] Commission on Crime Prevention and Criminal Justice (CCPCJ) Resolution 20/5 (15 April 2011) UN Doc E/2011/30, E/CN.15/2011/21.
- [34] G. Rose, Forests, fish and filthy lucre, in: G. Rose (Ed.), *Following the Proceeds of Environmental Crime: Fish, Forests and Filthy Lucre*, Routledge, 2014, pp. 3–12.
- [35] K. Barclay, *Following the proceeds of illegal fishing in the Asia-Pacific: Supply chain intervention points*, in: G. Rose (Ed.), *Following the Proceeds of Environmental Crime: Fish, Forests and Filthy Lucre*, Routledge, 2014, pp. 88–99.
- [36] Marine Living Resources Act 18 of 1998.
- [37] National Environmental Management Act 107 of 1998.
- [38] Criminal Procedure Act (No 51 of 1977).
- [39] Constitution of the Republic of South Africa 108 of 1996.
- [40] M. Sowman, S. Raemackers, J. Sunde, O. Schultz, Fishing for equality: policy for poverty alleviation for South Africa's small-scale fisheries, *Mar. Policy* 46 (2013) 31–42.
- [41] P. Gastrow, Organised crime in the SADC region: Police perception. Institute for Security Studies (ISS) monograph 2001.no. 60 Institute for Security Studies; Pretoria (2001).
- [42] J. Steinberg, The illicit abalone trade in South Africa. Paper 105 Institute for Security Studies; Pretoria (2005).
- [43] M. Hauck, M. Kroese, Fisheries compliance in South Africa: a decade of challenges and reform 1994–2004, *Mar. Policy* 30 (2006) 74–83.
- [44] Personal communication, Lieutenant Colonel, Directorate for Priority Crime Investigation, Organised Crime Western Cape, Hawks and DAFF MSC personell June (2014).
- [45] Personal communication, key DAFF personell June and October 2014.
- [46] G. Rose, M. Tsamenyi, Universalising jurisdiction over marine living resources crimes: a report for WWF International World Wide Fund for Nature (WWF) (2013).
- [47] S. Bricknell, *Environmental Crime in Australia. AIC Reports. Research and Public Policy Series*, Australian Institute of Criminology, 2010.
- [48] L. Elliott, Transnational Environmental Crime in the Asia Pacific: an 'Un(der) securitised' Security Problem? *Pac. Rev.* 20 (4) (2007) 499–522.
- [49] L. Elliott, *Transnational Environmental Crime in the Asia-Pacific: characteristics and key issues*, in: G. Rose (Ed.), *Following the Proceeds of Environmental Crime: Fish, Forests and Filthy Lucre*, Routledge, 2014, pp. 15–27.
- [50] M. Palma-Robles, Fisheries crime: bridging the conceptual gap and practical response Centre for International Maritime Security (2014).
- [51] R.R. Churchill, A.W. Lowe, *The Law of the Sea*, third ed., Manchester University Press, Manchester, 1988.
- [52] Prevention of Organised Crime Act 121 of 1998.
- [53] Chao v the State (2014).