This is the Author's Accepted Manuscript version of the article: Okafor-Yarwood, I., (2020). The cyclical nature of maritime security threats: illegal, unreported and unregulated fishing as a threat to human and national security in the Gulf of Guinea. African Security. Accepted for publication on Jan 24, 2020.

#### **Abstract:**

Analyses of [maritime] security issues have long focused on threats to the nation-state, thereby promulgating traditional state-centric security policies and practices. The preceding claim is valid for maritime security responses on the African continent, where piracy/armed robbery at sea has been met with robust regional and international interventions, and resulted in two UN resolutions and regional policies. Focusing primarily on illegal, unreported and unregulated (IUU) fishing, this paper seeks to highlight the centrality of human security issues to national security by providing evidence of the cyclical relationship between the two; anything that undermines human security, explicitly threatens national security. Utilising evidence from Nigeria, the paper critiques the tendency to ignore the individual as the referent object of security.

## 1. Introduction

"If we lose command of the sea, it is not invasion we must fear but starvation." 1

The concept of security remains an intense subject of debate, with respect to who or what should be secured. Proponents of traditional security approaches focus on the protection of the state against threats from other states, and are generally opposed to broadening the security agenda to include non-military sources of threats, and the security concerns of individuals (Walt, 1991; Paris, 2001). For most traditionalists, security should simply entail the safety of a state's territory — including the maritime domain — from external hostility (primarily militarised threats) from other states, as doing so inevitably ensures the security of the people within the state (Morgenthau, 1960; Khong, 2001). The role of the military — in this case, the navy — therefore, is to protect the state against external threats emanating primarily from other states' militaries, particularly where such a threat has the capacity to hinder the maximisation of the state's maritime domain and resources, and the wellbeing of its people (Bateman, 2011).

While the arguments presented by the traditionalists remains relevant, since the end of the cold war, it has become pertinent to broaden the security discourse, as security threats assume new forms. Threats are no longer restricted to those from external military forces, but now also include threats against the state and its population from non-state actors such as organised criminal networks, or, from state-derived threats against citizens and non-citizen residents (Jolly and Ray, 2006). To this end, scholars such as Booth (2005) have questioned the state-centeredness of the traditional security discourse, arguing instead for a new understanding of security, one that places the individual as the reference object. Accentuating this point, Booth notes that:

The only trans-historical and permanent fixture in human society is the individual physical being, and so this must naturally be the ultimate referent in the security problematique (Booth, 2005: 254).

This quest for a definition of security that places the individual at the centre gave rise to a new paradigm of human security. In the 1994 Human Security Report, the United Nations Development Programme (UNDP) presented a more humane concept of security than previous definitions. Human security as it is termed, not only proposes the recognition of the individual as the referent object of security, but rests on the premise that it is the responsibility of the state to ensure the safety of the people who reside within its borders (UNDP, 1994). This definition recognises that an individual's protection and preservation come not just from upholding and defending the state's right to engage in actions that upholds national security, and providing financial and resource supports to secure its safety and

<sup>&</sup>lt;sup>1</sup> Adapted from "It's not invasion we have to fear if our Navy is beaten. It's Starvation!", attributed to Admiral John Fisher in 1904.

sustainability as an effective political unit, but also from assured access to individual welfare and quality of life. Espousing this position Hayden (2004) observes that human security does not merely encompass issues of individual benefits (e.g. education and healthcare as examples) as these issues are better thought of as being part of the broader responsibilities of the sovereign state. In the context of maritime security, security for coastal communities would entail ensuring the safety of their sea-fearers as well as the sustainable exploitation of the resources in the maritime domain. By espousing the human security implications of unsustainable exploitation of the fisheries resources resulting from Illegal, Unreported and Unregulated (IUU) fishing, and understanding how coastal communities' responses to these livelihood threats might impact on national security, this paper explores the synergistic interaction between the state-centric and human-centric dimensions of security, and underscores the centrality of effective state2 institutions in providing human security.

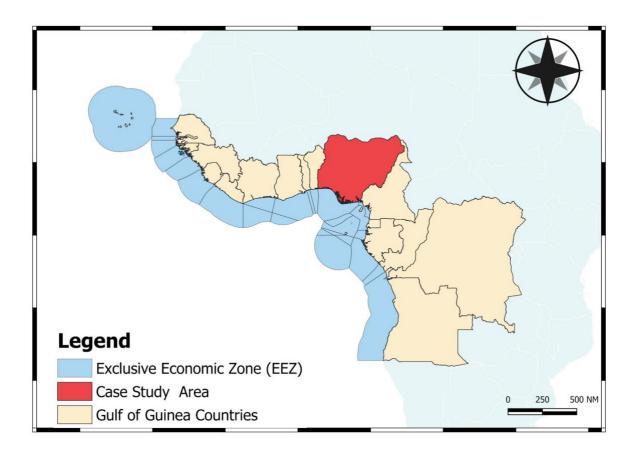
While scholars such as Klein, (2012), Till, (2013) and Bueger (2015) have written — albeit briefly — on the interconnectedness of maritime security threats and human security, they failed however to provide any empirical evidence in support of their claims. They each recognised the impact of maritime insecurity on those who depend on the sea for subsistence, yet they did not explain how these folks responded to threats to their securities, or how those responses might undermine national security. Drawing on empirical data, this paper foregrounds the interconnectedness of the human and national security concepts. It does so by showing that when the security of the people is at risk, the security of the state, — and in this particular context of IUU fishing, the security of the Nigerian state, and, by extension the Gulf of Guinea region — is equally at risk. The paper problematizes the prevailing theories of maritime security issues in the Gulf of Guinea where analytical focus has predominantly centred on incidences of piracy/armed robbery at sea. I do so by adding analytic nuance through a human security lens, and by highlighting the cyclic nature of maritime insecurity in the region. The paper does not seek to promulgate security of the individual devoid of the state. Instead, it aims to highlight the interconnectedness of human and national security issues with respect to maritime security, and to demonstrate the inseparability of an effective state institution in ensuring the optimum utilisation of the maritime domain.

The Nigerian example makes for a suitable case study for understanding the situation in the Gulf of Guinea, because the mangroves of the Niger Delta serves as breeding grounds for fisheries species in the Gulf of Guinea (Okafor-Yarwood, 2018). Moreover, the Niger Delta is at the epicentre of some of the maritime security threats that plague the region (Ali, 2015; Onuoha, 2012). The Gulf of Guinea is

<sup>.</sup> 

<sup>&</sup>lt;sup>2</sup> An effective state is a state with an efficient and effective institution that can ensure the sustainable exploitation of its (marine) resources, provides public goods to its people, and is free of corruption by elites (See: Griffiths, 2011; Evans, Huber, and Stephens 2014; Kohli, 2016; Ahlers and Nellis, 2016). Importantly, an effective state is recognised by its ability to mitigate the risks from insecurities that threaten the safety of the daily lives of its citizenry.

defined here as the coastal states between Senegal to Angola, including the island nations of Cabo Verde, São Tomé and Príncipe – see the map below.



Extended map of the Gulf of Guinea, with Nigeria highlighted as the case study area.<sup>3</sup>

The research for this paper employed qualitative methods. The data presented here are based on five months of fieldwork (between October 2015 and February 2016) <sup>4</sup> in Nigeria across the creeks of the Niger Delta in the Bonny Local Government Area (LGA), which is where the H.Q. of the Nigeria Natural and Liquified Gas (NLNG) is located. During the author's time in Bonny, first-hand evidence was gathered from fisherfolks, fishmongers, and manufacturers of fishing equipment from the Sandfill, River 7, Lighthouse and Agaja communities, and interviews were also held in Abuja, Lagos, Ibadan and Port-Harcourt.

<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> See Council of the European Union and EEAS 2014 for the definition of the Gulf of Guinea. Map data source from Flanders Marine Institute, 2019; Map Library, n.d.

<sup>&</sup>lt;sup>4</sup> Follow up interviews were conducted in June 2017, March and July 2019, including an interview with representatives of the Cameroonian Navy, conducted in October 2019.

The author facilitated three focus groups and conducted fifteen interviews with the fisherfolks and fishmongers from the four communities. A telephone interview was conducted with the Coordinating Chairman of the Artisan Fishers Association Akwa-Ibom state and the Niger Delta Branch. Interviews were also conducted with senior officials of the Nigerian Navy, Nigeria Department of Fisheries, the Economic Community of West African States (ECOWAS), Nigeria Trawler Owners Association (NITOA), and the Maritime Administration and Safety Agency (NIMASA).

The rest of this paper is divided into five parts. The author begins with a review of the literature and identifies the gaps addressed within this article. The paper then outlines the significance of fisheries to the human security discourse, clarifying along the way how depleting fisheries, resulting from IUU fishing, undermines the human security of coastal communities. This is followed by an analysis of how fisherfolks respond to their insecurity, and highlights how such responses threaten national security. The paper concludes with reflections and recommendations on the imperative to incorporate maritime enforcement with improving the livelihood of coastal communities.

## 2. The false duality of the human security vs state security debate

In defining human security, the focus has almost always been on ensuring the safety of the individual from threats to their security. The comprehensive definition of human security as the "safety from such chronic threats such as hunger, disease and repression [and] protection from sudden and hurtful disruptions in the patterns of daily life" (UNDP, 1994) has been criticised by scholars as being too broad. Some of the most prominent criticisms relate to its conceptual ambiguity and lack of a precise definition – implying that the concept is too broad, analytically weak, and raises false hope for the poor (Newman, 2010; Paris, 2001; Paris, 2004; Khong, 2001; Krause, 2004). For Paris (2001), the concept is akin to other equally vague concepts such as sustainable development — favourable to all, but only a select few have an idea of what it entails. Equally critical of the concept, Khong (2001) notes that making the individual the reference object of security analyses fails to provide practical guidance, either for setting priorities, or for alleviating human insecurity. Khong's state-centric bias is further revealed by the position that it is better for people to throw their lot in with their government — and their state — if they want a way out of their privation.

Despite these criticisms the concept provides a fruitful basis for raising fundamental questions about the role of the state in protecting its people, especially in the context of security threats at sea. Primarily, while often presented as challenging the centrality of the state (Voelkner, 2010) the human security agenda highlights that having the individual as the referent object reinforces the security of the state. Although the argument presented by Khong (2001) about the practicability of human security has validity, he fails to consider that the state could be the oppressor, and/or that human insecurity might prevail because the state is not fulfilling its responsibilities, such as providing public goods and/or ensuring the safety of its internal features, including the people. As Kaunert and Leonard (2013) posit,

the drafters of the 1994 report saw the all-encompassing character of these definitions of security as a major strength, especially in their recognition of the interdependent character of all the other listed components. In other words, the definition and components embedded in the 1994 report are conceived in such a way that they are complementary to each other.

Some proponents of the human security concept have also criticised its broad definition. They assert that referring to human security as "freedom from fear" and "freedom from want", is too vague in meaning and thus, have argued for conceptual clarity (Krause, 2004; Owen, 2004; Mack, 2004). For scholars such as Buzan (2004) and Martin and Owen (2010) this broad definition represents a mere extension of the human rights ideas. These views have been countered by Brauch (2005) as he notes that many scholars are in favour of a broadened concept of human security that includes "freedom from fear" and "freedom from want". An important point here is that the broad conceptualisation of human security is intended to drive a multidisciplinary approach that engages development and security, hence while achieving an agreeable definition is impossible, this does not make the concept useless or inapplicable.

Espousing this view, the UN Human Security Unit (2009) notes that protection and empowerment of the individual are the two essential constituents for actualising human security goals. Protection recognises that individuals face different threats (in this case IUU fishing), thus the concept requires that such individuals be protected (by the state as the purveyor of security) from threats to their security. Empowerment as used here entails the implementation of strategies that would enable the individuals to develop their resilience to difficult situations, and to make their own choices. Essentially, protecting and empowering individuals not only enables them to develop their full potential, but it also allows them to find ways to participate in solutions to ensure their security and that of other people. For littoral communities in the Gulf of Guinea, this would mean ensuring that their sources of livelihood are safeguarded, by limiting threats to the marine environment, and also supporting them to build resilience to their vulnerability. The connection between human security and the state's role in providing security is thus fundamental, as the systematic protection and empowerment of individuals can only be provided by the state (Commission on Human Security, 2003; Tadjbakhsh, 2009). It follows that the concept recognises and seeks to highlight the responsibility of the state to safeguard its internal features – territory, the economy and the environment in the interests of the people.

Nevertheless, the idea that human security can be achieved through state security and vice versa has been interpreted by some scholars (including the proponents of the concept) as the gradual co-optation, adaptation, cajolement and manipulation of the concept into a statist framework (Bellamy and McDonald, 2002; Tadjbakhsh, 2007; Thomas and Tow, 2002; Booth, 2007). State elites are unlikely to sincerely commit to promoting human welfare, because the state is sometimes complicit in structural injustices (the use of force, human rights abuses, lack of social justice systems and patriarchy amongst others) from which it is unwilling or unable to extricate itself (Newman, 2010). Greaves (2012) went

as far as noting that human security has maintained a state-centric position that is opposed to the primary purpose of the concept – namely, utilising the individual as the referent object.

Notwithstanding, countering the foregoing critiques, Duffield and Waddell (2006) argue that while the argument presented by the Commission for Human Security appears to be wedded to reinstating the state, what it does is to highlight the significance of an effective state, one that is able to ensure the security of the individual, compared to a state that is fragile, weak, fragmented or generally chaotic. Therefore, while acknowledging the argument of the risk of the co-optation of human security by state elites, the salient statist position of the concept is not serving to reinstate the state unit, but, instead, to re-establish a state that is deemed acceptable to achieve human security. In the context of maritime security issues, effective state institutions that are efficient and in turn able to ensure the sustainable use of their marine resources are vital to meeting the human security needs of coastal communities (Okafor-Yarwood, 2018, 2019).

## 3. Fish and human security

Fish play a vital role in the human security of coastal communities in Nigeria and the rest of the Gulf of Guinea. As an essential species in the marine ecosystem, fish are significant to the food and economic security of billions of people globally, including millions in Nigeria, the Gulf of Guinea and the African continent at large. It serves as a source of protein, and sometimes is the only source of animal protein for millions of people in Nigeria and the rest of the Gulf of Guinea. The fisheries sector is a source of direct and indirect employment to an estimated nine million people in West Africa alone (Okafor-Yarwood, 2019). For countries across the region, fish is vital to their revenue generation as it is a source of foreign direct investment (Okafor-Yarwood, 2019; Belhabib, Sumaila, and Le Billon, 2019; Virdin et al., 2019; Okafor-Yarwood and Belhabib, 2020) hence highlighting the centrality of a secure marine environment to human security and the interconnectedness of various human security components (Gjørv, 2017; Poppy et al., 2014).

In 2007, in Nigeria alone, the fishing sector employed an estimated two million Nigerians on full time, part time and recreational basis (Nigeria Department of Fisheries, 2007),<sup>5</sup> a figure said to have since increased. Moreover, fish is also vital for the economic empowerment of women, who make up 73 per cent of those involved in fisheries in Nigeria (UNCTAD, 2017). It follows that threats to the economic security, in the form of reduced catch, can lead to persistent poverty and unemployment in coastal communities (Pomeroy, 2010; UNCTAD 2017a; Gegout, 2016; Okafor-Yarwood, 2019) thus undermining the "freedom from fear" and "freedom from want" components of their human security.

7

.

<sup>&</sup>lt;sup>5</sup> The 2007 figure is used because the Nigerian Department of Fisheries does not have an updated figure.

Relatedly, since the ability of the fisherfolk(s) to be economically secure is tied to their ability to yield sufficient catches, then their economic security is reliant on the health of the marine environment.

As the global demand for fisheries continues to grow, so too does the illegal exploitation of the resource. The expansion of global fishing fleets in tandem with increasing demand saw the growth of the number of fishing vessels from an estimated 585,000 in 1970 (Battersby, 2014) to 4.6 million in 2016 (FAO, 2018). To meet their fisheries demand, distant water fishing nations such as China, Japan, Russia and political entities such as the European Union look to countries in the Gulf of Guinea. Equally, the governments of the respective countries in the region take advantage of the resource demands to generate more revenue for their countries; however, they do so without taking into account their need to effectively monitor the activities of fishing vessels from those nations (Belhabib et al., 2015; Okafor-Yarwood, 2019; Okafor-Yarwood and Belhabib, 2020). The resulting consequences include the overexploitation of fisheries (including IUU fishing) which damages marine ecosystems and results in the depletion of fish stock (Zeller and Pauly, 2016; Doumbouya et al., 2017; Belhabib, Greer, and Pauly, 2018). While pollution and climate change play a part in exacerbating the depletion of fisheries (Okafor-Yarwood, 2018), IUU fishing acts as a significant stressor, amounting to an estimated 65 per cent of the legal reported catch in the Gulf of Guinea (Doumbouya et al., 2017).

IUU fishing undermines the human security of coastal communities as its effects are reflected in less catch for the fisherfolks, which in turn equates to less fish to sell, and thus hampers their ability to meet the needs of their families (The World Bank, 2013; Okafor-Yarwood, 2019). Adopting this position, the FAO (2001, 2002) notes that IUU fishing leads to the reduction of catches for local fisherfolk, and by extension the amount of fish that is available to littoral communities for consumption. For fisherfolk in the Niger Delta area of Nigeria, IUU fishing robs them of the limited resources available, having for so long endured the depleting effects of pollution by multinational oil companies in the region (Okafor-Yarwood, 2018).

The impact of IUU fishing is also reflected in the level of bycatches – the capture of non-targeted species, and discards associated with it.6 Bycatches are unavoidable with legal fishing, however, with IUU fishing it can be quite destructive for the marine environment as juvenile species are needlessly destroyed (NIC, 2016). The reduced catch for fisherfolks, and the diminishing size of fish – as perpetuating vessels target areas where the fish breed and, take juvenile fish as they seek to exploit the adult ones illegally – is just some of the evidence of the effect of IUU fishing on the environment and livelihoods. Bycatches are also associated with discards, as the non-target species are often discarded in the ocean where it decomposes and contributes to oxygen-deprived "dead zones" (NIC 2016), thereby worsening the cycle of pollution of the marine environment (Hall, Alverson, and Metuzals, 2000). For the fisherfolks in the Niger Delta, the effect of bycatches on their business is as detrimental as not

8

.

<sup>&</sup>lt;sup>6</sup> Dead zones are oxygen deprived areas in the water (Altieri et al., 2017).

catching anything at all, as it gives them false hope of accomplishment while at sea, when in fact their catch are mostly discards. This view is aptly captured by the response given by one of those present at the focus group discussion at Sandfill community,

... [these vessels] throw back the dead fishes into the sea which makes the sea stink as well as kills those that would have grown to become adult... The idea of going to sea and spending three nights, knowing fully well that your boats might be attacked by these illegal vessels, and then making it home only to realise that one-third of your catches are dead discards, is the reality we have faced on several occasions...

These problems make it impossible for such fisherfolk to meet the food security needs of their family, including impeding on their ability to pay for a better education for their children as limited catch makes them economically insecure.

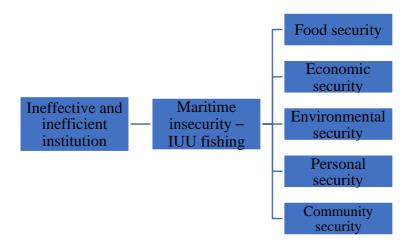
There is also the threat to their personal security. Though the statistics are unreliable due to poor data collection, the fisherfolks noted that they had lost two colleagues between 2014-2015 to violence at sea (these people were shot at sea by perpetrating IUU fishing vessels in the dead of the night). According to the Director of Fish Trade at the Federal Department of Fisheries:

... an estimated 50 lives are also said to be lost annually through the sinking of fishermen's boats and outright shooting by pirates... (Omoaka, 2018).

Speaking with the author, the Director noted that many of the challenges faced by fisherfolks are not duly reported, either because they do not know who to report to, or, they were equally engaging in illegal activity, of which reporting to the authority is a risk. It follows that as well as undermining the "freedom from want" component of human security by the reduced catch for the fisherfolks — which in turn inhibits their ability to meet their economic and food security needs — IUU fishing equally undermines "freedom from fear", as the personal security of the fisherfolks are threatened.

There is nowhere that the preceding claims are more valid than in the Niger Delta, Bonny in particular, where an estimated 70 per cent of the population directly or indirectly derive their livelihood from the fisheries sector (Okafor-Yarwood, 2018). The pervasiveness of IUU fishing, (together with pollution from the multinational oil companies and climate change) exacerbates the depletion of fisheries. The resulting impact is that the fisherfolk are driven out of business, and for the fishmongers who are predominantly women, their access to enough fish to sell becomes limited. As such, IUU fishing represents a substantial threat to the human security of the millions of people in Nigeria who depend on fisheries for subsistence.

Figure 1 IUU fishing as a threat to human security (Source: author).7



For the Nigerian state, while the economic cost of IUU fishing is difficult to deduce, it is estimated that the country loses between US\$70 million (Odita, 2018) to \$800 million a year (Okafor-Yarwood, 2019). The latter sum is close to what the country spends each year on the importation of fish and its supplements to meet the fisheries demands of its increasing populations. According to the Director of Fish Trade at the Nigeria Fisheries Department, Nigeria loses an estimated US\$29 million — the equivalent of its annual revenue from shrimp exports— a year to illegal shrimping. Although the total cost of IUU fishing to the country's economy is tentative, it robs Nigeria of the much-needed revenue to improve its fisheries sector and support coastal communities to build resilience to their vulnerabilities.

# 4. Cyclical nature of maritime insecurity: IUU fishing as a threat to human and national security.

The definition of national security, as with many other concepts in international relations, has been widely contested, with some scholars advocating for the incorporation of environmental issues as a national security issue (Kaplan, 1994; Porter, 1995; Matthew, 2000). For this paper, national security is defined as "the ability of a nation-state to protect its internal values or features [people, economic interests, boundaries and environment] from external threats" (Bock and Berkowitz, 1966, 134). Based on this definition, it is evident that IUU fishing presents a direct threat to the national security of coastal states as it is linked to different forms of organised crime – human/drug smuggling, arms trafficking among other illegal activities (de Coning 2011; Lindley, Percy, and Techera, 2019). Espousing this view, a representative of the Nigerian Navy notes that it is conceivable that arms are smuggled into the Niger Delta region of Nigeria using fishing vessels, thus threatening the peace and stability of the

10

<sup>&</sup>lt;sup>7</sup> The community security is equally affected as fisheries depletion destabilises the continuity of the age-long tradition of which the sea and the fish within it have been vital to its preservation. This has further implications for issues of community cohesion as they risk losing their identity of being a traditional fishing community.

country. While he was reluctant to give further details, the propensity for IUU fishing vessels to be used in illegal arms smuggling is heightened by the fact that 70 per cent of the estimated 8 million weapons smuggled into West Africa each year, end up in Nigeria (Jimoh and Bashir, 2012), making it relatively easy to acquire illegal arms in the country. Elsewhere, the naval representative noted that it is credible that illegal fishing vessels are used as a front for smuggling arms into the country, as a result their activities threaten the national security of Nigeria as such illegal arms can be used to fuel violence. According to him,

...the mere fact that anyone can to do anything illegal in our waters is in itself a national security threat... There is also the risk of espionage by crew members parading themselves as fishermen, and of course gun running by such crew members which are probably used in destabilising the Niger Delta region. There is also the issue of the cyclical effect of IUU fishing, as we have caught fishermen engaging in sea robbery and kidnapping and their excuse is that they do not catch enough fish [due to depleting fish stock] to feed their family.

Among those participants in focus groups and interview sessions in Bonny, there was general awareness that crews of IUU fishing vessels used threats of violence against fisherfolk, and questioning revealed considerable consensus among them as to how they should respond to threats to their safety. Specifically, when asked if they ever responded in kind to such violence, though their responses varied, the general consensus was that they had not ever previously violently responded to threats directed at them. Possible violent responses, such as attacking illegal fishing vessels, or returning fire when their boats came under attack, was not an option because they lacked access to firearms. However, there was agreement that if they could access firearms, they would seek to defend themselves in the face of any future threats to their safety. Their response mirrored that given by one of the representatives of the Fishers Association present,

No! Never!! we have never [responded with violence]. How can we? With what weapon? But... if we had access to guns and we are shot at, we might be able to respond in kind. You cannot come in our waters and kill us and expect us to do nothing. But sadly, we are not in a position to even protect ourselves...

The question was posed because the author wanted to understand how the fisherfolks present had responded to previous threats to their personal security. Their responses are indicative of a group of helpless people, intent on doing their best to protect their interests in the absence of their government's positive response to their plights. The quote above suggests that the links between the arms trade and IUU fishing could, theoretically — if weapons were to fall into fisherfolks' hands — engender further violence in the future. Illegal arms can indeed be used to fuel instability across the region. Specifically, in September 2018, three Nigerian fishing vessels were intercepted by the Cameroonian navy. They were found to be illegally in the country's territorial waters, and moreover, were allegedly carrying AK47

machine guns, and forty-three persons, whose status is unknown. While one report alleged that the vessels and their occupants were engaging in illegal fishing (Nkeze, 2018), others suggested that they were in fact en-route to Ambazonia (Anglophone Cameroon) where separatists have been fighting for secession (Amin, 2018; Guemo, 2018). Though the author could not confirm the intentions of these individuals, a representative of the Cameroonian Navy disclosed that some Ambazonian separatists have on a number of occasions been arrested (through a joint initiative with the Nigerian Navy), onboard fishing boats, trying to smuggle arms to Cameroon from Nigeria.8

The national security ramifications of instability at sea are also visible in the fallout on land, to the detriment of littoral communities. As Adger (2006) suggests, any disturbance to the environment (in the context of depleting fish stock) can potentially have dramatic social consequences. Encapsulating this position Vreÿ (2015) observes that IUU fishing impacts on the state's ability to provide for its people by threatening food security, job security and the income source of littoral communities. Fisheries are tied to the development and prosperity of coastal communities in countries across the Gulf of Guinea – many of which are low income countries (The World Bank, 2016). The underlying benefit of the ocean economy is threatened by the pervasiveness of IUU fishing – thus making it a national security concern.

Importantly, other social factors alongside IUU fishing contribute to human insecurity, and these challenges often exist within a wider context of challenging institutional structures. The key importance of an effective state institution that is able to control and/or ameliorate such undesirable consequences is evident. As observed by Ohlsson (2000):

Young men [and women] do not [at least not in significant numbers] regularly seek immediate rewards in illegal activities and looting, as long as the society they live in can provide livelihoods and social position... (Ohlsson, 2000: 8)

Ohlsson's assertion is valid for many in the coastal communities in Nigeria whose source of livelihood is undermined by IUU fishing and exacerbated by lack of social provisions such as employment, good health care and quality education. This has resulted in some fisherfolks continuously struggling with the decision to go fishing or not (in the knowledge that they might not catch enough fish to cover their fuel costs) to seek alternative sources of livelihood - including those that threaten the national security of Nigeria, and by extension the regional security of the Gulf of Guinea. In fact, the overall lack of employment in coastal communities is making engaging in illegal activities at sea attractive to the jobless population (Osinowo, 2015) especially those who once identified as fishers. In addition, the responses to their insecurity have the capacity to result in transborder conflict in the long term, given that local fisherfolks are increasingly engaging in acts that amount to IUU fishing, by traveling to neighbouring countries to supplement their earning abilities (Okafor-Yarwood, 2019).

-

<sup>&</sup>lt;sup>8</sup> Beseng (2019) also wrote about arms smuggling as a fishery crime in Cameroon.

The ensuing sub-sections explore the different ways in which fisherfolks, and fishmongers respond to depleting fisheries.

## 4.1 IUU fishing by artisanal fishers

Increased competition for the dwindling resource of fish in the Niger Delta has resulted in fisherfolks in Nigeria resorting to illegal fishing on the local scale, as a means of adapting to their changing environment and to secure livelihoods. This can be seen from analyses of the focus groups and interview data, which suggests that some fisherfolk engage in some form of IUU fishing – using illegal equipment or fishing gear, fishing in restricted waters including beyond the permissible 5Nautical Miles, or work in cohort with industrial vessels who tranship their illegal catches at sea. It is necessary to clarify that classifying the actions of artisanal fishers as a form of IUU fishing in a country like Nigerian is very problematic. This is because small-scale fisheries in developing countries – such as those in the Gulf of Guinea – are generally unregulated, with hardly any reporting system of fishing activities (FAO, 2001b). As noted earlier, local fisheries administrations do not have adequate human and material resources to maintain systematic monitoring. Although the actions of these fisherfolks might qualify as illegal, based on the Sea Fisheries Acts of 1992 (Babangida, 1992), the complexity of IUU fishing is that fisherfolk do not view their actions as illegal. To them, they are merely going to where the fish are, and/or fishing with the equipment available to them in order to compensate for reduced fish catch. Nevertheless, the impact of IUU fishing activities by artisanal fishers are equally as damaging as the IUU fishing by commercial and foreign vessels, as they further undermine the longerterm sustainability of the fisheries resources (Lawson and Robinson, 1983; Katikiro and Mahenge, 2016; The World Bank, 2016a; Binet, Failler, and Thorpe, 2012).

Frustrated by their growing inability to catch sufficient fish to feed their families, pay their children's school fees, or even to cover their daily expenses, some fisherfolks resort to IUU fishing. This is manifested in the form of fishing in restricted areas, such as close to oil pipelines. Given the proximity of the Bonny fishing communities and many offshore oil installations, areas that were once available to them have been made off-limits to avoid accidents, leakages and to protect the interests of the oil industry. However, some of the fisherfolks risk their lives and safety by fishing in those prohibited areas, which they know to be the breeding grounds for their target species. The implications of such actions should their boats encounter an oil pipeline, possibly resulting in oil leakage, is an outright restriction on fishing activities in the surrounding waters for up to six months to allow for the clean-up exercise (Okafor-Yarwood, 2018). The cyclic nature of the impact of IUU fishing by commercial/foreign vessels, which results in the depletion of fisheries, is thus a further threat to their human security – undermining "freedom from want" as artisanal fishers are forced into dangerous waters with potentially further damaging consequences for the environment and thus their livelihoods.

Alongside fishing in restricted areas, some fisherfolks are alleged to conspire with industrial vessels, by either being paid with cash or fish in exchange for acting as lookouts while they fish in restricted areas, and/or holding on to their illegal fishing equipment such as fishing nets with the wrong mesh sizes to avoid detection. Specifically, some registered vessels fish with smaller mesh sizes (below the specified 44 mm for shrimp and 76 mm for fish as recommended by the Nigerian Department of Fisheries). To avoid detection, they give such nets to local fishers in exchange for some fish. It is worth noting that the fisherfolks were reticent to confirm their involvement in this kind of activity. However, in trying to adapt to the effect of IUU fishing by commercial/foreign vessels, their actions further undermine the sustainability of the marine resources, and the food and economic security of the "honest" fisherfolks as their catch continues to decrease.

Other fisherfolks are understood to have modified their boats to enable them to travel further at sea – up to the territorial boundaries with neighbouring countries; up to 35NM, which is 30NM more than they are legally allowed to go. Apart from exposing their personal security to further risk, as has happened in instances where they were mistaken as criminals by vessels and security personnel, there is an increased risk of conflict between them and the fisherfolks of the countries whose fishing grounds they are targeting. According to the Coordinating Chairman of the Akwa-Ibom State and the Niger Delta Artisanal Fishers Association of Nigeria (ARFAN), reduced catch is driving their members as far as the Cameroonian border, particularly the once-disputed Bakassi Peninsula which was bequeathed as fishing waters to Cameroon in 2002 (Okafor-Yarwood, 2015). In an interview for this research, the Coordinating Chairman noted that:

...we share a boundary with Cameroon and some of us now tend to fish around the waters, we get arrested and have to pay the Cameroonian *gendarme* [police] to be released.

This development and its attendant effects should not be underestimated, as it could potentially lead to a deterioration of the already unstable relationship between Nigeria and Cameroon; there have already been reports of violent clashes between the Nigerian fisherfolks and the Cameroonian gendarme (Okafor-Yarwood, 2019).

It follows that by engaging in illegal fishing as a response to the effect of illegal fishing by commercial and foreign vessels, local fisherfolk contribute to the cycle of depletion as the sustainability of the marine environment is further undermined. The national security of Nigerian thereof, is threatened by these activities because among other things, they hamper the state's ability to meet the fish food-security of its growing population, by aggravating the rate of fisheries depletion and putting other fishing communities at risk of fish food-insecurity, and in extreme cases, malnutrition (Bennett et al., 2018; UN, 2016). What is more, in their efforts to meet their needs, the actions of these fisherfolks further undermine the ability of Nigeria to meet some of their Sustainable Development Goals (SDGs),

especially SDG 14 which seeks to ensure the sustainable use of the ocean, marine and sea's resources by 2030 (Okafor-Yarwood, 2019).

## 4.2 Pipeline vandalisation/ fuel smuggling

The consequences of depleting fisheries, attributed to IUU fishing, is unemployment, social unrest, and poverty, especially in coastal communities across the Gulf of Guinea. According to Ali (2015) such vulnerabilities have led to violent behaviours at sea, as those who are previously engaged in the fishing sector look for alternative sources of livelihood, including engaging in illegal activities. Ali's submission is true for many communities in the Niger Delta where there are limited opportunities for subsistence outside fishing and farming, which is why the option of illegal activity is almost always the only alternative (Houeland, 2015; Odusote, 2016; Okafor-Yarwood, 2018).

One of the ways that some people in the Niger Delta have responded to threats to their human security is to engage in pipeline vandalisation. Pipeline vandalisation is the deliberate breaking of fuel or oil pipelines, with the intention of stealing petroleum products, or to sabotage the government (Okoli and Orinya, 2013). The fisherfolks interviewed for this research recognised the sensitivity of the subject, and accordingly described themselves as law abiding citizens. They noted however that they were aware of cases whereby some fisherfolks and/or a family member had engaged in pipeline vandalisation or taken fuel from a vandalised pipeline to supplement their income. Some implied that there had been times when they had themselves considered either engaging in pipeline vandalisation or siphoning fuel from a vandalised pipeline. However, the associated risk of getting caught or being killed should the pipeline catch fire had acted as deterrent.

Elsewhere, in an interview, two fisherfolks from one of the settlements remembered that in 2014, they had taken some fuel from an already vandalised oil pipeline, which they later sold on "the black market" in exchange for cash. The actions of these fisherfolks stemmed from the absence of any form of support from the government. The sensitivity of this subject means that it is impossible to get anyone to admit to their involvement as they know they risk being arrested by the police. However, interviews with representatives of the Navy confirmed that fisherfolks in the Niger Delta do indeed engage in pipeline vandalisation, as well as fuel smuggling. It was also stated in these interviews that some fisherfolks use their boats to convey stolen fuel, following the vandalisation of a pipeline, which they go on to sell in the black market and to other fisherfolks, including to shipping vessels operating in the area. The 2016 arraignment in court of eleven fishermen for their involvement in the vandalisation of a petroleum product pipeline provides further evidence of the involvement of some fisherfolks in pipeline vandalisation. Following their arrest, an estimated 220 drums of petrol valued at Naira \text{\text{N}5.3} million were recovered from the accused, who claimed to have obtained the goods from a vandalised pipeline for re-sale (Agency Reporter, 2016).

The vandalisation of pipelines are actions taken to mitigate the wider impact of IUU fishing and are a threat to the national security of Nigeria. This is because oil is the mainstay of the Nigerian economy. Crude oil derived from the Niger Delta accounts for 95 per cent of Nigeria's foreign exchange earnings, and 80 percent of the total revenue accruable to the Federal account. The GDP contribution from crude oil in 2017 was 8.68 per cent and 9.61 per cent in the first quarter of 2018, generating the bulk of the government's revenue (Okafor-Yarwood, 2018). The vast economic contributions of the oil sector have led the federal government to view any threat to the sustained production of oil as a threat to national security (Allen, 2019). The implications of pipeline vandalisation are loss of revenue and the continued pollution of the land and marine environment, which in turn undermines the existence of the Nigerian state, and the source of livelihood for individuals and communities that depend on the environment for subsistence (Aishatu, Chukwudi, and Hauwa, 2016). According to the Nigerian National Petroleum Corporation, (NNPC) Nigeria lost an estimated Naira ₹59,597 billion – estimated US\$166 million – to pipeline vandalism in 2014, of which Naira \$\frac{1}{2}264,370, million was from the vandalisation of pipelines carrying Bonny Light oil, which as the name suggests, is sourced from Bonny (Eboh, 2015). Since oil generates the bulk of Nigeria's government revenue, the loss of such revenue undermines the ability of the federal government to function effectively (Igbinovia 2014; Okoli and Orinya, 2013).

Pipeline vandalisation further undermines the national security of Nigeria by endangering the lives of Nigerians. Pipeline vandalisation has triggered fire outbreaks and resulted in the death of Nigerians and destruction of properties. It therefore threatens the human security of Nigerians, and by extension, the national security of Nigeria, as human and national security are mutually reinforcing and supportive of each other (UN Human Security Unit, 2009). Further, pipeline vandalisation which results in oil spillages pollutes the marine environment which acts as an additional stressor to depleting fish stocks, thereby undermining the ability of Nigeria to ensure the sustainable exploitation of its fisheries resources (Okafor-Yarwood, 2018).

## 4.3 Armed robbery at sea by fisherfolks

According to the Secretary General of the United Nations, IUU fishing encourages and/or has direct links to piracy/armed robbery at sea (UNSC, 2016), a view re-enforced by Denton and Harris (2019) who argue that increased IUU fishing results in increased incidences of piracy in West Africa. These submissions have resonance for the situation in the Niger Delta area of Nigeria, whereby a "select" number of fisherfolks respond to depleting fisheries by engaging in actions that amount to armed robbery at sea — thereby undermining the national security of Nigeria, as well as threatening the safety of other sea-fearers. The actions ascribed to the fisherfolks is restricted to armed robbery at sea, defined herein as any violent act other than the act of piracy which occurs within the territorial waters and under the jurisdiction of the sovereign state (IMO, 2013). The lack of opportunities for alternative sources of livelihood and depleting fisheries is identified as a factor that is driving young people from coastal

communities to illegal activities such as armed robbery at sea (Montclos 2012; Uddin, Phillips, and Austin, 2013). These actions further undermine the safety of other sea farers and the national security of Nigeria through reduced investment and revenue (Onuoha and Hassan, 2009).

The lack of statistical data makes it difficult to establish a direct evidentiary link between IUU fishing and armed robbery at sea in Nigeria, since fisherfolks are unwilling to disclose their involvement, admitting only second-hand or hearsay knowledge such as "I know a fisher that have engaged or acted as a look out... I heard of a fisher that have attacked a fishing vessel because they felt threatened..." which is understandable due to the sensitive nature of the threat. Nevertheless, there is evidence to conclude that fisherfolks engage in armed robbery at sea or indeed act as lookouts for robbers (Okafor-Yarwood, 2019). According to Ridley (2014), fisherfolks from the Niger Delta area are either coerced or paid by (pirates) sea robbers not to expose their illegal activities to the authorities. They are sometimes recruited as navigators, since they are more familiar with specific coastal routes. Supporting this claim, the director of NITOA noted that there is every chance that local fishers engage in armed robbery at sea to support their income. Specifically,

... 15 horse power is the average engine size for a fishing boat, when you see a supposed fishing boat coming at you at 75 horse power – which is more or less a speed boat, what comes to mind is that their intent is robbery... these local fishers are [also] used as baits for armed robbery, to identify potential [vessel] to attack.

While the foregoing are just some examples of fisherfolks engaging in armed robbery at sea, evidence emerging from the analysis of data from the Nigerian Navy, the Federal Department of Fisheries and NITOA is that armed robbery at sea exposes the IUU fishing activities of vessels operating in Nigeria. They imply that some of the fishing vessels that have fallen victims to armed robbery at sea in Nigeria's territorial waters were caught up in such attacks precisely because they were engaging in some form of IUU fishing, i.e. fishing in areas prohibited to them. In most cases, the authorities only become aware of the presence of such fishing vessels when there has been an attack or an incident, and they needed to be rescued. Representatives of the Nigerian Navy interviewed for this research acknowledged this occurrence, and it was also corroborated by the Director of Fish Trade of the Federal Department of Fisheries who noted:

...we are also aware that an estimated 20 per cent of IUU fishing occurs beyond the 5NM point. We are confident about this because it is also within this zone that pirates/armed robbers attack some of these vessels...

Piracy/ armed robbery have implications on the economic interests and stability of Nigeria, as armed robbery attacks against ships constrict the country's economic viability, as shipping companies began to avoid Nigerian waters (Editor, 2019). The impact of such attacks against ships, is an increase in insurance costs, which also translates into an increase in the price of imported goods (Wardin and Duda,

2013; Onuoha, 2012). The actions of sea robbers also undermine the sustainability of the fish trade in Nigeria through the loss of revenue, and diminishing opportunities for employment, as commercial fishing vessels are leaving the trade. At the same time, others look elsewhere for fishing licences.

Overall, incidences of armed robbery at sea puts additional pressures on the maritime security agencies, who are generally under-resourced and ill-equipped to deal with the threat; it also exacerbates the suffering of those who depend on the marine environment for subsistence. The NITOA withdrawal of almost 200 fishing vessels from the sea in 2008 due to continued attacks by sea robbers makes for a ready example. What followed was a temporary work stoppage for an estimated 20,000 workers, increases in the prices of seafood in the local market, and the resulting food and economic insecurity for affected households, albeit temporary (Onuoha, 2012). In recent times, incidences of sea robbery and kidnaps have resulted in reduced activities for trawlers registered in Nigeria, including members of NITOA. Such that between January and late February 2016, one-third of the 147 registered fishing/shrimping vessels in Nigeria were docked in the dockyard due to increasing incidences of piracy/sea robbery.

Elsewhere, the director of NITOA noted that locally owned fishing companies that once thrived and significantly contributed to the Nigerian economy are closing due to the threats they face at sea. He cited the reduced presence of the Tarabaroz Fishing Company, and the closure of Honey Well Fisheries Ltd as examples. The increased violent attacks against the members of NITOA have thus resulted in its members seeking to take their business elsewhere, as Nigerian waters though rich in fisheries resources, are now renown as unsafe, and economically intensive. It comes as no surprise to find that there is a clear reduction in the number of vessels registered to fish in Nigeria, reducing from 250 in 2003 to 145 in 2018 (Oritse, 2010; FCWC and CPCO, 2018). According to the Director of Monitoring, Surveillance and Control of the Nigeria Fisheries Department, in 2015 three shrimping vessels were deleted from the list of Nigeria's registered vessels as they sourced for licenses to operate in Brazil due to increased insecurity in Nigerian waters.

IUU fishing and its resulting implication, such as depleting fisheries, also threaten the human security of the fishmongers who depend on the fish catch from fisherfolks for subsistence. The following section explores how some fishmongers who are predominantly women have responded to IUU fishing and the effect on the national security of Nigeria.

## 4.4 Sex work

The impact of depleting fisheries resulting from IUU fishing by commercial/foreign vessels is not only felt by the fisherfolks, but also by fishmongers; reduced catches means less fish available for sale. This has resulted in some fish sellers, who are mostly women, resorting to alternative means of livelihood, such as sex work. In a region with limited support from the government, the fishmongers take specific advantage of the cash inducements of oil and other workers in the oil economy by turning to sex work,

(Anugwom and Anugwom, 2009; Okafor-Yarwood, 2018). According to a female boat owner interviewed for this research, IUU fishing by commercial/foreign vessels has resulted in the severe reduction in the number of catches made by her crewmembers. She went on to add that from her perspective and experience as a boat owner, this has affected the economic security of many people in the community, especially fishmongers. In order to make up for their lost income, some turn to sex work, a feasible alternative due to the presence of the NLNG company, whose employees are willing to patronise them.

Another lady, a fishmonger, noted that the women fishmongers are pressured by male fisherfolk to offer sexual favours in exchange for guaranteed supply. She cited her own experience as the main breadwinner, which meant she has to do everything she possibly can to provide for her family, even if it means "selling my body to make sure that my kids are fed". Analysis of the data suggests that the fishmongers who engage in sex work are likely to be unmarried or single parents. Some married fishmongers rely on their husband's ability to catch enough fish that they, in turn, can sell, or to make them eligible to apply for and receive a "love thy neighbour cooperative society loan". Clearly, the correlation between depleting fisheries and sex work needs to be researched further, as the number of participants who disclosed their involvement in sex work is insufficient to draw generalisable conclusions about the extent to which it is representative of women fishmongers' rational responses to the situation across the region. Such research would establish how female fishmongers are affected by depleting fisheries, the pervasiveness of sex work as a response to the changing circumstances, and how they navigate the stigma of being a sex worker, and its impact on their health and their family.

Nevertheless, the link between women in fisheries and sex work is not new; in Uganda, there have been cases reported of women being forced to pay/compete for limited supplies of fish in exchange for sex – "sex for fish" (Pearson et al., 2013). The practice of "sex for fish" is common in certain littoral communities' due to the decline of species and the resultant competition for the depleting resource. In coastal communities in Kenya, for example, fisherfolk give special access to fish to women with whom they have sex. Although such examples evince consensual trade (sexual) relationships, further examples from Zambia provides evidence that sex has been used as a coercive tool, whereby fisherfolks refuse to sell their fish to female mongers who refuse to engage in these sexual transactions (Matthews et al., 2012). Evidence from Bonny, Uganda, Kenya and Zambia reveal similarities, yet are disparate from each other, in that, fishmongers in Bonny also have to sell their bodies to non-fisherfolks for cash. Women fishmongers in Uganda, Kenya and Zambia reportedly enter into "sex for fish" transactions solely to be guaranteed supplies of the depleting resource.

Although the interviews revealed that only a minority – especially single women – turn to prostitution, their determination to ensure steady supplies and/or to supplement their income comes as no surprise. There exists already an established linkage between poverty and sex work in Nigeria – especially in the Niger Delta region. As Ajayi (2003)(James Olaitan Ajayi 2003) posits, many young

men and women are driven (or forced) into sex work due to poverty and poor family economic circumstances, which has contributed to the high prevalence of HIV/Aids in Nigeria. The FAO reports that the threat of HIV/Aids is more acute in fishing communities where fisheries are in decline (FAO, 2006). The FAO's position is supported by the fact that Bonny, like most communities in the Niger Delta region, has a high HIV/Aids prevalence rate (Okonko and Nnodim, 2015). The high rate of sex work in this region and the resulting increase in HIV cases (Udoh et al., 2009) is due primarily to the environmental degradation caused by the multinational oil companies. According to Udoh et al., (2009) this has triggered rural-to-urban migration, while fostering sex work and other risky sexual behaviours that make people vulnerable to HIV.

According to Okonko and Nnodim (2015) of the other local governments in Rivers State, Bonny had the second largest prevalence of HIV infections in 2010. The HIV/Aids prevalence level in the Island was 8.3 per cent in 2003, falling to 6.0 percent in 2005. These figures rose to 8.4 per cent in 2008 but declined again to 5.9 per cent in 2010 (Okonko and Nnodim, 2015). The population of Bonny is estimated at 170,000, and the majority depend on fisheries for subsistence. Therefore, the pervasiveness of HIV in fishing communities such as those in Bonny threatens the sustainability of indigenous knowledge about fisheries resource management, as well as economic growth in the region. As Matthews et al., (Matthews et al., 2012) observed, HIV/Aids have severe economic effect as fewer fisherfolks live enough to engage in investments that will encourage growth in their communities. According to Akintoye et al. (2016), the NLNG provided counselling and testing for 24, 256 persons – 14.27 per cent of the entire population, of whom 1842 persons, or 7.59 per cent of them, tested positive for HIV. This figure is worrying, especially so should the trend be representative of the situation across the other littoral communities in Nigeria and the wider Gulf of Guinea.

Importantly, sex work is linked to the prevalence of HIV/Aids in the Niger Delta region including Bonny — 30 per cent of sex workers in the region are said to be HIV positive (Udoh et al., 2009; Akintoye et al., 2016). This, coupled with the traditional mobility of fisherfolks makes the increasing incidences of HIV in communities such as Bonny a threat to public health, as the fisherfolks' mobility encourages the spread of the disease to other areas (Seeley and Allison, 2005; Matthews et al., 2012). Worse still, the more people who fall ill from HIV, the fewer fisherfolks are available to ensure the fish food security of the communities — and in turn, the less fish there is available to the fishmongers (Seeley and Allison, 2005).

The public health implications, and the potential threat to the GDP of Nigeria, makes HIV a threat to the national security. Specifically, Nigeria has the second highest HIV burden in the world -3.2 million of its population live with the virus, and the prevalence of the virus threatens the economic security of the country (Awofala and Ogundele, 2018; UNAIDS, 2017). The GDP contributions of the affected population will be diminished due to deteriorating health, which will result in lower productivity (Adesina, 2014). This is especially worrying for Nigeria given that according to the UN,

countries where the HIV prevalence rate is more than 20 per cent are expected to experience an estimated annual GDP reduction of 1 to 2 per cent (UN, 2001). This is expected to give rise to a 20 per cent loss in GDP contribution by 2020 (UN, 2001; Awofala and Ogundele, 2018) for Nigeria and other similarly heavily affected countries. Undoubtedly, the pandemic undermines the government's ability to invest money in other sectors as funds are diverted into HIV treatment. According to UNAIDs,

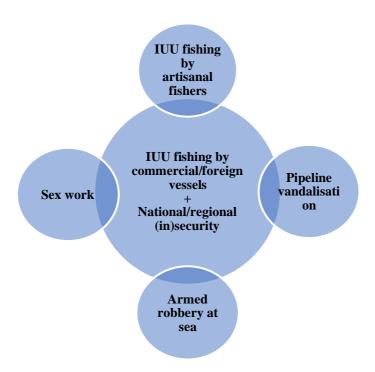
The number of people living with HIV on life-saving antiretroviral therapy in the country grew to more than one million by mid-2017... [this has led to an increase in spending on its treatment] from US\$ 300 million in 2007 to US\$ 730 million in 2013 (UNAIDS, 2017).

The effects of depleting fisheries, especially those arising from IUU fishing by commercial and foreign vessels, goes beyond stealing fish from some of the world's poorest, to posing a threat to the health security of the wider population, as fishmongers might resort to sex work as an alternative source of livelihood, which exposes them to diseases such as HIV/Aids

#### 5 Conclusion

The previous sections have shown that IUU fishing as a threat to human security – resulting in fear and want for the fisherfolks/fish mongers – implicitly threatens the national security of Nigeria, as the actions taken by those affected undermines sustainable livelihoods, the security of the maritime space and by extension inhibits the ability of the state to meet the needs of the people. The research analysis has shown that when a country is ineffective in fulfilling its traditional duty of safeguarding its internal features and territory, such a state loses legitimacy, as the people look elsewhere for some form of security. For Nigeria, such a response is in the shape of illegal activities.

Figure 2: IUU fishing as a threat to national security: response to depleting fisheries summarised (Source: author).



The overlapping relationships between the damaging effects of IUU fishing and other threats already prevalent in the country, which IUU fishing may exacerbate, are summarised in figure 2 above. The prevailing discussions highlight the need to broaden the concept of security, so that it encompasses non-military dimensions at the environmental, economic and social-political levels (Duffield, 1998). As Duffield (2013) notes, incorporating non-military agendas to national security is a good thing, however, other tenets of security such as human security can only be guaranteed within a state that is effective, and having institutions responsive to, and equipped to meet the needs of its people. Therefore, the responses to IUU fishing by "select" fisherfolks and fishmongers validates the argument on the relationship between an effective state and the sustainable exploitation of (fisheries) resources, of which the opposite, as we have seen in the Nigerian example, can be, in the final estimation, detrimental to national security.

If properly harnessed, the fishing industry can complement the oil sector, which is already seeing a downward spiral of the revenue it generates for Nigeria. However, in failing to implement measures that allows littoral communities to adapt to their vulnerabilities, Nigeria's example highlights the centrality of the state (in)effectiveness thesis to the human and national security discourse. It supports the notion that human and national security can only be actualised with an effective state supported by efficient institutions to fulfil the responsibilities incumbent of a sovereign state (Onuoha and Hassan, 2009). If IUU fishing is allowed to continue unabated, it can potentially result in conflict between states as fisherfolks are crossing borders in search of the depleting resource. The arguments presented in this

paper highlight the link between IUU fishing and illicit activities in Nigeria, a precarious relationship that not only aggravates the potential for inter-regional conflict over marine resources, as well as facilitating the arming of violent non-state actors, and fuelling insurgency in the country.

Finally, this paper has presented a critical analysis of the security debate and provided empirical evidence that highlights the inseparability of the human and national security discourse. In addressing security threats at sea in the Gulf of Guinea and beyond, there is the need first to understand how security threats at sea affect coastal communities and threatens their security. The paper recognizes the efforts of the Nigerian state to ensure a holistic response to maritime security, evidenced in the Abuja declaration of October 2019 following the Global Maritime Security Conference organised by NIMASA,<sup>9</sup> including enhancing the capacity of the Nigerian Navy, as well as championing regional initiatives aimed at maritime cooperation and enforcement. However, such efforts must be rooted in a commitment to improving the welfare of coastal communities, many of whom depend on the dwindling fish stock for subsistence. Otherwise, the cycle of insecurity breeding other insecurity will continue.

#### **Notes**

- 1. The fisherfolks who engage in illegal fishing are of the view that their actions are in no way illegal, as they are merely doing all they can to make up for reduced catch.
- Analysis of the data shows that fisherfolks and fishmongers have at some point engaged in illegal
  activities such as IUU fishing or know someone that has engaged in other unlawful activities,
  such as acting as lookouts for criminals who engage in armed robbery, or engaging in pipeline
  vandalization.
- 3. Fisherfolks in Bonny have on several occasions been faced with the challenge of not going to sea for at least six months due to oil leakages which damages their fishing gears and result in decline of select species. Nevertheless, they argue that since the areas are usually marked as off zones by the government without compensation, they are faced with no option than to fish in those restricted areas.
- 4. Sea robbers attacked a vessel belonging to Tarabaroz Fishing Company in 2009, which resulted in the death of its Captain, with another member of the crew sustaining a life-threatening injury.
- 5. Incidences of pipeline vandalisation are common in the Niger Delta area, as residents (not necessarily ex-fisherfolks) rely on stolen petrol from the vandalised pipelines to make ends meet, especially in times of fuel scarcity.

<sup>9</sup> The author was an invited speaker at the conference and presented a paper on maritime governance and the blue economy in the Gulf of Guinea.

#### References

- Adesina, Olubukola S. 2014. 'HIV / AIDS as a Threat to Nigeria's National Security'. *International Journal of Business and Social Science* 5 (5): 231–41.
- Adger, W. Neil. 2006. 'Vulnerability'. *Global Environmental Change* 16 (3): 268–81. https://doi.org/10.1016/j.gloenvcha.2006.02.006.
- Agency Reporter. 2016. '11 Fishermen Re-Arraigned over Pipeline Vandalism'. The Nation. 2016.
- Ahlers, Theodore, and John Nellis. 2016. 'Building Effective Institutions—The Biggest Challenge'. *Global Journal of Emerging Market Economies* 8 (2): 247–70. https://doi.org/10.1177/0974910116634471.
- Aishatu, Sanusi, Onovo Josiah Chukwudi, and Isa Hauwa. 2016. 'The Environmental Impact of Pipeline Vandalism A Challenge to Biodiversity in Portharcourt Area Of'. *Int'l Journal of Advances in Chemical Engg.*, & *Biological Sciences* 3 (1): 1–5.
- Akintoye, Oluyemi Ayorinde, Abiodun Komomo Eyong, Peter Okpe Agada, Opaminola Nicholas Digha, and Okibe James Okibe. 2016. 'Socio-Economic Implication of Nigeria Liquefied Natural Gas (NLNG) Project in Bonny Local Government Area, Rivers State, Nigeria'. *Journal of Geoscience and Environment Protection* 04 (05): 63–79. https://doi.org/10.4236/gep.2016.45007.
- Ali, Kamal-deen. 2015. 'The Anatomy of Gulf of Guinea Piracy'. *Naval College Review* 68 (1): 93–118.
- Ali, Kamal-Deen. 2015. *Maritime Security Cooperation in the Gulf of Guinea: Prospects and Challenges*. Leiden & Boston: BRILL NIJHOFF.
- Allen, Fidelis. 2019. 'Violence, Politics and Food Insecurity in Nigeria'. In *Global Food Politics and Approaches to Sustainable Consumption: Emerging Research and Opportunities*, edited by Luke Amadi and Fidelis Allen, 78–117. United States of America: IGI Global.
- Altieri, Andrew H., Seamus B. Harrision, Janina Seemann, Rachel Collin, Robert J. Diaz, and Nancy Knowlton. 2017. 'Tropical Dead Zones and Mass Mortalities on Coral Reefs'. *PNAS* 114 (14): 3660–65. https://doi.org/www.pnas.org/cgi/doi/10.1073/pnas.1621517114.
- Amin, Julius A. 2018. 'Conflict in Cameroon Is Extracting a Heavy Toll on Ordinary People'. The Conversation. 2018.
- Anugwom, Edlyne Ezenongaya, and Kenechukwu N. Anugwom. 2009. 'The Other Side of Civil Society Story: Women, Oil and the Niger Delta Environmental Struggle in Nigeria'. *GeoJournal* 74 (4): 333–46. https://doi.org/10.1007/s10708-008-9239-4.
- Atul Kohli. 2016. 'State and Economic Development'. In *The Oxford Handbook of Historical Institutionalism*, edited by Orfeo Fioretos, Tulia Falleti, and Adam Sheingate, 167–80. United Kingdom.
- Awofala, Awoyemi Abayomi, and Olusegun Emmanuel Ogundele. 2018. 'HIV Epidemiology in Nigeria'. *Saudi Journal of Biological Sciences* 25 (4): 697–703. https://doi.org/10.1016/j.sjbs.2016.03.006.
- Babangida, Gen. Ibrahim. 1992. 'Sea Fisheries (Fishing) Regulations of Nigeria'. Laws of the Federation of Nigeria. 1992. http://faolex.fao.org/docs/pdf/nig120899.pdf.
- Bateman, S. 2011. 'Navies and the Maintenace of Good Order in Peacetime'. In *The Politics of Maritime Power: A Survey*, edited by A.T.H. Tan, 95–114. London & New York: Routledge.
- Belhabib, Dyhia, Krista Greer, and Daniel Pauly. 2018. 'Trends in Industrial and Artisanal Catch Per Effort in West African Fisheries'. *Conservation Letters* 11 (1): 1–10. https://doi.org/10.1111/conl.12360.

- Belhabib, Dyhia, Rashid Ussif Sumaila, and Philippe Le Billon. 2019. 'The Fisheries of Africa: Exploitation, Policy, and Maritime Security Trends'. *Marine Policy*, 1–13.
- Belhabib, Dyhia, U. Rashid Sumaila, Vicky W. Y. Lam, Dirk Zeller, Philippe Le Billon, Elimane Abou Kane, and Daniel Pauly. 2015. 'Euros vs. Yuan: Comparing European and Chinese Fishing Access in West Africa'. *Plos One* 10 (3): 1–22. https://doi.org/10.1371/journal.pone.0118351.
- Bellamy, Alex J, and M. McDonald. 2002. 'The Utility of Human Security': Which Humans? What Security? A Reply to Thomas & Tow'. *Security Dialogue* 33 (3): 373–77.
- Bennett, Abigael, Pawan Patil, Kristin Kleisner, Rader. Doug, John Virdin, and Xavier Basurto. 2018. 'Contribution of Fisheries to Food Security: Current Knowledge, Policy and Research'. *NI Report 18-02*. Durham NC. https://nicholasinstitute.duke.edu/sites/default/files/publications/contribution\_of\_fisheries\_to\_food\_and\_nutrition\_security\_0.pdf.
- Beseng, Maurice. 2019. 'Cameroon's Choppy Waters: The Anatomy of Fisheries Crime in the Maritime Fisheries Sector'. *Marine Policy* 108: 10. https://doi.org/https://doi.org/10.1016/j.marpol.2019.103669.
- Binet, T., P. Failler, and A. Thorpe. 2012. 'Migration of Senegalese Fishers: A Case for Regional Approach to Management'. *Maritime Studies* 11 (1): 1–14. https://doi.org/10.1186/2212-9790-11-1.
- Bock, P.G., and M. Berkowitz. 1966. 'The Emerging Field of National Security'. World Politics 19 (1): 122–36.
- Booth, Ken. 2005. 'Beyond Critical Security Studies'. In *Critical Security Studies and World Politics*, edited by Ken Booth, 259–78. Boulder, Colorado: Lynne Rienner.
- ———. 2007. *Theory of World Security*. United Kingdom: Cambridge University Press.
- Brauch, H.G. 2005. 'Environment and Human Security: Towards Freedom from Hazard Impacts'. Bonn.
- Bueger, Christian. 2015. 'What Is Maritime Security?' Marine Policy 53: 159–64.
- Buzan, B. 2004. 'A Reductionist, Idealistic Notion That Adds Little Analytical Value'. *Security Dialogue* 35 (3): 369–70. https://doi.org/10.1177/096701060403500326.
- Commission on Human Security. 2003. 'Human Security Now'. New York. http://www.un.org/humansecurity/content/human-security-now.
- Coning, E. de. 2011. 'Transnational Organized Crime in the Fishing Industry: Focus on: Trafficking in Persons Smuggling of Migrants Illicit Drugs Trafficking'. Vienna. http://www.unodc.org/documents/human-trafficking/Issue\_Paper\_-\_TOC\_in\_the\_Fishing\_Industry.pdf.
- Council of the European Union, and EEAS. 2014. 'EU Strategy on the Gulf of Guinea'. Foreign Affairs Council Meeting. 2014.
  - https://eeas.europa.eu/sites/eeas/files/eu\_strategy\_on\_the\_gulf\_of\_guinea\_7.pdf.
- Cyrille Serge Atonfack Guemo. 2018. 'IUU Fishing: 03 Foreign Vessels Boarded in Cameroon's EEZ'. Video Documentation Shared by the Ministry of Defence, Cameroon via Linkedin. 2018.
  - https://www.linkedin.com/feed/update/activity:6445397870060277760/.
- Denton, Ginger L, and Jonathan R Harris. 2019. 'The Impact of Illegal Fshing on Maritime Piracy: Evidence from West Africa'. *Studies in Conflict & Terrorism*, 1–20. https://doi.org/10.1080/1057610X.2019.1594660.
- Doumbouya, Alkaly, Ousmane T Camara, Jesophus Manie, Jeremias F. Intchama, Abdoulie Jarra, Salifu Ceesay, Assane Guèye, et al. 2017. 'Assessing the Effectiveness of Monitoring Control and Surveillance of Illegal Fishing: The Case of West Africa'. *Frontiers in Marine Science* 4 (March). https://doi.org/10.3389/fmars.2017.00050.

- Duffield, John. 1998. World Power Forsaken: Political Culture, International Institutions, and German Security Policy After Unification. Stanford, California: Stanford University Press.
- Duffield, Mark R. 2013. *Development, Security and Unending War: Governing the World of Peoples*. Cambridge: Polity Press.
- Duffield, Mark, and Nicholas Waddell. 2006. 'Securing Humans in a Dangerous World'. *International Politics* 43 (1): 1–23.
- Eboh, Michael. 2015. 'Nigeria Loses N59.6bn to Pipeline Vandalism NNPC'. *Vanguard*, July 2015. http://www.vanguardngr.com/2015/07/nigeria-loses-n59-6bn-to-pipeline-vandalism-nnpc/.
- Editor. 2019. 'Sanitising Nigerian Maritime Space, Perspectives of Secure Anchorage Approach, Sanity of Contracts'. The Guardian Nigeria. 2019. https://guardian.ng/business-services/maritime/sanitising-nigerian-maritime-space-perspectives-of-secure-anchorage-approach-sanity-of-contracts/.
- Evans, Peter, Evelyne Huber, and John Stephens. 2014. 'The Political Foundations of State Effectiveness'. 2015. Edited by Miguel Centeno, Atul Kohli, and Deborah Yashar. *State Building in the Developing World*. 24. Watson Institute for International Studies.
- FAO. 2001a. 'New International Plan of Action Targets Illegal, Unreported and Unregulated Fishing'. FAO Press Release 01/11. 2001.
  - http://www.fao.org/waicent/ois/press\_ne/presseng/2001/pren0111.htm.
- ——. 2001b. Report of and Papers Presented at the Expert Consultation on Illegal, Unreported and Unregulated Fishing, Sydney, Australia, 15-19 May 2000. Rome: United Nations Food and Agricultural Organization.
  - http://www.fao.org/docrep/005/Y3274E/y3274e04.htm#bm04.
- ———. 2002. *Implementation of International Plan of Action to Prevent, Deter and Eliminate, Illegal, Unreported and Unregulated Fishing*. Rome: United Nations Food and Agriculture Organization. https://doi.org/10.1080/13880290109353986.
- ——. 2006. 'Impact of HIV/AIDS on Fishing Communities: Policies to Support Livelihoods, Rural Development and Public Health'. Rome. http://www.fao.org/docrep/010/ai022e/ai022e00.htm.
- ——. 2018. 'The State of World Fisheries and Aquaculture: Meeting the Sustainable Development Goals'. *The State of the World*. Rome. http://www.fao.org/3/i9540en/i9540en.pdf.
- FCWC, and CPCO. 2018. 'West Africa Task Force: Interagency Cooperation in the FCWC Region'. WATF Report. 2018. https://stopillegalfishing.com/wp-content/uploads/2017/06/WATF\_Cooperation\_Report\_FINAL\_Web\_DPS.pdf.
- Flanders Marine Institute. 2019. 'Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM)'. Marineregions.Org. 2019.
- Gegout, Catherine. 2016. 'Unethical Power Europe? Something Fishy about EU Trade and Development Policies'. *Third World Quarterly* 37 (12): 2192–2210. https://doi.org/10.1080/01436597.2016.1176855.
- Gjørv, G.H. 2017. 'Finding Gender in the Artics: A Call to Intersectionality and Diversity Methods'. In *The Interconnected Arctic UArctic Congress 2016*, edited by Kirsi Latola and Hannele Savela, 293–304. Switzerland: Springer.
- Greaves, Wilfried. 2012. 'Insecurities of Non-Dominance: Retheorising Human Security and Environmental Change in Developed States'. In *Natural Resources and Social Conflict: Towards Critical Environmental Security*, edited by M Schnurr and L Swatuck, 63–82. London & New York: Palgrave Macmillan.
- Griffiths, Martin. 2011. *Rethinking International Relations Theory*. United Kingdom: Palgrave Macmillan.

- Hall, Martin A., Dayton L. Alverson, and Kaija I. Metuzals. 2000. 'By-Catch: Problems and Solutions'. *Marine Pollution Bulletin* 41 (1–6): 204–19. https://doi.org/10.1016/S0025-326X(00)00111-9.
- Hayden, Patrick. 2004. 'Constraining War: Human Security and the Human Right to Peace'. *Human Rights Review* 6 (1): 35–55. https://doi.org/10.1007/s12142-004-1035-z.
- Houeland, C. 2015. 'Casualisation and Conflict in the Niger Delta: Nigerian Oil Workers' Unions between Companies and Communities'. *Revue Tiers Monde* 224 (4): 25–46.
- Igbinovia, P.D. 2014. *Oil Theft and Pipeline Vandalisation in Nigeria*. Ibadan: Safari Books LTD.
- IMO. 2013. 'Code of Conduct Concerning the Repression of Piracy, Armed Robbery against Ships, and Illicit Maritime Activity in West and Central Africa'. Yaoundé. http://www.imo.org/en/OurWork/Security/WestAfrica/Documents/code\_of\_conduct signed from ECOWAS site.pdf.
- James Olaitan Ajayi. 2003. *The HIV-AIDS Edpidemic in Nigeria: Some Ethical Considerations*. Rome: Gregorian Biblical BookShop.
- Jimoh, A., and M. Bashir. 2012. '70 Percent of W/Africa Illegal Weapons in Nigeria –Gen Abdulkadir'. *Sunday Trust*, 19 July 2012. http://www.dailytrust.com.ng/sunday/index.php/news/8965-70-percent-of-wafrica-illegal-weapons-in-nigeria-gen-abdulkadir.
- Jolly, R., and D.P. Ray. 2006. 'The Human Security Framework and National Human Development Reports: A Review of Experiences and Current Debates'. *UNDP*. http://hdr.undp.org/sites/default/files/nhdr\_human\_security\_gn.pdf.
- Katikiro, Robert E., and Jairos J. Mahenge. 2016. 'Fishers' Perceptions of the Recurrence of Dynamite-Fishing Practices on the Coast of Tanzania'. *Frontiers in Marine Science* 3 (November): 1–14. https://doi.org/10.3389/fmars.2016.00233.
- Kaunert, Christian, and Sarah Leonard, eds. 2013. European Security Governance and the European Neighbourhood after Lisbon Treaty. Oxford: Routledge.
- Khong, Y.F. 2001. 'Human Security: A Shotgun Approach to Alleviating Human Misery?', Global Governance'. *Global Governance* 7 (3): 231–36.
- Klein, N. 2012. *Maritime Security and the Law of the Sea*. 2nd ed. Oxford: Oxford University Press.
- Krause, Keith. 2004. 'Is Human Security More Than Just a Good Idea?' 30. Edited by BICC. *Brief 30: Promoting Security: But How and For Whom?* Geneva. http://www.hsrgroup.org/docs/Publications/Additional-Publications/Andrew-Mack-BonnCenterForConversionBrief-Concept-Human-Security.pdf.
- Lawson, Rowena, and Michael Robinson. 1983. 'Artisanal Fisheries in West Africa'. *Marine Policy* 7 (4): 279–90. https://doi.org/10.1016/0308-597X(83)90041-6.
- Lindley, Jade, Sarah Percy, and Erika Techera. 2019. 'Illegal Fishing and Australian Security Illegal Fishing and Australian Security'. *Australian Journal of International Affairs* 73 (1): 82–99. https://doi.org/10.1080/10357718.2018.1548561.
- Mack, A. 2004. 'A Signifier of Shared Values Security'. *Security Dialogue* 35 (3): 366–67. Map Library. n.d. 'Africa'. Accessed 19 January 2020. http://www.maplibrary.org/library/stacks/Africa/index.htm.
- Martin, Mary, and Taylor Owen. 2010. 'The Second Generation of Human Security: Lessons from the UN and EU Experience'. *International Affairs* 86 (1): 211–24. https://doi.org/10.1111/j.1468-2346.2010.00876.x.
- Matthew, Richard A. 2000. 'The Environment as a National Security Issue'. *Journal of Policy Histroy* 12 (1): 101–22.
- Matthews, Elizabeth, Jamie Bechtel, Easkey Britton, Karl Morrison, and Caleb McClennen. 2012. 'A Gender Perspective on Securing Livelihoods and Nutrition in Fish-Dependent

- Coastal Communities'. Bronx, New York. http://anewcourse.org/wp-content/uploads/2013/04/WCS-Gender-Fisheries-2012.pdf.
- Morgenthau, H. J. 1960. *Politics Among Nations: The Struggle for Power and Peace*. 3rd ed. New York: McGraw-Hill.
- Newman, Edward. 2010. 'Critical Human Security Studies'. *Review of International Studies* 36 (1): 77–94. https://doi.org/10.1017/S0260210509990519.
- NIC. 2016. 'Global Implications of Illegal , Unreported , and Unregulated ( IUU ) Fishing'. United States of America. https://fas.org/irp/nic/fishing.pdf.
- Nick Ridley. 2014. *Terrorism in East and West Africa: The Under-Focused Dimension*. Cheltenham (UK), Northampton, MA (USA): Edward Elgar Publishing.
- Nigeria Department of Fisheries. 2007. 'Nigeria Department of Fisheries; Fourth Edition 1995-2007'. Abuja.
- Nkeze. 2018. 'Bakassi: Cameroon Intercepts Weapon Bearing Boats'. Cameroon Tribune. 2018. https://www.cameroon-tribune.cm/article.html/20368/fr.html/bakassi-cameroon-navy-intercepts-weapon-bearing-boats#.
- Odita, S. 2018. 'Nigeria Loses \$70m to Illegal Fishing, Others Yearly'. The Guardian Nigeria. 2018. https://guardian.ng/news/nigeria-loses-70m-to-illegal-fishing-others-yearly/.
- Odusote, Abiodun. 2016. 'Nigeria: The Matrix Between Fragility of Livelihoods and Conflict'. *Journal of Global Initiatives: Policy, Pedagogy, Perspective* 10 (2): 9–30.
- Ohlsson, Leif. 2000. 'Livelihood Conflicts: Linking Poverty and Environment as Causes of Conflict'. Stockholm: Environmental Policy Unit.
- Okafor-Yarwood, I., and D. Belhabib. 2020. 'The Duplicity of the European Union Common Fisheries Policy in Third Countries: Evidence from the Gulf of Guinea.' *Ocean and Coastal Management Coastal Management* 184 (1): 11.
- Okafor-Yarwood, Ifesinachi. 2018. 'The Effects of Oil Pollution on the Marine Environment in the Gulf of Guinea the Bonga Oil Field Example'. *Transnational Legal Theory* 9 (3–4): 254–71.
- ——. 2019. 'Illegal, Unreported and Unregulated Fishing, and the Complexities of the Sustainable Development Goals (SDGs) for Countries in the Gulf of Guinea'. *Marine Policy* 99: 414–22. https://doi.org/10.1016/j.marpol.2017.09.016.
- Okoli, A.C., and S. Orinya. 2013. 'Oil Pipeline Vandalism and Nigeria's National Security'. Global Journal of HUMAN SOCIAL SCIENCE Political Science Volume 13 Issue 5 Version 1.0 Year 2013 Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc. (USA) 13 (5): 66–75. http://www.technokontrol.com/pdf/pipelines/7-Oil-Pipeline-Vandalism-and-Nigerias.pdf.
- Okonko, I.O., and L.C. Nnodim. 2015. 'Trends in HIV Prevalence from 2008 to 2012 among Young Adults in Port Harcourt, Nigeria'. *African Health Sciences* 15 (3): 776–88.
- Omoaka, John. 2018. 'Nigeria Loses \$20m Annually to Illegal Fishing'. Ships & Ports. 2018. http://shipsandports.com.ng/nigeria-loses-20m-annually-illegal-fishing/.
- Onuoha, F.C., and H.I. Hassan. 2009. 'National Security Implications of Sea Piracy in Nigeria's Water'. *The Nigerian Army Quarterly Journal* 5 (1): 1–28.
- Onuoha, Freedom. 2012. 'Piracy and Maritime Security in the Gulf of Guinea: Nigeria as a Microcosm'. Qatar.
  - http://studies.aljazeera.net/ResourceGallery/media/Documents/2012/6/12/201261294647291734Piracy and Maritime Security in the Gulf of Guinea.pdf.
- Oritse, G. 2010. 'Fishing: Nigeria Loses N30bn to Pirate Attacks'. Vanguard Nigeria. 2010. https://www.vanguardngr.com/2010/06/fishing-nigeria-loses-n30bn-to-pirate-attacks/.
- Osinowo, A.A. 2015. 'Combating Piracy in the Gulf of Guinea'. Conflict Trends.

- Owen, T. 2004. 'Human Security Conflict, Critique and Consensus: Colloquium Remarks and a Proposal for a Threshold-Based Definition.' *Security Dialogue* 35 (3): 373–87. https://doi.org/10.1177/0967010604047555.
- Paris, R. 2004. 'Still an Inscrutable Concept'. *Security Dialogue* 35 (3): 370–72. https://doi.org/10.1177/096701060403500327.
- Paris, Roland. 2001. 'Human Security: Paradigm Shift or Hot Air?' *International Security* 26 (2): 87–102. https://doi.org/10.1162/016228801753191141.
- Paul Battersby. 2014. *The Unlawful Society: Global Crime and Security in a Complex World*. United Kingdom: Palgrave Macmillan.
- Pearson, Georgina, Caroline Barratt, Janet Seeley, Ali Ssetaala, Georgina Nabbagala, and Gershim Asiki. 2013. 'Making a Livelihood at the Fish-Landing Site: Exploring the Pursuit of Economic Independence amongst Ugandan Women'. *Journal of Eastern African Studies* 7 (4): 751–65. https://doi.org/10.1080/17531055.2013.841026.
- Pérouse de Montclos, Marc-Antoine. 2012. 'Maritime Piracy in Nigeria: Old Wine in New Bottles?' *Studies in Conflict & Terrorism* 35 (7–8): 531–41. https://doi.org/10.1080/1057610X.2012.684651.
- Pomeroy, Robert. 2010. 'Addressing Overcapacity in the Small-Scale Marine Fisheries of Vietnam'. Malaysia.
- Poppy, G M, P C Jepson, J A Pickett, and M A Birkett. 2014. 'Achieving Food and Environmental Security: New Approaches to Close the Gap'. *Philosophical Transactions of the Royal Society* 369: 6. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3928881/pdf/rstb20120272.pdf.
- Porter, G. 1995. 'Environmental Security as a National-Security Issue'. *Current History* 94: 218–22.
- Robert Kaplan. 1994. 'The Coming Anarchy'. The Atlantic. 1994. https://www.theatlantic.com/magazine/archive/1994/02/the-coming-anarchy/304670/.
- Seeley, Janet A., and Edward H. Allison. 2005. 'HIV/AIDS in Fishing Communities: Challenges to Delivering Antiretroviral Therapy to Vulnerable Groups'. *AIDS Care Psychological and Socio-Medical Aspects of AIDS/HIV* 17 (6): 688–97. https://doi.org/10.1080/09540120412331336698.
- Sohel Uddin, Ronke Phillips, and Henry Austin. 2013. 'Fishing for Crime': Desperation, Lack of Opportunities behind Nigerian Piracy, Experts Say'. *NBC News*, November 2013.
- Tadjbakhsh, S. 2007. 'Human Security in International Organizations: Blessing or Scourge?' *The Journal of Human Security* 4: 8–15.
- Tadjbakhsh, Shahrbanou. 2009. "'Human Security": Looking Back before Looking Forward'. http://www.birjand.ac.ir/ichswa/downloads/Dr Tajbakhsh's Paper in ICHSWA.pdf.
- The World Bank. 2013. 'West Africa: Fishing Communities Restore Health to Ocean Habitats', 5 June 2013. http://www.worldbank.org/en/news/feature/2013/06/05/west-africa-fishing-communities-restore-health-to-ocean-habitats.
- ——. 2016a. 'Safety and Sustainability for Small-Scale Fishers in West Africa'. News. 2016. http://www.worldbank.org/en/news/feature/2016/05/16/safety-and-sustainability-for-small-scale-fishers-in-west-africa.
- . 2016b. 'World Bank Country and Lending Groups'. Country Classifications. 2016. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups.
- Thomas, Nicholas, and William T. Tow. 2002. 'The Utility of Human Security: Sovereignty and Humanitarian Intervention'. *Security Dialogue* 33 (2): 177–92. https://doi.org/10.1177/0967010602033002006.
- Till, Geoffrey. 2013. Seapower a Guide for the Twenty First Century. 3rd ed. London &

- New York: Routledge.
- Udoh, Isidore a, Joanne E Mantell, Theo Sandfort, and Myron a Eighmy. 2009. 'Potential Pathways to HIV/AIDS Transmission in the Niger Delta of Nigeria: Poverty, Migration and Commercial Sex.' *AIDS Care* 21 (5): 567–74. https://doi.org/10.1080/09540120802301840.
- UN. 2001. 'AIDS as a Security Issue'. Fact Sheets. 2001. http://www.un.org/ga/aids/ungassfactsheets/html/fssecurity\_en.htm.
- ——. 2016. 'Goal 14: Life below Water: Why It Matters'. Sustainable Development Goals. 2016. http://www.un.org/sustainabledevelopment/oceans/.
- UN Human Security Unit. 2009. 'Human Security in Theory and Practice: An Overview of the Human Security Concept and the United Nations Trust Fund for Human Security'. http://www.un.org/humansecurity/sites/www.un.org.humansecurity/files/human\_security\_in\_theory\_and\_practice\_english.pdf.
- UNAIDS. 2017. 'Closing the HIV Resource Gap in Nigeria with More Domestic Funding'. Press Centre. 2017. http://www.unaids.org/en/resources/presscentre/featurestories/2017/december/20171214\_nigeria.
- UNCTAD. 2017a. *A Man-Made Tragedy: The Overexploitation of Fish Stocks*. Youtube. https://www.youtube.com/watch?v=\_dIwFzGt5ug&t=52s.
- . 2017b. 'Fishery Exports and the Economic Development of Least Developed Countries: Bangladesh, Cambodia, the Comoros, Mozambique, Myanmar and Uganda'. Geneva. https://unctad.org/en/PublicationsLibrary/aldc2017d2\_en.pdf.
- UNDP. 1994. 'United Nations Development Programme: Human Development Report'. Rome: United Nations Environmental Programme.
- UNSC. 2016. 'Report of the Secretary-General on the Situation with Respect to Piracy and Armed Robbery at Sea off the Coast of Somalia'.
- Virdin, John, Mimako Kobayashi, Stephen Akester, Tibor Vegh, and Stephen Cunningham. 2019. 'West Africa's Coastal Bottom Trawl Fishery: Initial Examination of a Trade in Fishing Services'. *Marine Policy* 100: 288–97.
- Voelkner, Nadine. 2010. 'Governmentalizing the State: The Disciplining Logic of Human Security'. In *Security and Global Governmentability: Globalization and the State*, edited by Miguel de Larrinaga and G. Doucet Marc, 132–49. London & New York: Routledge.
- Vreÿ, Francois. 2015. 'Good Order at Sea off West Africa'. In *Towards Good Order at Sea: African Experiences*, edited by Thomas Mandrup and Francois Vreÿ, 183–206. South Africa: Sun Press.
- Walt, S.M. 1991. 'The Renaissance of Security'. *International Studies Quarterly* 35 (2): 211–39.
- Wardin, K., and D. Duda. 2013. 'Characteristics of Piracy in the Gulf of Guinea and Its Influence on International Maritime Transport in the Region'. In *Marine Navigation and Safety of Sea Transportation: STCW, Maritime Education and Training (MET), Human Resources and Crew Manning, Maritime Policy, Logistics and Economic Matters*, edited by A Weintrit and T. Neumann, 177–84. London: Taylor and Francis.
- Wittenberg, Dick. 2004. 'Oil, Gas and Mining: The Bonny Island LNG Project: In Bonny It Never Becomes Night Anymore'. ECA Watch. 2004. http://www.eca-watch.org/problems/oil\_gas\_mining/bonnyisland/BonnyIsland130704.html.
- Zeller, Dirk, and Daniel Pauly. 2016. 'Methods for Catch and Allocation'. Sea Around Us. 2016. http://www.seaaroundus.org/.