

Fisheries extractivism and the right to subsistence: Conflicting governance models and the legal structures that enact them

Bryan P. Galligan, SJ^{a,*}

^a Department of Philosophy, Loyola University Chicago, 1032 West Sheridan Road, Chicago, IL 60660, USA

* Corresponding author. *Email address:* bgalligan@luc.edu. *Present address:* Jesuit Justice and Ecology Network Africa (JENA), P.O. Box 1540, 00502, Nairobi. *Twitter:* @galligan_sj.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declarations of interest: none.

Acknowledgments: My thanks go to Dr. Joy Gordon of Loyola University Chicago and Monica Galligan of California State University, Monterey Bay for their comments on this manuscript. I am also grateful to the two anonymous reviewers for their helpful feedback.

Galligan, B. P. (2021). Fisheries extractivism and the right to subsistence: Conflicting governance models and the legal structures that enact them. *Marine Policy*, 133, 104729.

<https://doi.org/10.1016/j.marpol.2021.104729>

Fisheries extractivism and the right to subsistence: Conflicting governance models and the legal structures that enact them

Abstract

Approaches to global fisheries governance generally fall into one of two broad categories, tending to rely either on an extractivist model that prioritizes macroeconomic growth or a norms-based model that subordinates economic processes to ethical social objectives. While global fisheries could contribute much more effectively and directly to fulfilling the human right to subsistence (an ethical norm that is as universal and binding as any under international law), their potential to do so is undermined by legal structures that favor the extractivist model and fail to legislate ethical norms. These legal structures undermine the human right to subsistence, in large part by marginalizing small-scale fisheries, which provide for the subsistence needs of many more food-insecure people around the world than do their industrial counterparts. After illustrating the conflict between extractivism and ethical norms in international fisheries law, this article turns to the case of South African small-scale fisheries, which provides a more concrete and place-based view of these power dynamics and demonstrates the resilience of the extractivist paradigm in the face of norms-based challenges. If global fisheries are to contribute more fully to the realization of the human right to subsistence, the extractivist model will need to be seriously constrained and ethical norms will have to be given pride of place in fisheries law and policy.

Keywords: Small-scale fisheries, South Africa, UNCLOS, human rights, subsistence

1. Introduction

Recent years have seen much discussion on the ethics of fisheries governance. This literature is highly diverse: some authors have adopted a human rights approach [1–4], while others have adopted a social justice [5–7] or food sovereignty [8] framework. Other authors have chosen to avoid foregrounding explicit ethical analysis in favor of interrogating more concrete or practical issues that have deep ethical implications, such as neoliberalism [9–11]; food security [12–18]; illegal, unreported, and unregulated (IUU) fishing [19–21]; or fisheries subsidies [22–24], to name a few. And yet, despite this diversity of approaches, methods, and conclusions, virtually all of these authors agree that marine and freshwater capture fisheries could be doing much more than they are to provide for people's basic needs and contribute to a more just and sustainable world. There is no shortage of reasons for the gap between what capture fisheries could achieve and what they do achieve, and this article does not attempt a global analysis of these issues. Neither does it contend with any non-anthropocentric ethical arguments, although those approaches are certainly legitimate and valuable. Rather, it is argued here that there are two competing (although not *a priori* irreconcilable) models of fisheries governance: an extractivist model that emphasizes economic growth and a norms-based model that is primarily concerned with human wellbeing (Table 1).

Table 1. Some elements of the extractivist and norms-based models of fisheries governance.

	Extractivist Model	Norms-Based Model
In Legislation	Clear and binding provisions are jurisdictional or economic in nature.	Clear and binding provisions address ethical social objectives.
General Policy Goal	Macroeconomic growth	Fulfillment of human rights (or other ethical demands)

Fisheries-Specific Policy Goals	Economic efficiency and maximum exploitation	Just distribution of access rights and maximum contribution to local food security
Fish and Fishery Products	Defined primarily as commodities	Defined primarily as food

The extractivist model of fisheries governance, which is roughly consistent with what others have called a "resourcist" approach [8,25], primarily views marine living resources as potential drivers of economic growth. This model's goal is to extract marine resources at or close to their maximum sustainable yield (MSY), trade them as commodities, and optimize the economic efficiency of these processes. The macroeconomic growth this model pursues is either considered to be the best way to contribute to overall human wellbeing or is considered to be a sufficient good in its own right. Either way, normative considerations are secondary if they enter the discussion at all.

The norms-based model, on the other hand, foregrounds and prioritizes ethical and legal norms as governing principles for fisheries. Examples of this model would include a sustainable livelihoods [26] or human rights-based [2,27] approach to fisheries management; the FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) [28] could also be considered to follow the norms-based model. Under this model, marine living resources are utilized first to provide food and livelihoods for those who most need them. Economic growth is considered to be a means, not an end, and states take on legal obligations to manage their fisheries in ways designed to fulfill their ethical commitments.

A significant, and often overlooked, deciding factor between these two models is the legal landscape created by legislation and treaties. In what follows, international and South African law are analyzed to reveal how legal instruments exercise power in the domain of

fisheries governance. While these instruments are often celebrated for their stated objectives or their optimistic introductory language, it is shown here that they in fact facilitate economic exploitation by reserving clear, binding, and enforceable provisions for economic and jurisdictional concerns while failing to legislate clear normative requirements, especially when it comes to the allocation of fishing rights. In doing so, these legal instruments create a framework in which powerful actors are able to pursue their interests freely while vulnerable small-scale fishers are left unprotected. Here, small-scale fisheries (SSF) are understood to be less capital-intensive and to involve shorter fishing trips than their industrial counterparts, to provide resources that are mainly destined for local consumption, and to include both artisanal and subsistence fisheries as subcategories [29]. Although many ethical norms can be, and are, applied to fisheries governance, this article foregrounds the human right to subsistence.

2. The right to subsistence

When it comes to the use and allocation of natural resources, it is an ethical imperative that the right to subsistence take priority over the pursuit of profit in all cases. It is true that subsistence need not be the only concern; there is, after all, growing recognition of the many ways in which thriving marine ecosystems contribute to human wellbeing beyond the fulfillment of basic rights, and a variety of non-anthropocentric environmental ethical approaches exist that emphasize the inherent value of other-than-human beings [30,31]. However, subsistence remains an unfulfilled goal on a global level: according to recent estimates from the FAO, almost 10% of the world's population is "exposed to severe levels of food insecurity" and "an estimated two billion people in the world did not have regular access to safe, nutritious, and sufficient food in 2019" [32]. Tragically, this most basic of rights remains unfulfilled for a large portion of the

planet's population. It follows from this reality that any domain that could contribute more to the realization of people's right to subsistence, must do exactly that.

In addition to its status as a pressing humanitarian issue, subsistence is also an internationally recognized human right and it carries the weight of international law. The Universal Declaration of Human Rights (UDHR), which is both legally binding and as universal as any international agreement can be, specifically recognizes that "everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing, and medical care" [33]. It further places this right to subsistence among a list of economic, social, and cultural rights that it considers "indispensable for [a person's] dignity" [33].

More recently, the United Nations also adopted the 2030 Agenda for Sustainable Development, which is centered on its 17 Sustainable Development Goals (SDGs) and is generally seen as a follow-up effort to the Millennium Development Goals, which contained similar content [34,35]. The SDGs reaffirm the international community's normative commitment to the human right to subsistence and lend it specificity. The relevant goals include Goal 1 to end poverty; Goal 2 to end hunger and achieve food security; Goal 10 to reduce inequality; and Goal 13 to take action on climate change, which specifically urges the agenda's signatories to prioritize the "least developed countries and small island developing states, including focusing on women, youth, and local and marginalized communities" [34]. The SDGs also provide a precedent for specifically considering fisheries to be an integral part of the international community's commitment to the human right to subsistence. Not only do they include Goal 14 ("conserve and sustainably use the oceans, seas, and marine resources for sustainable development"), but the document specifically describes the goals as "integrated and

indivisible" [34,36]. Under this framework of indivisibility, managing marine resources and reducing food insecurity are made part of the same normative commitment.

The UDHR and the SDGs are both legally binding and are signed by all member states of the UN. This means that the norms they establish, including the human right to subsistence, are as universal as any ethical commitment can be in the international system. Together, they provide a more than sufficient basis to assert the primacy of human rights and sustainable development in virtually any governance process and they set an ambitious agenda for the management of global fisheries.

2.1 Where subsistence and fisheries meet: the need to prioritize SSF

Capture fisheries, especially SSF, can and do make substantial contributions to the realization of the right to subsistence, and a norms-based governance model could support and enhance those contributions. On a global level, the FAO reports that fish account for about 17 percent of animal protein consumption, and "in Bangladesh, Cambodia, the Gambia, Ghana, Indonesia, Sierra Leone, Sri Lanka, and some [small island developing states], fish contributed 50 percent or more of total animal protein intake" in 2017 [37]. Furthermore, demand for fish is increasing, both globally and in specific countries and regions [15,37]. Marine living resources represent now, and will represent in the future, a crucial food source for billions.

It is also true, however, that the harvest of marine species does not in all cases contribute to subsistence, whether through direct production of food for consumption or through the generation of livelihoods [13]. As Loring et al. point out, "food production does have a bearing on food security, but so do the foods that are being produced, how, where, when, and by whom they are produced, how they are distributed and marketed, and whether all people have equal

access" [17]. In some cases, increased fisheries production, even within ecologically sustainable limits, can undermine food security, for example when distant water fleets overfish the coastal waters of developing nations, "leaving few fishes for small-scale and artisanal fishers to generate income and subsistence" [38,39]. In these cases, distant water fleets contribute to increased food production and have the added benefit of economic efficiency, but they also directly endanger poor coastal communities. A similar maldistribution is produced by global seafood markets, where developing countries export high value seafood products to the developed world in exchange for similar quantities of low quality seafood [40,41]. While low quality seafood is better news for food security than no seafood would be, the level at which imports are entering developing nations' economies means that they are unlikely to contribute to subsistence in a meaningful way in the absence of ambitious and well-executed policies of wealth redistribution [41,42]. The relationship between fish production and subsistence is highly context specific [13].

Small-scale fisheries, however, are being increasingly recognized for their ability to produce fish in a way that directly contributes to the subsistence of those most in need. In terms of employment alone, SSF are responsible for over 90% of fisheries sector jobs, most of which are located in developing countries [43]. In addition to the livelihoods they support, SSF are also able to provide food more directly to local communities than their industrial counterparts [17]. According to the FAO, "in developing countries, small-scale fisheries produce more than half the fish catch, and 90-95 percent of this is consumed locally in rural settings where poverty rates are high and good-quality nutrition is sorely needed" [37]. Especially where formal markets and global supply chains do not provide for subsistence needs, SSF are often able to generate and distribute food and income in just and sustainable ways [5]. This is why, when it comes to human rights, the international community's priority ought to be "strengthening the fishing rights

of SSF against the claims of larger, wealthier, and more privileged fishing entities" [3]. When an extractivist model is followed, the lack of enforceable norms works in favor of larger entities and undermines the success of SSF [5,9,10]. A norms-based model, on the other hand, can prioritize the interests of SSF and provide for better human rights outcomes.

3. Global fisheries extractivism

Despite the international community's clear normative commitment to the right to subsistence, global fisheries governance has largely followed an extractivist model. Recent years have seen welcome developments in so-called "soft law" instruments, that is, nonbinding documents and agreements such as the FAO's SSF Guidelines, but the actual obligations and rights that states have under international law work against the UDHR and the SDGs. This serves to produce a governance landscape for fisheries that undermines the right to subsistence. The UN Convention on the Law of the Sea (UNCLOS) [44] provides a stark example of this dynamic: while its rhetoric appears to be aligned with subsistence, it concretely creates a legal structure that authorizes economic exploitation.

3.1 Extractivism in UNCLOS

UNCLOS begins with some laudatory and beautiful preambulatory language. The states parties name their "desire to settle, in a spirit of mutual understanding and cooperation, all issues relating to the law of the sea" and highlight "the historic significance of this Convention as an important contribution to the maintenance of peace, justice, and progress for all peoples of the world" [44]. Among the listed goals are a "legal order" that will provide for the "equitable and efficient" utilization of marine resources [44]. The document also announces that "the

achievement of these goals will contribute to the realization of a just and equitable international economic order," evoking the UDHR's promise of the same [33]; this international economic order is described as one "which takes into account the interests and needs of mankind as a whole and, in particular, the special interests and needs of developing countries" [44]. This language is very encouraging and it would seem to set the stage for a series of treaty provisions designed to create a more just and sustainable world. Unfortunately, however, the treaty's preamble contains no binding or enforceable language and the states parties' announced desire to "take into account. . . the special interests and needs of developing countries" was never given flesh in the body of the treaty [44].

Throughout UNCLOS, the most binding provisions are consistently reserved for the protection of states' economic resources and any "explicit linkage between fisheries and food security or poverty eradication is often minimal" [45]. Consider Article 56, which provides the legal basis for states' exclusive economic zones (EEZ) [44]. The language here is strong and unequivocal: "the coastal state has sovereign rights" in the EEZ [44]. Moreover, a clear limit to those rights is drawn in Article 57: "the exclusive economic zone shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured" [44]. With respect to the EEZ, each state's right to exploit the resources off its own coast is clearly and effectively defined. The procedure for ensuring maximal extraction of fisheries resources from each state's waters is similarly clear and effective. Under Article 61, coastal states "shall determine" the allowable catch of the living marine resources in their waters [44]. A second provision in Article 62 attempts to ensure that the allowable catch is actually harvested; "where the coastal state does not have the capacity to harvest the entire allowable catch, it shall . . . give

other states access to the surplus" [44]. By using the verb 'shall' in both cases, the treaty imposes a clear and binding requirement on its signatories. They have taken on a true obligation.

Normative subsistence concerns, on the other hand, are often absent and, when present, are qualified by language that imposes no strong requirements. For example, when Article 62 provides states with instructions for how they are to allocate their surplus allowable catch, it declares that

the coastal state shall take into account all relevant factors, including, inter alia, the significance of the living resources of the area to the economy of the coastal state concerned and its other national interests, . . . the requirements of developing states in the region or subregion in harvesting part of the surplus, and the need to minimize economic dislocation [44].

These are important concerns. The recognition of a "need to minimize economic dislocation" could serve to protect SSF from industrial competition and, as has already been discussed, the "requirements of developing states," especially the subsistence needs of their citizenry, give rise to an ethical claim that they be granted priority access to marine resources. And yet, despite the importance of these normative concerns, this provision is remarkably weak. The stipulation that a state "take into account" some concern is very different from actually requiring that they use it as the primary basis for the allocation of fishing rights. Additionally, the insertion of "*inter alia*" into the text means that states can justify their decisions to allocate fishing rights based on virtually any other criterion. Other provisions that mention the needs of developing states or the nutritional needs of states' populations are couched in similar, and similarly nonbinding, language. UNCLOS simply does not prioritize the right to subsistence. Indeed, what it does prioritize are the privileges it grants to wealthier states and industrial fishing interests that enable them to continue a pattern of economic exploitation.

There are also two notable instances where normative concerns were written out of UNCLOS. The first is the definition of 'optimum utilization.' As Van der Burgt points out, the

1958 UN Convention on Fishing and Conservation of the Living Resources of the High Seas prioritized food security in its definition of this term [45]. Where Article 2 of the convention describes what it calls "optimum sustainable yield," it clearly stipulates that "conservation programs should be formulated with a view to securing *in the first place* a supply of food for human consumption" (emphasis added) [46]. This early version of optimum utilization gave pride of place to food security. UNCLOS, however, dropped that normative concern. While it uses the term "optimum utilization" in Article 62, no definition is provided, and food security is not mentioned. Under UNCLOS, "optimum" can now mean whatever a state wants it to mean; the inclusion of ethical norms is purely discretionary. It is true that some states exercise this discretion in progressive ways. For example, optimum yield is normally lower than MSY in the United States for conservation purposes [47] and Djibouti so strongly prioritizes SSF that industrial fishers are wholly prohibited from harvesting resources in that country's EEZ [48]. However, progressive outcomes are generally exceptions to the rule, and the discretion granted to individual states under UNCLOS, especially with respect to ethical concerns, remains a key factor in allowing these exceptions to remain in the minority.

The removal of food security concerns from the definition of optimum utilization is not the only occasion on which a norms-based framework was rejected in the drafting of UNCLOS. According to Van der Burgt, the relationship between fisheries and food security and the pursuant "need to prioritize the consumption of the population of coastal states" came up repeatedly during the negotiations [45]. Various additions and modifications were proposed, but none of them made it into the final document [45]. It would seem that the parties involved in drafting UNCLOS were simply not interested in protecting human rights. Their interests lay,

rather, in the protection of economic resources and their maximum exploitation; their interest was fisheries extractivism.

3.2 Extractivism is the norm

UNCLOS provides one clear example of the extractivist model of fisheries governance and its systematic neglect of the right to subsistence. Sadly, UNCLOS is not an isolated example; today, fisheries extractivism has become its own kind of norm. First, in instruments like UNCLOS, it functions as a legal norm that overrides competing priorities with stronger ethical claims, such as the right to subsistence. Second, the extractivist model has also become the norm in fisheries governance in the sense that it is overwhelmingly the normal state of affairs. At the end of her analysis of *The Contribution of International Fisheries Law to Human Development*, Nienke Van der Burgt concludes that the international legal instruments that govern fisheries are simply "not designed to contribute to poverty eradication" [45]. Although nonbinding instruments have increasingly used norms-based models in recent years [28], and despite the fact that progress has been made in many places [36,49], power relations in global fisheries remain thoroughly one-sided.

This one-sided functioning of power strengthens and protects maximally extractive fishing practices while failing to protect human rights and prioritize SSF. As a result, small-scale fishers often find themselves in conflict with industrial fishing operations. While fisheries conflicts come in many forms [50], have various drivers [51], and are still subject to significant knowledge gaps [52], it can nevertheless be said that conflict between small-scale fishers and maximally extractive fishing entities is a common and oft-repeated story. Pauly et al. and Atta-Mills et al. point to the pattern of distant water fleets outcompeting developing countries' local

SSF for scarce marine resources [38,39], and it would seem that this story presents one of the overarching patterns of exploitation in African fisheries as a whole, where Belhabib et al. find that since 2004, SSF catches have decreased despite increasing effort while industrial catches have increased [48]. After surveying each of the continent's large marine ecosystems (LMEs), their conclusion is that "conflicts over coastal African fisheries have *mostly* been the result of competition between industrial and small-scale fishers" (emphasis added) [48]. The FAO's SSF Guidelines point to the widespread existence of these conflicts in other regions as well [28]. When fisheries extractivism collides with SSF in this way, the stakes are quite high: coastal communities' right to subsistence is directly threatened.

4. Extractivism v. subsistence in South African fisheries

The conflict between the extractivist and norms-based models is illustrated well by the development of South African fisheries governance in the post-apartheid era. South African citizens enjoy strong human rights protections under the 1996 constitution [53], but those rights have often been undermined, in and beyond the realm of fisheries, by the government's commitment to neoliberal economic policies [54]. These policies are directly aligned with the extractivist model of fisheries governance. Turning to the context of South Africa allows for a clearer illustration of how the conflict between these models plays out, and also demonstrates how entrenched economic dynamics can prop up the extractivist model even when that model has lost normative legitimacy. While others have argued that the South African government's failure to implement a successful and just small-scale fisheries policy has largely been the result of procedural and capacity challenges [55,56], it is argued here that the legal frameworks at play

provided vested interests with so much latitude that possibilities for successful reform were severely limited from the start.

4.1 Democracy and disappointment

Before South Africa's 1994 transition to democracy, the apartheid government had ensured that all of the country's commercial fishing rights were allocated to a small number of white-owned companies [57]. The country's pelagic fisheries had been central to Afrikaner nationalism's economic ideology and a marine economy had been established whose main features included industrial extractivism, high levels of production, and the exclusion of the country's black majority [58]. When apartheid ended, small-scale fishers, who in many cases had been forced to break fisheries laws to provide for their subsistence, were hopeful that they would be included and their rights recognized under the new regime [59]. Encouraging policy developments materialized quickly. The new Marine Living Resources Act (MLRA) legally recognized subsistence fishers and one of its listed objectives was "to address historical imbalances and achieve equity" [60]. The number of rights holders increased from around 300 before the transition to 5,837 in 2004 [57]. By 2006, historically disadvantaged individuals accounted for 85% of the fishing workforce [57].

Unfortunately, these early sources of hope did not translate into meaningful inclusion for South Africa's small-scale fishers. Neoliberal economic policies and the end of international trade sanctions resulted in a substantial "post-apartheid dividend" for the country's established (industrial) fishing operations [58]. They found new sources of revenue in export markets [58] and were often able to buy up quotas allocated to poor fishers, which simultaneously expanded the share of the catch available to established companies and excluded SSF [6]. The MLRA was

also not nearly as pro-SSF as some had thought. As was the case with UNCLOS, the most binding provisions of the MLRA were reserved for the protection of economic interests and there were no norms-based requirements for the allocation of fishing rights [60]. Furthermore, the much-lauded list of objectives and principles that included references to "historical imbalances" and the need for "equity" was legally weak. The only operational requirement was that fisheries regulations "have regard to the following objectives and principles." There was no requirement that those objectives and principles be implemented as hard criteria for policy decisions. Neither was there any indication made as to how regulators ought to prioritize ethical norms relative to the other objectives and principles listed, one of which was "economic growth" [60]. The MLRA was, and remains, an essentially extractivist document.

On the level of implementation, the government did initiate processes to provide access rights to subsistence fishers, but progress was slow and uneven, and commercial interests were consistently prioritized over the needs of food insecure coastal fishing communities [59]. Target species that were determined to be of high economic value were not made available to subsistence fishers [57], regardless of whether they had fished or consumed them in the past [59]. As a result, SSF in whole regions of the country were denied fishing rights simply because their traditional target species were deemed to be too valuable [59]. By 2006, some argued that the situation for SSF and subsistence fishers had become even worse than it had been under apartheid [59].

4.2 Taking extractivism to court

Although the MLRA legally recognized subsistence fishers, it had failed to do the same for other (artisanal) SSF [60]. Additionally, despite these legal recognitions, it concretely

functioned so as to undermine coastal people's right to subsistence [6]. In the ten years after its passage, many people lost access to their traditional livelihoods and fell even deeper into poverty than they had been under apartheid [6]. This led to increasing tension between the government and small-scale fishers, the formation of a popular movement to advocate on coastal communities' behalf [6], and, eventually, a class action lawsuit [6,55]. As Sowman et al. point out, a key argument in the lawsuit "was that the government's failure to allocate rights to this group of fishers had violated their fundamental Constitutional rights" [55]. The prevailing extractivist model was thus confronted with a strong norms-based legal challenge, and in a rare opportunity to adjudicate between the two models, the Equality Court responded by affirming the supremacy of human rights over extractivist economic concerns. The 2007 ruling ordered interim relief for excluded small-scale fishers, the development of a new small-scale fisheries policy (the SSFP), and led to an amendment to the MLRA [55].

It seemed like human rights norms had gone to court and won. The 2012 SSFP was heralded as a "paradigm shift" [55] and the corresponding 2014 amendment to the MLRA that legally recognized artisanal as well as subsistence fishers was likewise celebrated [61,62]. And yet, in the years since these developments, familiar dynamics have continued to undermine the right to subsistence of people in coastal communities. Implementation of the SSFP has been slow to nonexistent and some scholars and stake holders have noted that references to it are conspicuously absent from government implementation plans [56,62]. Additionally, some small-scale fishers argue that they are being excluded by the policy's method of allocating rights to communities rather than to individuals [63]. Eight years after the SSFP was released, South African SSF were still reported to be in a state of crisis [56,62].

Although many scholars point to legal, procedural, and capacity-related hurdles [55,56], the crisis in South African SSF can be traced directly back to the extractivist model's continued success. The 2014 amendment to the MLRA, a key outcome of the 2007 ruling, did not contain any substantial changes apart from the legal recognition of more fishers. It still excludes binding normative requirements and retains its basic extractivist structure [61]. The SSFP, while promising, was probably always unrealistic in that it attempted to reform SSF while leaving the extractivist model intact. As Sowman et al. argue, "the paradigm shift proposed by the policy would require that South Africa's fisheries governance as a whole be re-structured and the ideological basis upon which it rests be transformed" [55]. As long as the government remains committed to the extractivist model, it will not be capable of norms-based reform.

It is also worth noting that the extractivist model continues to be favored in the domain of knowledge production as well. Although large-scale South African fisheries continue to be relatively well-managed, Cochrane et al. found that the government does not have the capacity or the will to produce the types of knowledge that would allow for the effective management and inclusion of SSF. Their survey of official Fisheries Branch research papers revealed that less than one percent included any mention of the human aspects of fisheries [56]. In the meantime, neoliberal economic policies and the transferable quota system have sufficiently strengthened industrial fishing interests to such an extent that SSF will continue to find it hard to compete [6,58]. For South African fisheries to move beyond the extractivist norm, economic growth will have to be subordinated to ethical objectives, such as the equitable inclusion of SSF and the improvement of fisheries' contributions to food security, at all levels of fisheries governance. While this type of transformation cannot be carried out through legislative changes alone, a more clear and ethically binding legislative framework would be an important step.

5. Conclusion

The international community's ethical commitment to the right to subsistence is contradicted by its commitment to fisheries extractivism. Since UNCLOS, norms-based requirements have consistently been left out of legally binding fisheries instruments or circumscribed by language that is vague and nonbinding. In the name of maximal resource extraction, industrial fishing concerns are outfishing and outcompeting the world's small-scale fisheries. And in a world where living marine resources could make a much more substantial contribution to the food security and livelihoods of coastal populations, they are instead fished and overfished in order to drive macroeconomic growth. In the meantime, the extractivist model of fisheries governance has come to function as its own type of norm. It protects industrial fishing interests and macroeconomic priorities by removing or eschewing ethical obligations and it directly threatens the right to subsistence through the maldistribution of wealth, fishing rights, and food. Even where there are explicit efforts at norms-based reform, these powerful interests are able to persist. As the case of South Africa's SSF shows, the extractivist model is so entrenched in law, practice, and knowledge production that it remains dominant even after a court ruling that reasserted small-scale fishers' human rights.

If the world's fisheries are to one day meet their potential in fulfilling coastal peoples' right to subsistence, the extractivist model will have to be severely constrained. Small-scale fisheries will need to be given clear priority where conflicts occur, and human rights norms will have to be centered and operationalized at every level of fisheries governance. This will not happen without the inclusion of clear, binding, and enforceable ethical norms in both international treaties and national legislation. This does not mean that all industrial fishing must

come to an end. It is more than legitimate for industrial fishers to target species unavailable to SSF, either because they are located far offshore or because their exploitation requires advanced technology [57]. It is likewise legitimate for industrial fishers to sustainably harvest any marine resources remaining after subsistence needs have been met. However, where food security is a concern, SSF must be allowed to fish to their capacity without competition or interference from industrial fleets. The right to subsistence cannot be compromised. Unfortunately, asserting the primacy of human rights in this way will require a very different approach to legislation and treaty making, an approach that is unafraid to enact binding ethical norms at the expense of powerful economic interests. Until this balance is shifted, the world's fisheries will continue to be a site of marginalization and impoverishment for millions of small-scale fishers and the billions of people they help feed.

References

1. E.H. Allison, B.D. Ratner, B. Asgard, R. Willmann, R. Pomeroy, J. Kurien, Rights-based fisheries governance: from fishing rights to human rights, *Fish Fish.* 13 (2012) 14–29. <https://doi.org/10.1111/j.1467-2979.2011.00405.x>
2. E.H. Allison, B. Asgard, R. Willmann, Human rights approaches to governing fisheries, *MAST* 10 (2011) 5–13. http://www.marecentre.nl/mast/documents/MAST10.2_Editorial.pdf
3. A.M. Song, A. Soliman, Situating human rights in the context of fishing rights – Contributions and contradictions, *Mar. Policy* 103 (2019) 19–26. <https://doi.org/10.1016/j.marpol.2019.02.017>
4. A.M. Song, Human dignity: A fundamental guiding value for a human rights approach to fisheries? *Mar. Policy* 61 (2015) 164–170. <https://doi.org/10.1016/j.marpol.2015.08.013>

5. P.J. Cohen, E.H. Allison, N.L. Andrew, J. Cinner, L.S. Evans, M. Fabinyi, L.R. Garces, S.J. Hall, C.C. Hicks, T.P. Hughes, S. Jentoft, D.J. Mills, R. Masu, E.K. Mbaru, B.D. Ratner, Securing a just space for small-scale fisheries in the blue economy, *Front. Mar. Sci.* 6 (2019). <https://doi.org/10.3389/fmars.2019.00171>
6. M. Isaacs, Individual transferable quotas, poverty alleviation and challenges for small-country fisheries policy in South Africa, *MAST* 10 (2011) 63–84.
http://www.marecentre.nl/mast/documents/MAST10.2_Isaacs.pdf
7. M. Isaacs, M. Hara, J. Raakjær, Has reforming South African fisheries contributed to wealth redistribution and poverty alleviation? *Ocean Coast. Manag.* 50 (2007) 301–313.
<https://doi.org/10.1016/j.ocecoaman.2006.11.002>
8. C.Z. Levkoe, K. Lowitt, C. Nelson, “Fish as food”: Exploring a food sovereignty approach to small-scale fisheries, *Mar. Policy* 85 (2017) 65–70.
<https://doi.org/10.1016/j.marpol.2017.08.018>
9. E. Pinkerton, R. Davis, Neoliberalism and the politics of enclosure in North American small-scale fisheries. *Mar. Policy* 61 (2015) 303–312. <https://doi.org/10.1016/j.marpol.2015.03.025>
10. E. Pinkerton, Hegemony and resistance: Disturbing patterns and hopeful signs in the impact of neoliberal policies on small-scale fisheries around the world, *Mar. Policy* 80 (2017) 1–9.
<https://doi.org/10.1016/j.marpol.2016.11.012>
11. M.R. Kalina, A. Mbereko, B. Maharaj, A. Botes, Subsistence marine fishing in a neoliberal city: A political ecology analysis of securitization and exclusion in Durban, South Africa, *J. Polit. Ecol.* 26 (2019) 363–380. <https://doi.org/10.2458/v26i1.23008>

12. D. Belhabib, U.R. Sumaila, D. Pauly, Feeding the poor: Contribution of West African fisheries to employment and food security, *Ocean Coast. Manag.* 111 (2015) 72–81.
<https://doi.org/10.1016/j.ocecoaman.2015.04.010>
13. C. Béné, R. Arthur, H. Norbury, E.H. Allison, M. Beveridge, S. Bush, L. Campling, W. Leschen, D. Little, D. Squires, S.H. Thilsted, M. Troell, M. Williams, Contribution of fisheries and aquaculture to food security and poverty reduction: Assessing the current evidence, *World Dev.* 79 (2016) 177–196. <https://doi.org/10.1016/j.worlddev.2015.11.007>
14. R.B. Cabral, B.S. Halpern, S.E. Lester, C. White, S.D. Gaines, C. Costello, 2019. Designing MPAs for food security in open-access fisheries. *Sci. Rep.* 9, 8033.
<https://doi.org/10.1038/s41598-019-44406-w>
15. C.Y. Chan, N. Tran, S. Pethiyagoda, C.C. Crissman, T.B. Sulser, M.J. Phillips, Prospects and challenges of fish for food security in Africa, *Glob. Food Secur.* 20 (2019) 17–25.
<https://doi.org/10.1016/j.gfs.2018.12.002>
16. Q. Ding, X. Chen, R. Hilborn, Y. Chen, Vulnerability to impacts of climate change on marine fisheries and food security, *Mar. Policy* 83 (2017) 55–61.
<https://doi.org/10.1016/j.marpol.2017.05.011>
17. P.A. Loring, D.V. Fazzino, M. Agapito, R. Chuenpagdee, G. Gannon, M. Isaacs, Fish and food security in small-scale fisheries, in: R. Chuenpagdee, S. Jentoft (Eds.), *Transdisciplinarity for Small-Scale Fisheries Governance: Analysis and Practice*, Springer International Publishing, Cham, Switzerland, 2019, pp. 55–73. https://doi.org/10.1007/978-3-319-94938-3_4
18. T. McClanahan, E.H. Allison, J.E. Cinner, Managing fisheries for human and food security, *Fish Fish.* 16 (2015) 78–103. <https://doi.org/10.1111/faf.12045>

19. B.L. Gallic, A. Cox, An economic analysis of illegal, unreported and unregulated (IUU) fishing: Key drivers and possible solutions, *Mar. Policy* 30 (2006) 689–695.
<https://doi.org/10.1016/j.marpol.2005.09.008>
20. G.A. Petrossian, Preventing illegal, unreported and unregulated (IUU) fishing: A situational approach, *Biol. Conserv.* 189 (2015) 39–48. <https://doi.org/10.1016/j.biocon.2014.09.005>
21. U.R. Sumaila, J. Alder, H. Keith, Global scope and economics of illegal fishing, *Mar. Policy* 30 (2006) 696–703. <https://doi.org/10.1016/j.marpol.2005.11.001>
22. U.R. Sumaila, N. Ebrahim, A. Schuhbauer, D. Skerritt, Y. Li, H.S. Kim, T.G. Mallory, V.W.L. Lam, D. Pauly, 2019. Updated estimates and analysis of global fisheries subsidies. *Mar. Policy*. 109, 103695. <https://doi.org/10.1016/j.marpol.2019.103695>
23. C.W. Clark, G.R. Munro, U.R. Sumaila, Subsidies, buybacks, and sustainable fisheries, *J. Environ. Econ. Manag.* 50 (2005) 47–58. <https://doi.org/10.1016/j.jeem.2004.11.002>
24. A.M. Cisneros-Montemayor, U.R. Sumaila, 2019. Busting myths that hinder an agreement to end harmful fisheries subsidies. *Mar. Policy*. 109, 103699.
<https://doi.org/10.1016/j.marpol.2019.103699>
25. F. Berkes, Shifting perspectives on resource management: Resilience and the reconceptualization of ‘natural resources’ and ‘management’, *MAST* 9 (2010) 13–40.
http://www.marecentre.nl/mast/documents/Mastvol9no1_Berkes.pdf
26. E.H. Allison, B. Horemans, Putting the principles of the Sustainable Livelihoods Approach into fisheries development policy and practice, *Mar. Policy* 30 (2006) 757–766.
<https://doi.org/10.1016/j.marpol.2006.02.001>
27. R. Willmann, N. Franz, C. Fuentevilla, T.F. McInerney, L. Westlund, A human rights-based approach in small-scale fisheries: Evolution and challenges in implementation, in: S. Jentoft,

- R. Chuenpagdee, M.J. Barragán-Paladines, N. Franz (Eds.), *The Small-Scale Fisheries Guidelines: Global Implementation*, Springer, Cham, Switzerland, 2017, pp. 763–787.
<https://doi.org/10.1007/978-3-319-55074-9>
28. FAO, Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication. <http://www.fao.org/documents/card/en/c/I4356EN> (2015).
 29. FAO, FAO Term Portal, <http://www.fao.org/faoterm/en/?defaultCollId=21> (accessed 14 July 2021).
 30. E.H. Allison, J. Kurien, Y. Ota, D.S. Adhuri, J.M. Bavinck, A. Cisneros-Montemayor, M. Fabinyi, S. Jentoft, S. Lau, T.G. Mallory, A. Olukaju, I. van Putten, N. Stacey, M. Voyer, N. Weeratunge, The human relationship with our ocean planet. <https://oceanpanel.org/blue-papers/HumanRelationshipwithOurOceanPlanet> (2020).
 31. K. McShane, Anthropocentrism vs. nonanthropocentrism: Why should we care? *Environ. Values* 16 (2007) 169–185. <https://www.jstor.org/stable/30302252>
 32. FAO, IFAD, UNICEF, WFP, WHO, The State of Food Security and Nutrition in the World 2020: Transforming food systems for affordable healthy diets (2020).
<http://www.fao.org/3/ca9692en/online/ca9692en.html>
 33. UN General Assembly. Universal Declaration of Human Rights. A/RES/217 A (Dec. 10, 1948). <https://www.un.org/en/universal-declaration-human-rights/>
 34. UN General Assembly. Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1 (Oct. 21, 2015). <https://sdgs.un.org/2030agenda>
 35. UN General Assembly. Millennium Declaration. A/RES/55/2 (Sep. 8, 2000).
<https://www.ohchr.org/EN/ProfessionalInterest/Pages/Millennium.aspx>

36. K.L. Cochrane, Reconciling sustainability, economic efficiency and equity in marine fisheries: Has there been progress in the last 20 years? *Fish Fish.* (2020) 1–26.
<https://doi.org/10.1111/faf.12521>
37. FAO. The State of World Fisheries and Aquaculture 2020: Sustainability in action. (2020).
<http://www.fao.org/3/ca9229en/ca9229en.pdf>
38. D. Pauly, R. Watson, J. Alder, Global trends in world fisheries: impacts on marine ecosystems and food security, *Philos. Trans. R. Soc. B Biol. Sci.* 360 (2005) 5–12.
<https://doi.org/10.1098/rstb.2004.1574>
39. J. Atta-Mills, J. Alder, U.R. Sumaila, The decline of a regional fishing nation: The case of Ghana and West Africa, *Nat. Resour. Forum* 28 (2004) 13–21.
<https://doi.org/10.1111/j.0165-0203.2004.00068.x>
40. F. Asche, M.F. Bellemare, C. Roheim, M.D. Smith, S. Tveteras, Fair enough? Food security and the international trade of seafood, *World Dev.* 67 (2015) 151–160.
<https://doi.org/10.1016/j.worlddev.2014.10.013>
41. R.A. Watson, R. Nichols, V.W.Y. Lam, U.R. Sumaila, Global seafood trade flows and developing economies: Insights from linking trade and production, *Mar. Policy* 82 (2017) 41–49. <https://doi.org/10.1016/j.marpol.2017.04.017>
42. C.P. Timmer, The macro dimensions of food security: Economic growth, equitable distribution, and food price stability, *Food Policy* 25 (2000) 283–295.
[https://doi.org/10.1016/S0306-9192\(00\)00007-5](https://doi.org/10.1016/S0306-9192(00)00007-5)
43. D.J. Mills, L. Westlund, G. de Graaf, Y. Kura, R. Willman, K. Kelleher, Under-reported and undervalued: Small-scale fisheries in the developing world, in: N. Andrew, R.S. Pomeroy

- (Eds.), *Small-Scale Fisheries Management: Frameworks and Approaches for the Developing World*, CABI, Cambridge, 2011, pp. 1–15. <https://hdl.handle.net/20.500.12348/1123>
44. UN General Assembly. Convention on the Law of the Sea. A/RES/37/66 (Dec. 3, 1982).
https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf
 45. N. Van der Burgt, *The Contribution of International Fisheries Law to Human Development: An Analysis of Multilateral and ACP-EU Fisheries Instruments*, Martinus Nijhoff, Boston, 2013.
 46. UN Convention on Fishing and Conservation of the Living Resources of the High Seas. U.N.T.S. vol. 559, p. 285 (Apr. 29, 1958).
https://legal.un.org/ilc/texts/instruments/english/conventions/8_1_1958_fishing.pdf
 47. Magnuson-Stevens Fishery Conservation and Management Act, 18 U.S.C. §§ 1801 *et seq* (2007). <https://www.fisheries.noaa.gov/resource/document/magnuson-stevens-fishery-conservation-and-management-act>
 48. D. Belhabib, U.R. Sumaila, P. Le Billon, The fisheries of Africa: Exploitation, policy, and maritime security trends, *Mar. Policy* 101 (2019) 80–92.
<https://doi.org/10.1016/j.marpol.2018.12.021>
 49. S. Jentoft, R. Chuenpagdee, From Rhetoric to Reality: Implementing the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, in: S. Jentoft, R. Chuenpagdee, M.J. Barragán-Paladines, N. Franz (Eds.), *The Small-Scale Fisheries Guidelines: Global Implementation*, Springer, Cham, Switzerland, pp. 789–812. <https://doi.org/10.1007/978-3-319-55074-9>

50. J. Spijkers, G. Singh, R. Blasiak, T.H. Morrison, P. Le Billon, H. Osterblom, 2019. Global patterns of fisheries conflict: Forty years of data. *Glob. Environ. Change*. 57, 101921.
<https://doi.org/10.1016/j.gloenvcha.2019.05.005>
51. R. Pomeroy, J. Parks, K.L. Mrakovcich, C. LaMonica, Drivers and impacts of fisheries scarcity, competition, and conflict on maritime security, *Mar. Policy* 67 (2016) 94–104.
<https://doi.org/10.1016/j.marpol.2016.01.005>
52. J. Spijkers, T.H. Morrison, R. Blasiak, G.S. Cumming, M. Osborne, J. Watson, H. Osterblom, Marine fisheries and future ocean conflict, *Fish Fish*. 19 (2018) 798–806.
<https://doi.org/10.1111/faf.12291>
53. S. Afr. Const., 1996. <https://www.gov.za/sites/default/files/images/a108-96.pdf>
54. UN Economic and Social Council. Concluding observations on the initial report of South Africa. E/C.12/ZAF/CO/1 (Nov. 29, 2018).
<https://digitallibrary.un.org/record/1654223?ln=en>
55. M. Sowman, J. Sunde, S. Raemaekers, O. Schultz, Fishing for equality: Policy for poverty alleviation for South Africa's small-scale fisheries, *Mar. Policy* 46 (2014) 31–42.
<https://doi.org/10.1016/j.marpol.2013.12.005>
56. K.L. Cochrane, J. Eggers, W.H.H. Sauer, 2020. A diagnosis of the status and effectiveness of marine fisheries management in South Africa based on two representative case studies. *Mar. Policy*. 112, 103774. <https://doi.org/10.1016/j.marpol.2019.103774>
57. G.M. Branch, B.M. Clark, Fish stocks and their management: The changing face of fisheries in South Africa, *Mar. Policy* 30 (2006) 3–17. <https://doi.org/10.1016/j.marpol.2005.06.009>

58. D. Crosoer, L. van Sittert, S. Ponte, The integration of South African fisheries into the global economy: Past, present and future, *Mar. Policy* 30 (2006) 18–29.
<https://doi.org/10.1016/j.marpol.2005.06.013>
59. M. Sowman, Subsistence and small-scale fisheries in South Africa: A ten-year review, *Mar. Policy* 30 (2006) 60–73. <https://doi.org/10.1016/j.marpol.2005.06.014>
60. Marine Living Resources Act 18 of 1998 (S. Afr.).
https://www.environment.gov.za/sites/default/files/legislations/marine_livingresources_act18_0.pdf
61. Marine Living Resources Amendment Act 5 of 2014 (S. Afr.).
https://www.gov.za/sites/default/files/gcis_document/201409/37659act5of2014marinelivingresources19may2014.pdf
62. M. Isaacs, The state of small-scale fisheries in South Africa, Fishing Industry News SA
<https://www.fishingindustrynewssa.com/2018/06/20/report-the-state-of-small-scale-fisheries-in-south-africa>, 2018 (accessed 23 January 2021).
63. J. Sunde, K. Erwin, Cast Out: The Systematic Exclusion of the KwaZulu Natal Subsistence Fishers from the Fishing Rights Regime in South Africa. (2020).
<https://sdcea.co.za/download/cast-out-the-systematic-exclusion-of-the-kwa-zulu-natal-subsistence-fishers-from-the-fishing-rights-regime-in-south-africa/>