
Aligning the sustainable development goals to the small-scale fisheries guidelines: A case for EU fisheries governance

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Abstract :

Since the launch of the Sustainable Development Goals (SDGs) in 2015, several countries, funding organizations, environmental groups and research communities have pledged support and made commitment to help achieve these goals. SDG14: Life Below Water, for instance, has been embraced as the global goal for conservation and sustainable uses of the oceans, seas and marine resources. Among its many targets, SDG14b speaks directly to small-scale fisheries, calling for secured access to resources and markets for this sector. We argue that achieving SDG 14b requires a holistic approach encompassing several SDGs, including livelihoods, economic growth, community sustainability, strong institutions and partnerships. It is also important to align the SDG targets with the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (SSF Guidelines), as the mutuality that exists between the scope and nature of the two instruments can help guide the formulation of appropriate governance tools. Yet, the alignment of these two instruments alone does not guarantee sustainability of small-scale fisheries, especially without an official mandate from the governments. The case in point is the European Union where small-scale fisheries are not sufficiently recognized within the Common Fisheries Policy (CFP), despite being the largest sector (75% of the fleet). Through an examination of the CFP in the context of the SSF Guidelines and the SDGs, we discuss options and possibilities for inclusive consideration of small-scale fisheries in the upcoming policy reform, which might then lead to both achieving fisheries sustainability and the SDGs in the EU.

1) Introduction

In 2015, the world came to an agreement on 17 Sustainable Development Goals (SDGs), which are set to address the concurrent global concerns related to deprivation and hunger, inequalities, wellbeing, education, clean water, climate change, ocean and land resources, governance, consumption, and economic growth and so on[1]. The SDG agreement and its implementation has caught the attention of many scholars, sparking a whole new narrative on how SDGs ought to be achieved in an integrated manner [2]–[5]. Hailing from the natural, social and political science spectrums, the ‘sustainability’ discourses on SDGs tend to converge on the need of approaches that intertwine the principles of economic growth, social development and environmental protection [6] through robust governance frameworks that facilitate their implementation [7].

The debate on the implementation of SDG14 “Life below water” has also taken its course, with various works focusing on the sustainability of the natural capital including the oceans [8], [9], marine biodiversity [6], marine space [10], and fisheries resources [4]. Singh et al [11] take the discussion a step further by looking in-depth at the relationships between the seven targets of the SDG14 and other SDGs and the contribution to other SDG goals by looking at co-benefits and trade-offs inherent to the achievement of such goals. In this paper we will further the analysis by focusing on one of the secondary targets of SDG14, specifically pertaining to small-scale fisheries (SDG14b), which calls for the provision of access to resources and markets to small-scale fishers. The specific attention to small-scale fisheries in the SDGs, comparing with other sectors such as agriculture or mining, is noteworthy, and it points to a need of having a discussion on how small-scale fisheries sustainability can be achieved, both through SDG14b and other SDGs. We argue that the interconnection between SDG14b and other goals, as well as with other global processes, is imperative since what matters to small-scale fisheries go beyond issues of access.

As a sector that draws livelihoods from the oceans, has close connection to land and sea, and is socially and culturally embedded in the communities [12], small-scale

fisheries are not only one of the key actors in the governance for ocean sustainability, but can also play significant role in achieving food security (SDG1), reduced poverty (SDG2), community wellbeing (SDG3), gender equality (SDG5), and economic growth (SDG8). The interconnectedness between the different SDGs in the context of small-scale fisheries has been recognized by the Food and Agriculture Organization of the United Nations (FAO), with a recent workshop highlighting the trajectory of adopting a holistic approach to resolve small-scale fisheries concerns pertaining to poverty alleviation, gender equality, food security and ocean conservation [13]. In these discussions, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, known as the 'SSF Guidelines' [14], adopted by FAO Member States in 2014, have been highlighted as an important tool to achieve SDG14b, by integrating them into legal frameworks and relevant processes [13]. The mutuality that exists between the SSF Guidelines and the SDGs implies that synergies can be created in the design of policies and strategies to implement both instruments.

The SSF Guidelines speak directly, with breadth and depth, on the different dimensions of small-scale fisheries, arguing for their importance and contribution to the society, and provide a broad spectrum of how achieving their sustainability is critically linked to the political, social, economic, natural and governance systems in which they operate [15]. For instance, the SSF Guidelines offer guidance on how to reduce the vulnerability and insecurity of fishing people by recognizing their basic human rights, including rights to food, healthy environment, fisheries resources, capacity-building and education, and to livelihoods and work [16]. All of these are central to the goals and targets specified in the SDGs. Hence, as an international tool they have much to offer to the SDG components that pertain directly to small-scale fisheries, and by aligning the two instruments, the governance portfolio can be strengthened. Needless to say, successful integration and coordination of the two instruments in any setting depends on several factors including the existing governing rules and regulations, the capacity of the governing system and of the local communities to mobilize concerted efforts around the effective implementation of these instruments to address the concerns and challenges

facing small-scale fisheries. These are the key 'governability' questions according to interactive governance theory [17].

Current efforts to align the SDGs through the SSF Guidelines are predominantly happening in the Global South, as illustrated in the exploratory workshop held by FAO in 2018 [13], with minimal, if any, interest in the implementation in the Global North. This is perhaps not surprising given its voluntary nature, the focus on poverty eradication, and since small-scale fisheries in the north may already be regulated through other instruments. One example of this is the European Union (EU), where governance of small-scale fisheries is mostly regulated through the regulations emanating from the Common Fisheries Policy (CFP). Defined as fisheries using vessels of less than 12 metres length and mainly using passive gears (EC 508/2014 Art. 3 (2[14])), small-scale coastal fisheries (SSCF)¹ encompass 75% of the EU fleet as per recent statistics [see 17], making important contribution to the local economies and community wellbeing, also through positive externalities such as tourism [19].

We argue in this paper that the extent to which the EU can support small-scale fisheries depends, in the first instance, to the compatibility between the SSF Guidelines and the SDGs. Yet, the alignment between the two instruments does not guarantee any action within the EU to support small-scale fisheries unless it is mandated in the CFP. A close examination of the current governance profile of the CFP, and the objectives pertaining to small-scale fisheries, is therefore required. This analysis can also be useful in identifying conditions under which goals can be achieved, and determining how the SDG-SSF Guidelines alignment could be beneficial to improve the overall fisheries governance both at EU and Member State level. Considering the two instruments together in the EU fisheries policies implies not only better investment in fisheries and ocean sustainability but also prevents compromising the goals of one instrument over the others.

In the following, we present the results of the content analysis of the SSF Guidelines in terms of the correspondence with the goals specified in the SDGs. The complementarity between the two instruments is discussed, first on their own and later in the context of the CFP. The paper concludes with suggestions about how to move forward in aligning governance goals and targets for EU small-scale fisheries through the CFP.

2) Exploring the Complementarity of SDGs and SSF Guidelines

The need for an integrated approach has underpinned the fisheries sustainability debate for a number of years [20]–[22]. With the SDGs on the global agenda, consisting of a spectrum of governance goals that transcend across social, ecological and political targets, it is opportune to discuss how sustainability can be achieved through integrated policies that reflect the needs of the sector. For small-scale fisheries, the prospect is greatly enhanced with the SSF Guidelines. Given that the SDGs are broad in context, as they serve to touch upon major items, they do not have the necessary depth, leaving ample space and flexibility for interpretation. In contrast, the SSF Guidelines are explicit about how to improve the existing governance mechanisms, and are also indicative of how SDGs can be achieved, and how they can help foster governance reform and transformation. For example, as shown in Table 1, the SSF Guidelines provide guidance on how to implement specific measures to fulfil specific components of the SDG14 such as those pertaining to regulation of harvesting and overfishing (14.2), the contribution to the economic benefits to small-island states (14.7), as well as the implementation of marine area management (14.3). Solutions and readily available ideas on how to achieve other SDGs are also very much present throughout the SSF Guidelines.

Table 1. The number of paragraphs in the FAO SSF Guidelines that correspond to the Sustainable Development Goals.

Sustainable Development Goals (SDGs)	FAO SSF Guidelines										TOTAL
	Principles	Topics on Sustainable Development					Enabling environment and implementation				
	SSF3: Guiding Principles	Governance of Tenure in small-scale fisheries (SSF5)	SSF6: Social development, employment and decent work	SSF7: Value chains, post-harvest and trade	SSF8: Gender Equality	SSF9: Disaster risks & Climate Change	SSF10: Policy coherence, institutional coordination and	SSF11: Information, research and communication	SSF12: Capacity Development	SSF13: Implementation support and monitoring	
SDG1. No Poverty	1	1	1				2	1		1	7
SDG2. Zero Hunger	1	1		1		1	2	2		1	9
SDG3. Good Health & Wellbeing	1		2	2			1				6
SDG4. Quality Education	1		3				1	2	2		9
SDG5. Gender Equality	2	4	6	2	4			4	2	2	26
SDG6. Cleaner water & sanitation	1		1								2
SDG7. Affordable and Clean Energy	1					1					2
SDG8. Decent Work and Economic Growth	2	1	18				2				23
SDG9. Industry, Innovation and Infrastructure	1		2	2	1	3					9
SDG10. Reduced Inequalities	2	1	1	2				1			7
SDG11. Sustainable Cities and Communities	2	1	1				1		1		6
SDG12. Responsible Consumption & Production	2		1	5				1			9
SDG13. Climate Action	1					9	1	1			12
SDG14. Life below water	4	20	2	2		2	6	6			42
SDG15. Life on Land	1	2				3	1	1			8
SDG16. Peace, Justice and Strong Institutions	6	7	4	2	2	1	6	1	2	2	33
SDG17. Partnerships for the Goals	1							1		4	6
TOTAL	30	38	42	18	7	20	23	21	7	10	216

Nil
1-3 paragraphs
4-9 paragraphs
10+ paragraphs

Table 1 illustrates a high level of complementarity between SSF Guidelines and the SDG objectives, based on the close examination of the nature, scope and aims of these instruments. The level of correspondence, shown in the table, was gathered through a process that quantified ‘correspondence scores’ through comparative content analysis, conducted manually by in-depth reading of all paragraphs in the SSF Guidelines and the different goals specified in the SDG document. In other words, we counted the number of times (paragraphs) certain topics and subject areas indicated in the SSF Guidelines within the different sections, i.e. ‘Guiding Principles’, ‘Responsible and Sustainable Development,’ and ‘Ensuring an Enabling Environment and Supporting

Implementation,' are also mentioned either directly or indirectly in the content of the SDGs. As this exercise was exploratory in nature, and did not aim to be an extensive representation, the analysis focused only on the main goals of the SDGs and did not include the primary or secondary targets.

As can be expected, SDG14, 'Life Below Water', has the highest correspondence score of 42 occurrences (Table 1). What was less anticipated, however, was the high score on "Governance of Tenure" within the SDGs, which indicates a strong emphasis on issues pertaining to ownership, rights and access to resources, even at the goal level of the SDGs. SDG16 on Peace, Justice and Strong Institutions has a correspondence score of 33, and it is the only goal in the SDGs that touches upon all aspects of the SSF Guidelines. The next two SDGs with moderately high correspondence score are SDG5 on Gender Equality (n= 26), and SDG8 on Decent Work and Economic Growth (n = 22). To a lesser extent, provisions on how to tackle these targets, as well as other SDGs including Zero Hunger (SDG1), No Poverty (SDG2) and Climate Change (SDG13), Sustainable Communities (SDG11) and Responsible Production and Consumption (SDG12) are intrinsic to the SSF Guidelines. The SDGs that are least covered by the SSF Guidelines include 'Cleaner Water and Sanitation' (SDG 6) and 'Affordable and Clean Energy' (SDG7), both having a correspondence score of two.

On the whole, it could be said that the SSF Guidelines can serve as an important instrument to guide the development of the policy process and governance frameworks for the implementation of the SDGs, which, in one way or another, pertain to small-scale fisheries. The wide-ranging nature of the SSF Guidelines also invites an important analytical process, informed by a transdisciplinary perspective, to examine how they interact with other instruments, both to help fulfil SDG14b target, and to strengthen the role that small-scale fisheries can play in contributing to achieving other SDGs. An example would be how to promote the role of small-scale fisheries to resolve crisis of overexploited species, which is a global issue. Teh and Pauly (2018) submit that small-scale fisheries, the majority of which utilize low-impact fishing gear and engage in responsible fishing, are an important segment that could ease some of the problems related to failing ecosystems. The stewardship ethics found in many small-scale fisheries

are also an important trajectory for the conservation of marine resources [24], which is the main substance of SDG14. Alongside this exist the community values of fishing communities, which provide the backbone for collective action, economic growth and community viability [25], [26], all central components of the SDGs.

This shows that although small-scale fisheries are only mentioned in SDG14b, their role towards sustainability, as well as their ability to remain sustainable is subject to diverse elements. In other words, SDG14b cannot be a stand-alone target to achieve the sustainability of small-scale fisheries, and also, the route to SDG14b is determined by other systems including the political economy, the institutional landscape, the market systems, the governance structure, and the species they target [15]. All of these systems are, in one way or another, linked to different SDGs, hence, securing access for small-scale fishers to marine resources and markets can benefit from the synergy with several other objectives and targets in the SDGs. Strong connection can be made, for instance, between sustainable small-scale fisheries and strategies for decent work and economic growth (SDG8), sustainable communities (SDG11), strong institutions (SDG16), and so on.

Such interconnectedness between the different SDGs and the SSF Guidelines indicates why policy and institutional reforms implemented to reach the targets ought to be linked to the complexity of the small-scale fisheries systems. So when economic growth strategies or plans for local development are put in place, or when devising participatory governance mechanisms or implementing gender regulations, a reflection on how small-scale fisheries can be affected and incorporated would be necessary, as indicated in the SSF Guidelines. This also means that our vision must be broadened to cater for a process of coordination between the different goals, through a thorough identification of actual or impending trade-off challenges that may exist between attaining different sustainability goals [11] and with a consideration of the barriers and impetus that exists between different targets such as reducing inequalities (social sustainability) vs. economic growth (economic sustainability) [27], or achieving conservation (ecological sustainability) vs. retaining community viability (social sustainability).

While it is clear how the implementation of the SSF Guidelines can help achieve SDGs, the reverse is less obvious. This is because the inherent flexibility provided by the SDGs as an international tool enables the governing bodies at regional and national levels to choose whichever route to achieve the different targets. For instance, it is not clear what the plans for economic growth, sustainable communities and sustainable oceans look like under the SDGs, and how they can truly address the wide-ranging nature of small-scale fisheries sustainability. Bennett (2018) recently highlights how ocean science and management lacks adequate attention to issues of social justice and inclusion, making it highly improbable that the forthcoming ocean sustainability pathways of the SDGs are both just and inclusive. The same argument has been echoed by Barbesgaard (2018) who has claimed that currently coalitions towards growth and conservation have been predominantly steered by neoliberal paradigms, through the notion of market-based mechanisms, which are projected as both a need for the protection of the ocean's future and for creation of stable economies, but which do not always accommodate or reflect the needs of small-scale fisheries [30]. These conditions can hinder, rather than facilitate, the sustainability of small-scale fisheries, as will be illustrated in the next section in the case of small-scale fisheries in the EU.

3) Challenges facing small-scale fisheries in the EU

Small-scale fisheries in the EU generally refer to small fishing enterprises, predominantly family-owned and low-capital, utilizing vessels which are smaller than 12 metres, and engaging in a range of passive and low-impact fisheries. Totalling to over 49 thousand vessels and employing over 78 million fishers, the EU small-scale fleet produced an annual average of 254 thousand tonnes of seafood worth over Euro 830 million between 2016 and 2017 [18]. Small-scale fisheries contribute significantly to the supply of fresh fish to the local and international markets [31], and are important systems for local economies and food supply, especially in fishing-dependent areas [32]. Despite their functional roles, small-scale fisheries have been noted to undergo a number of challenges that derail their viability, such as restricted access to fishing opportunities and high resource and space competition with industrial and recreational segments [21]. These challenges mainly emanate from the CFP, especially policies that do not always fit small-scale fisheries realities. The CFP and its implementation through the jurisdiction of

Member States are frequently criticized for being overly focused on biology and recovery of stocks and economic growth of the fishing industry, with unequal attention towards the social sustainability of fishing communities [30], [33], [34].

It is worth noting that the CFP has been crucial in steering important and successful recovery of stocks in certain areas such as the East Atlantic, North Sea and Baltic Sea [35], and the Bluefin tuna in the Mediterranean [36] where fishing opportunities have been heightened in the past years. However, how much small-scale fisheries benefit from these successes remains questionable. Da-Rocha et al. (2018) recently claim that the overall conservation policy implemented by the EU in both the North East Atlantic and the Mediterranean is not sufficient to produce positive productivity trends amongst the small-scale fishing fleet. Issues in the economic trends of the small-scale fisheries in the North Sea and in the Eastern Arctic have also been flagged in the latest economic report by the European Scientific, Technical and Economic Committee for Fisheries (STECF) [18].

In other words, there is no direct link between stock recovery and viability of fishing communities, as the fishing opportunities are still very much distributed along the lines of economic efficiency, with the majority of the fishing opportunities, in many EU Member States being owned and controlled by a few large companies [38]. Various scholars have attributed this neoliberal concentration to the enabling policies that have taken place throughout the years, leading to contraction of fleets, with the aim of improving the efficiency of the fisheries within the EU waters. Neoliberalism has been the main vehicle used to govern fisheries in the past decades, serving as a political and economic tool that facilitates the optimal use and allocation of scarce resources [39, p. 565]. This ideology, which is based on management systems that assign fishing opportunities to the most efficient segments of the fishing fleet, is the main reason why small-scale fishing communities have been facing marginalization in the distribution of fisheries resources since the last policy reform [40]–[42], and also in the current period [34], [38], [43], [44].

Carpenter and Kleinjans [38] further explain that the allocation of fishing opportunities in the EU lacks transparency and accountability regarding the final recipients of quotas. As a result, the policies fuel equity concerns, particularly amongst small-scale fisheries, which are not adequately involved in the allocation process. In many

cases, due to their market-based nature, the system of allocation, which happens at the Member State level, resembles a privatization scheme that enables the concentration of the fishing licenses and opportunities into fewer hands, thus making it difficult for low-capital fishing enterprises to remain competitive [44], [45]. This policy also restricts newcomers into the fisheries, as they face an economic barrier to start a new venture. When the national systems that device allocation systems do not take into account the wider and social outcomes, even though Article 17 in the most recent CFP reform has made such requisitions through transparent and objective criteria, the sustainability of the fishing community is affected. .We argue that this could be resulting from a lack of understanding about what social sustainability should be about, and the consequent use of simple indicators to determine allocation decisions.

For example, in the study on ‘Criteria for allocating access to fishing in the EU,’ which the EU-Parliament commissioned [46], social indicators are reduced to three factors namely ‘employment generated’, ‘contribution to local economy’ and ‘social corporate responsibility’, the latter relating to compliance behaviours of fishing units. There is no specific mention of social justice components, such as the use of socially just criteria or equity-based measures in the allocation of quota. Whether the objective is known or not is questionable, but the route there is certainly missing and the essential elements of what ‘socialness’ should be about in fishing opportunities systems are absent. As a result, equity concerns are often not taken into account in allocation despite being very much related to the needs of small-scale fishers [38].

The lack of clarity of social objectives and priorities in the CFP has also been flagged by Goti-Aralucea et al. [47] who claim that the absence of social priorities to inform social sustainability in parallel to economic and biological pillars can have irreversible consequences on local communities. In fact, one of the major criticisms towards the institutional approach of European policies is that although the nucleus of the policy portfolio is said to be embedded in the principles of sustainable development, the fundamental driver is economic growth, which is not necessarily compatible with social sustainability [30]. This paradigm, however, might be very difficult to overturn, especially since the environmental and economic concerns dominate sustainable development

planning, driven in part by paradigms that have a lot of uptake in international fora such as the planetary boundaries framework and resilience theory [48]. With the social component remaining in the back seat of the science-policy debates that determine policy trajectories, as well as having the SDGs targets for economic and environmental goals set as near-term targets (2020), and the social goals as farther-term targets (2030), it becomes very difficult to materialize social goals into real policy material that matter to small-scale fisheries.

Consequently, when social priorities are neither defined nor considered in policies, the translation of 'social' components can be lost in the process through the national channels, during, for example, the allocation of fishing opportunities [49]. Without clear guidance, or obligation, of how allocation should be determined to realistically improve the situation of small-scale fishers and the communities, the 'social' criteria can become interpreted in different ways to suit political interests in the country. The structure and operation of participatory governance of countries and regional fisheries organizations and councils also has a role to play in this especially if the wide-ranging interests of small-scale fishers are not transmitted through the consultative processes [50]. A case in point are the regional advisory councils, which are often criticized for being overruled by the large-scale industry interests, giving less voice to small-scale fishers [51], [52]. With the reporting of the problems for small-scale fisheries in various contexts, some have expressed concern of a complete wipe out of a number fishing communities in the near future [53]. Small-scale fishers are also facing challenges in coastal areas, which are increasingly congested by recreational fisheries that at times engage in commercialization of the catches although this is prohibited [54]–[59]. These issues arise mainly because the management of non-quota based fisheries within the coastal areas, specifically within the 12-nautical mile zone, is the jurisdiction of Member States, and such flexibility for governance does not always equate to responsible management that fulfills the sustainability of small-scale fisheries [21], [56].

Another concern is related to the space competition with marine industries, which under the Blue Growth Strategy agenda, could further marginalize small-scale fisheries and exclude them from the engagement. Blomeyer and Sanz [60] report that there is no

specific reference to small-scale fisheries in any of the European Commission communications on Blue Growth strategy, thus creating speculation on how the rights of small-scale fisheries to marine space and resources may be compromised [61]. The EU Blue Growth strategy aims at supporting the sustainable development of marine and maritime sectors as a whole, by focusing on five key areas with high potential for creating sustainable jobs and growth, namely aquaculture, coastal tourism, marine biotechnology, ocean energy and mineral resources. As it stands, there is no explicit consideration of how these would be implemented alongside the existing activities including both large-scale and small-scale fisheries.

Small-scale fisheries have rightful and legitimate claims to marine resources and space, and in already-congested space, the blue growth agenda has already been criticized by scholars for its potential negative consequences, e.g. ocean grabbing and community disenfranchisement [29], [62]. It seems that the small-scale fisheries are caught up in a vortex of policies including those emanating from the CFP and less directly those hailing from the EU Blue Growth strategy, which in some ways has not catered for their sustainability, thereby jeopardizing the ability for Member States to fulfil some of the SDGs. A reflection of how these governance regimes can benefit from the SSF Guidelines, in a way that fulfills both the small-scale fisheries sustainability and the SDGs related to SSF, is provided in the next section.

4) Moving towards better alignment through innovation and transformation for the upcoming CFP reform

In order to better support small-scale fisheries in the EU, some transformation and innovation in the governance and policy systems is necessary. A discussion on such transformation is opportune given the approaching negotiations on the new CFP reform (which should start within a year or two), as it provides a reflection on how small-scale fisheries can be better governed, if the SSF Guidelines become a main instrument in the process. As can be seen in Table 2, the three multi-scalar governing instruments have different leverage and influence on the future of small-scale fisheries and the environment

they operate in, and their alignment can inform their governance. The process of such alignment requires careful consideration of the different factors encircling small-scale fisheries systems, taking into account their sustainability needs, and with a full understanding of the economic and governance systems [63].

The CFP, as a binding instrument for fisheries management across the EU waters, would benefit from aligning with the SSF Guidelines, as the latter can serve as the baseline for objectives, reference points and indicators in the context of social and economic development of small-scale fisheries. Similarly, the SSF Guidelines can inform harmonization strategies for economic development, including the blue growth strategy, such as the creation of marine-based opportunities that do not jeopardize the resilience of small-scale fisheries. These synergies would in turn inform, as well as be supported by, the overarching global governance mechanisms of the SDGs. In other words, because of the potential synergies, it makes sense to use the SSF Guidelines to inspire change and improve the situation of small-scale fisheries, and simultaneously fulfil the SDGs that pertain to small-scale fisheries.

Table 2. Governance instruments for small-scale fisheries.

Governance instruments	Nature	Scope	Goal	Sector Specific
SDGs	Non-binding	Global	Global Governance towards sustainability	Societal
SSF Guidelines	Non-binding	Global	Guidelines for SSF Sustainability	SSF-specific
Common Fisheries Policy	Binding	Regional	Fisheries management	Fisheries

By incorporating the SSF Guidelines in the implementation of the CFP, Member States can benefit from policies aiming to improving the wellbeing and livelihoods of fishing people, and their sustainability. In fact, as the SSF Guidelines are embedded in the human dignity framework, they provide both a legal and political base that can be used

to influence fisheries policy in the EU [64]. For example, an important component of the SSF Guidelines is the focus on social justice criteria in the distribution of fishing opportunities. The section on responsible governance of tenure in the SSF Guidelines speak directly to the need of fishing communities to “have secure tenure rights to the resources that form the basis for their social and cultural well-being, their livelihoods and their sustainable development...and for economic growth and rural and social development” [14, p. 5]. It also gives advice on how states should take the appropriate measures to identify, and respect legitimate holders of fishing rights. So by aligning Article 17 of the CFP (on fishing opportunities) to the tenure provisions of the SSF Guidelines, decision-makers can make more informed decisions on how to identify and recognize users, and how to assign fishing rights in just ways that fulfills both SDG14b and the sustainability of fishing communities in general (Table 1).

Another important component of the SSF Guidelines is the provision of measures for more inclusive governance, for example, by improving the role of participatory governance in decision-making fora, such as those at national and regional levels, including the EU regional advisory councils. The SSF Guidelines explain ways by which such interface can be more inclusive, as well as improve the dialogue between scientists, policy-makers and fishers. Enabling participation of small-scale fisheries in policy and decision-making process could be one way of facilitating the process of achieving SDGs, as it demonstrates ways of improved bottom-up engagement needed for transformation to take place. This participatory governance system could become an important building block for the implementation of co-management or community-based management, where responsibility can be delegated to the local levels, through scientific partnerships with institutions.

This could be achieved, for instance, in the case of the Mediterranean where a Regional Plan of Action for small-scale fisheries has been recently signed by the EU, committing to provide secure and sustainable futures to small-scale fisheries [65]. Here, the SSF Guidelines can assist in the promulgation of policies, with the input of both social and natural scientists, together with fishers and members of the fishing community. Whilst fulfilling the essential principles that ought to steer fisheries governance, such

development paves the way for strong and peaceful institutions in line with SDG 16. Given the complexity in fisheries governance, finding the solutions that would be broadly accepted and moving towards transformations require a new way of thinking and a holistic perspective. Known as a transdisciplinary approach, this method fosters collaboration and participation of many stakeholders to reach improvements pertaining to fisheries affairs [66]. By bringing together actors from different fora, including academics from different disciplines, such as ecologists, biologists, economists, anthropologists, sociologists and community experts, together with policy-makers, members of the communities and fishers, it is possible to break down the sustainability problem of small-scale fisheries into smaller pieces, and thus be in a better position to identify the constraints on the effectiveness and efficiency of the governance framework.

We posit that providing small-scale fisheries with the right tools and mechanisms, and deploying the necessary financial and human resources towards their capacity building as identified in the SSF Guidelines, can enable their contribution towards SDGs that matter to them, or which they can influence, such as community wellbeing, economic growth, reduced inequalities, sustainable production and consumption, and so on. Nevertheless, if the focus of the SDGs remains top-down, and implemented through simple projects and indicators, which do not guarantee a long-term success, then there will be unrealized potential. Sustainability is 'no quick fix' [67] and necessitates long meandering pathways, which involve unpacking of the complexities that surround small-scale fisheries. However, to get there, we need to recognize the linkages between fisheries and the rest of the SDGs and adopt a holistic approach that is both interactive and pragmatic to resolve the wicked problems inherent to the fisheries social and natural systems [68].

The alignment of the new CFP with the SDGs and the SSF Guidelines is not an easy or straightforward task, predominantly because some of the SSF Guidelines are politically contentious [15]. It would likely require a revoking in the power structures, which might have gained permanence and thus are resistant to change [69]. Although the pathway might be difficult, change of direction and commitment to attaining the real meaning of sustainable small-scale fisheries through inclusiveness and equity are

necessary. The process will be definitely challenging at the start, but in the long-term it will bring positive results for the sustainability of fishing communities. It could also bring about a new phase to the upcoming CFP reform, with potentially more balanced social, economic and ecological considerations of the policies, an objective that has not yet been fully achieved.

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