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The Contested Commons: The Failure of EU Fisheries Policy and Governance in the Mediterranean and the Crisis Enveloping the Small-Scale Fisheries of Malta

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This paper highlights how multi-scalar interstitial policy failings of the EU fisheries policy can directly trigger policy gaps in fisheries management at the expense of artisanal communities, leading to further expansion opportunities for industrial fishing and triggering instability and marginalization of traditional fishing communities. In order to contextualize and demonstrate this complexity, we explore a detailed scenario of the Maltese waters to show how the development of a national policy portfolio post-EU accession has destabilized long-existing functional fishing governance mechanisms and now pose a direct challenge to the sustainable management of the marine socio-ecological system. Using a mixed-method approach to investigate the partially obscured social, economic and political dynamics which drive marine policy, we demonstrate how the coastal fisheries have become subject to multiple-use competition arising primarily from a burgeoning recreational fishing sector that has benefited from “access-enabling policies,” and is, to a great extent uninhibited by fish conservation regulations. Our findings demonstrate how a deeper understanding of the socio-political ramifications of policy processes is necessary to improve the governance and management of contested and congested open-access fisheries.

Keywords: fisheries governance, small-scale fisheries, overfishing, policy-process, neoliberalism, recreational fisheries, policy gaps

INTRODUCTION

The global crisis of diminishing fish stocks is pervasive (Coulthard et al., 2011) with international efforts to resolve this human-induced catastrophe stubbornly ineffective (Bodin and Österblom, 2013). This is especially the case in the Mediterranean Sea (Vasilakopoulos et al., 2014; Cardinale and Scarcella, 2017), that hosts a fishing fleet of around 91,540 fishing vessels (FAO, 2016) from more than 20 countries making it one of the most intensely fished seas worldwide (Fernandes et al., 2017; Panagopoulou et al., 2017) with more than 85% of the assessed stocks overexploited (Colloca et al., 2013). The Mediterranean Regulation of the European Common Fisheries Policy is the main framework for fish conservation within this region (EC, 1967/2006). A number of studies have

shown that risks to fish stocks has not receded, mainly due to, policy-induced problems which are fuelling the overexploitation of the fisheries (Colloca et al., 2013; Fernandes et al., 2017). These include lack of realistic national management plans which conform to the maximum sustainable yields as defined by the scientific advice (Cardinale and Scarcella, 2017), and the failure to control “technological creep” and the associated enlarged capacity to harvest fish from this sector (Damalas, 2017).

The decline in fish stocks has socio-economic impacts on the fishing fleets, and such impacts are heavily felt across the small-scale sector, which comprises 80% of the Mediterranean fleet, and which is relatively less studied than the large-scale and industrial segment (Battaglia et al., 2010; Lloret et al., in press). Small-scale fishing in the Mediterranean, which primarily includes vessels that are smaller than 12 m in length has been noticed to be in a general decline in the past decades (Gómez et al., 2006; Arceo et al., 2013; Fabio et al., 2016; Said, 2017; Lloret et al., in press) due to an aging demographic of fishermen (Tzanatos et al., 2005), declining resources, and incremental competition from the industrial sector (Gómez et al., 2006; Panagopoulou et al., 2017) and the recreational fleet (European Parliament, 2006; Hadjimichael et al., 2013; Lloret and Font, 2013; Giovos et al., 2018). What is less understood, however, is how or whether this small-scale sector degeneration is being managed or addressed by the governance and policy systems in place, especially now that the EU has recently pledged to support the sustainable development of Mediterranean small-scale fisheries through the Medfish4Ever roadmap (European Commission, 2017).

Although the Mediterranean regulation sets a number of generic fisheries governance principles for small-scale fisheries, this segment does not get the same level of management requirements as the large-scale counterpart, and management remains mostly the responsibility of the national governments. In other words, the Mediterranean regulation defines specific obligations for the Member States (MS) to ratify into their national policy portfolio, and simultaneously endows MS with jurisdiction to attend to their needs when it comes to small-scale fisheries. This flexibility, which is aligned to the EU principle of subsidiarity whereby decision-making is decentralized to the “most appropriate level of competence” (Benson and Jordan, 2014) endows the individual MS with the freedom to implement management according to their needs. Although principle is sound, giving the MS more control to cater for local needs in its management framework; in reality it can lead to a policy “blind spot” where insufficient attention is paid to the aggregate impact since their management is not an EU obligation. Thus, the degree to which the EU principle of subsidiarity equates to or facilitates adaptive management is debatable (Payne, 2000) as policy gaps can create governability challenges that can engulf traditional fisheries systems (Jentoft, 2007).

To investigate the role of subsidiarity in the context of small-scale fisheries governance in the Mediterranean, we take Malta as a case study. Our approach draws on the concept of “policy process frameworks” that shape the decision-making of marine resource-use to yield important insights into the transformations occurring in socio-ecological systems and their implications on the fisheries governance (Van Tatenhove, 2011; Orach and

Schlüter, 2016). Our research has broader significance to the study on the sustainability implications of global responsible fisheries management (Coll et al., 2013) and contributes to the international literature that shows how policy gaps emanating from cross-scale misfits trigger governance challenges to marine resource management (Trembl et al., 2015).

Small-Scale Fisheries in Malta

Malta is a small southern European island which became a European Union MS in 2004 and currently has a small-scale fishing fleet of 935 small-scale vessels, representing over 93% of the fleet at the national level (Said, 2017). Between 2000 and 2010, the small-scale fishing fleet in Malta faced a decline of 30% in the number of vessels, ranking among the top EU countries experiencing such degeneration (Lloret et al., in press), thus making it a suitable candidate as a Mediterranean case study. Malta provides an interesting case since a specific chapter in the EU Mediterranean regulation has been dedicated to its complexity, yet ample flexibility is left into the hands of national government (MS jurisdiction) to determine the management of the coastal fishing resources contested by industrial, small-scale and recreational fisheries, as indicated in **Table 1**. Essentially, whereas specific management plans are in place for large-scale trawling and purse-seining in line with the Mediterranean Regulation (see MSDEC, 2013b), there are no management plans that encompass fisheries targeted by the small-scale artisanal fishing sector including trammel nets pots-and-traps, and long-lines, as these are not an EU obligation. Nevertheless, the small-scale fishing sector, as a commercial segment of the fleet, is subject to fishing capacity clauses which has been in place to sustainably conserve the fish stocks within Malta’s 25 nautical mile fisheries management zone (FMZ) as per Mediterranean Regulation.

Although these clauses limit the commercial fishing capacity; i.e., the total number of industrial and small-scale fishing vessels that can fish in the zone [EC 1967/2016 26 (1) (b)], it does not cap the capacity of the recreational fleet that may operate within the zone. Hence, the recreational sector in Malta, which according to the Maltese fisheries law is legally permitted “to work on a low scale” (Cap 425.07 Art 9) remains an open-access and largely unmanaged segment that has, in the past decade, registered a substantial increase in the number of vessels and fish catches (Khalfallah et al., 2017).

The growth in the recreational sector is therefore a potential threat to fish stocks and to remaining commercial artisanal fleet. In this article, we sought to understand the socio-political drivers that determine the governance of the multiple use open-access fisheries to understand the impacts on the traditional socio-ecological system. In particular, we seek to understand the socio-political justification behind allowing an expanding recreational fleet to grow in the lieu of a holistic management framework for the inshore fisheries and the consequential implications that these arrangements are having on the sustainability of the coastal fisheries, which are the bedrock of the small-scale fishing communities. By scrutinizing the policy-process framework involved, we provide important lessons on how national jurisdictional flexibility can tap on supranational policy interstices to engender a new fisheries governance framework

TABLE 1 | European and national regulations regulating industrial, artisanal and recreational fisheries in Malta.

Legislation	Measure/ Controls	Recreational	Artisanal/Professional	Industrial/Large-scale
EC1967/2006 EU Mediterranean Regulation	Fishing capacity	No restrictions, MS jurisdiction	Limited in line with Article 26 (1) (b)	Large vessels allowed to increase post-EU (Article 26)
	Fishing zones	No restrictions, MS jurisdiction	No restrictions, MS jurisdiction	Specific zones within territorial seas
	Gear use	Prohibited nets, dredges and harpoons with scuba	Restrictions on mesh size of set gillnets (Art 9 (6))	Restrictions on mesh size, depths and days at sea (Art 9 (6))
	Catch sales	Prohibited commercialization		Allowed
Management plans		No management plans in place, MS jurisdiction	Not for artisanal demersal fisheries, MS jurisdiction	Management plans for trawls and purse seines
	EC 199/2008 EU Data Collection Framework	Data collection	Exempted through derogation	On-board observations, Catch and Assessment Survey
EC 1224/2009 EU Control Regulation	Logbook	Only for pelagic species larger than 50 kg	Catches registered for vessels larger than 10m	Catches registered through logbook and e-logbook
National Law Cap 425.01 Fishery Regulations	Fishing gear	As defined in EC 1967/2006	Spatial and temporal restrictions (Since 1935)	As defined in EC 1967/2006
National Law Cap 425.07 Fishing Vessels Regulation	Definition	“Work on a low scale” (Since 2004)	a person who is engaged—in fishing for sale—and—relies on his fishing activities for the whole or part of his income	
	Catch sales	Not defined		Minimum Value of Landings (Schedule III)

that while compliant with EU law, is not attuned to the new local fishing realities unfolding at sea.

METHODOLOGY

As there is no coherent and comprehensive official data to guide and inform our exploration, we adopted a “blended inductive approach,” collecting data coordinated through various integrated approaches and methods that assimilate and triangulate information to gain greatest possible insight and understanding of what are complex, sensitive and partially obscured issues. A number of formal ($n = 47$) and informal ($n = 123$) interviews were conducted with recreational and professional fishermen both at sea, and in their workshops’ premises between June 2014 and August 2015. Co-incident meetings also took place in bars and at the fishing ports. Participant observation during fishing trips was also integral to the research effort as it provided an opportunity to delve into the realities of policy-related matters. The main author’s previous acquaintance with the field was important to establish the necessary trust and gain access to key informants in the fishing communities. Speaking the same language and dialect as the fishers, placed the researcher at an easier stance approaching individuals and gaining the tacit understanding of particular oral statements and attitudes that are inaccessible to “professional outsiders” (Agar, 1996).

A more formal series of interviews were held with the official representatives of the fishers’ co-operatives, the Federation for Recreational Fishermen Associations (FRFA) as well as the

website administrators of the Malta Fish Forum (MFF). The MFF is an online interface¹ that hosts threads of discussions between different fishers—predominantly recreational—and provides important public information on complex issues pertaining to the recreational sector, which otherwise would be very difficult to gather through other methods. Further information was gained from secondary data sources including media articles and websites, government public information, and other academic work that focused on the subject matter. The triangulation of information from multiple sources is important to reduce bias especially on contentious and sensitive issues such as the case of rights to resource-use (MacMillan and Han, 2011). The analysis of the data was based on the constructivist grounded theory approach (Charmaz, 2006) with the aim of reaching a saturation of predominant concepts through a process of theoretical coding and successively forming a narrative grounded in quantitative data and direct qualitative excerpts.

RESULTS

Rationalization of the Fleet and the Emergence of the Recreational Sector

Upon EU accession, the national government initiated the process of transposing the obligations of the EU Common Fisheries Policy (CFP) to Malta. One of the core obligations was to align the fishing fleet to “achieve a stable and enduring balance of fishing capacity with fishing opportunities” (EC 2371/2002

¹See <http://www.maltafishingforum.com/>

Art.11). The Maltese government ratified this obligation and capped the fishing fleet by not issuing new commercial licenses unless they replaced older licenses with the same kilowatt and tonnage (EC 2371/2002 Art.13). An ongoing process of fleet restructuring was also encouraged by the Government from 2005 to promote the replacement of what were considered as “inactive” and “low-income-nature” vessels with “economically efficient” vessels in an endeavor to rationalize the fleet and making it more competitive within the EU single market. In the small-scale fishers’ perspective however, this “rationalization” process also meant making space for large-scale vessels and distributing “trawling and permits to a handful of powerful and politically-connected individuals” (Artisanal fisher). In fact between 2005 and 2013, the number of registered trawlers in the commercial segment increased by 69% (NSO, 2004, 2015).

A legitimate way to initiate this process was sought through the establishment of a minimum landing scheme [Schedule III (Cap 425.07)] which obliged fishers to catch and declare specific amounts of fish sales to be able to retain their commercial license. Vessels that have been unable to fulfill the minimum specified declarations have been transferred either into the part-time commercial segment (MFB), or to a new category specifically established for “Non-Commercial Fishing Vessels i.e., recreational” known as the MFC category (Cap 425.07 Art 8 [b]). With the advent of this declaration system, some fishers also decided voluntarily to leave the commercial sector and join the MFC for they were “informally informed” by officials that “they could retain the same fishing practices without having to declare any catches” (ex-artisanal fisher). Back then, this was particularly enticing for those who did not want to declare catches due to taxation purposes. As a result of these processes, in the initial phase (2005) there was a sudden drop in the number of full-time (MFA) and part-time vessels (MFB), accompanied by the appearance of 826 recreational vessels within the MFC category (**Figure 1**). This rationalization process is ongoing, and over the years, around 1,000 small-scale vessels have transferred from the commercial to the recreational segment. Being of an open-access nature, the recreational register also accommodates the entrance of new individuals and in 2015, the segment had risen up to 1935 recreationally-registered vessels.

In contrast to the recreational segment, and as a result of the rationalization process, the number of commercial small-scale vessels has been constantly declining (**Figure 1**), with GT and KW becoming increasingly channeled to the enlargement of commercial large-scale vessels, predominantly linked to the corporate growth of fishing companies that have started appearing post-EU accession. As a result, commercial vessels are becoming scarce and expensive, and new small-scale entrants face a significant economic barrier to entry due to the high commercial value placed on existing boat licenses. The expansion of the MFC is also partly related to this market-driven system because those people who cannot afford to purchase a commercial license or a commercially-licensed vessel on the open market, can possibly gain a commercial fishing permit from the government when, or if, fleet capacity becomes available.

Through this process, when capacity is available, the government distributes permits to those who apply for one,

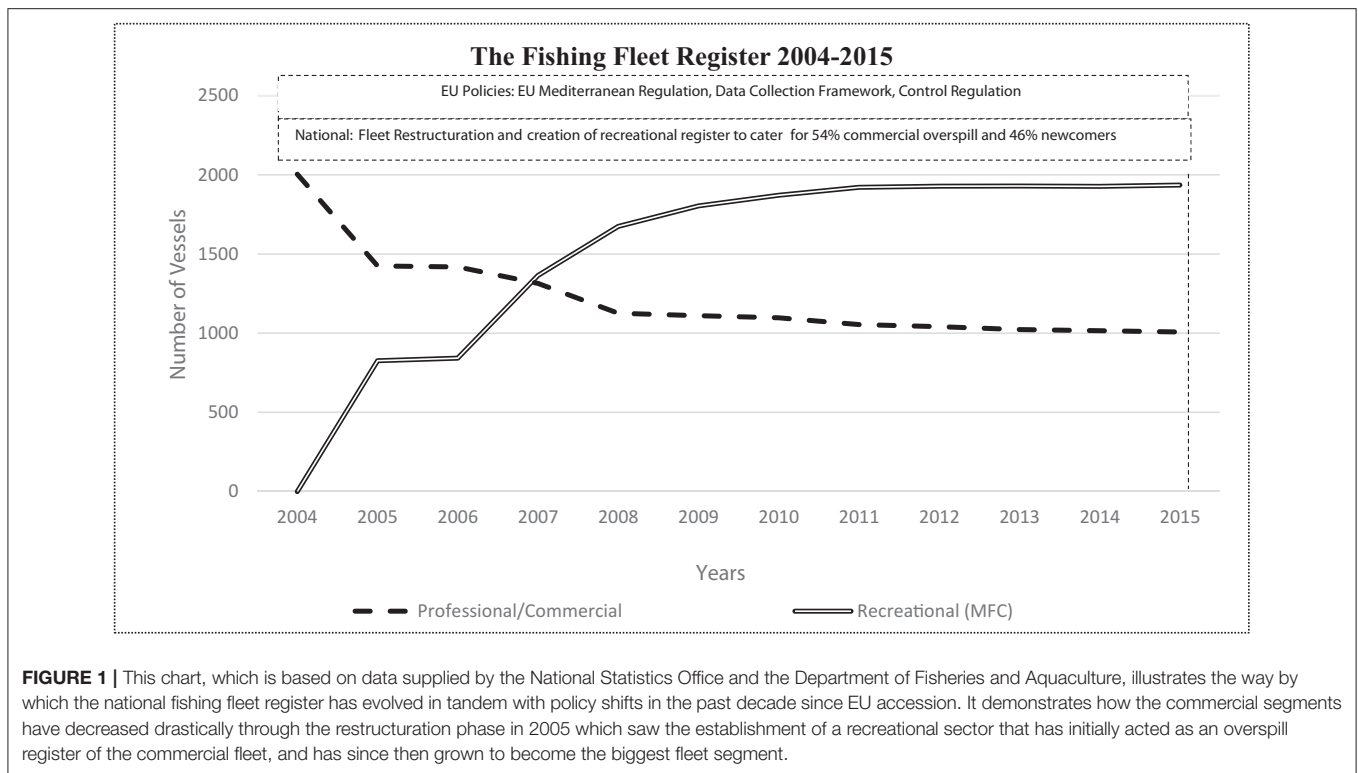
including MFC license holders. This opportunity entices potential entrants to register their vessels initially as MFC, and await their turn to attain the commercial license from the government. In other words, the MFC register has become, to a certain extent, a de facto gateway to the commercial small-scale sector. Having said this, it was clear for those interviewed that the license-allocation process itself is not transparent and is enmeshed in patterns of nepotism that only those with patronage links to top officials can access. Indeed, there is a perceptible increase in anticipation about permit acquisition close to general national elections with many individuals often “promised” a commercial permit in return for their vote by political candidates: “Last election... few weeks before the election, I was told that I will get a permit, but I never got it.” (MFC owner).

This is why in the past decade, the Maltese recreational sector kept growing, and has become larger than the small-scale counterpart. Hence we can ascertain that despite being referred to as a “recreational” sector, the MFC category was actually set up to “push out” a total of over 1,000 artisanal vessels from the “commercial” register into a “non-commercial one,” and to accommodate potential entrants to becoming commercial fishers incognito, and not actually to develop leisure-pursuit fishing. The key policy regulation driving this transformation was allowing members of the MFC fleet to retain most of their fishing rights using artisanal fishing gear which is not controlled by the Mediterranean regulation (Article 8 & 17) and hence being able, albeit indirectly, to pursue fishing for a commercial reason “on a low scale” (Cap 425.07 Art 9).

Although not officially allowed to sell their catch (EC, 1967/2006) (Art. 17), this “loophole” has attracted both artisanal fishermen, who could sell their commercial license to newcomers, predominantly large-scale investors, and also entirely new fishermen to join the recreational segment. This is because there are no specific restrictions on a wide range of species and gears such as bottom long-lines, pots and traps, trolling lines, and other pole-and-line tackle that are also widely used by the commercial small-scale sector. In addition to the MFC segment, there exists a Small Ships Register (SSR) (Cap 499.52) which falls under Transport Malta (TM) and currently hosts 13,905 pleasure crafts². Although there is no definite figure of how many of these vessels actually engage in recreational fishing, these vessels can lawfully use different types of fishing gear and thus have the same impact on fish stocks and on the small-scale fishing sector as the MFC fleet.

It is thus understandable why the MFC fleet, which has predominantly been the result of a neoliberal fleet restructuring, is more than a mere “leisure-based” sector. It hosts a range of fishers who perceive the “recreational” license in various ways, including those (i) who are ex-professional fishers sustaining their livelihoods (or part of it) through the MFC license, (ii) who have joined in with a “wish to fish” expecting or hoping that someday they will become recognized as commercial fishers and benefit from European Union funding and national fuel subsidies allocated to this commercial segment; others that (iii) fish for leisure but veer toward catch commercialization

²This information was supplied by Transport Malta on 16th August 2016.



to offset costs; and (iv) who pursue purely leisure fisheries, including catch and release.

All these distinctive motivations have been developing under the umbrella of “recreational” fishing, but are generating a series of socio-ecological consequences to the marine commons and the artisanal small-scale commercial fleet dependent on these resources. Specifically, the growth of the recreational sector, which is a result of policy-enabling mechanisms, remains unmanaged, and has triggered an interconnected reaction within the socio-ecological system that is manifesting primarily as problems of overfishing, resource-use conflicts, and reduced catches.

Policies Fuelling the Battle for the Coastal Commons

Competition for fisheries resources within Malta’s FMZ is increasingly contested among industrial trawlers, artisanal-commercial vessels and the recreational fleet directly due to enabling policy measures taken since EU accession. The industrial trawling fleet, which was previously restricted as a measure to protect the small-scale sector (Camilleri, 2002), for example, has been allowed to increase its coastal fisheries catch by 148% within designated trawling zones of the FMZ³ (MSDEC, 2013a) extending into the 3 nautical zone.

³These zones, which are based on a study conducted in 1978 (see Giudicelli, 1978), were mainly implemented in a period when trawling was done by small trawlers. Following the studies in 1970s, various developments took place including the restriction of the trawling operations from the 3 nautical mile zone following representation made by fishermen using inshore artisanal traditional gear [14, p.

Here they now compete with small-scale fishing activity and simultaneously, the growth of the burgeoning recreational sector is leading to direct competition on an unprecedented scale with the artisanal sector—as one artisanal fisher explained “*The sea cannot hold everyone. There isn’t enough fish for everyone!*”

In some cases, artisanal professional fishers cannot compete for fish with the recreational fishermen as the latter often have more powerful boats which allows them to reach the fishing grounds more quickly to find the best spots, and to fish for longer. Artisanal fishermen, who are unable to increase their vessel engine size due to the commercial engine capacity limits imposed by the EU law, feel hard done by. As one artisanal fisherman said “... *when we arrive we find recreational fishermen in the exact same spot, so we have to go look for another good fishing ground, and waste precious fishing time in the process.*”

A closer look at the situation in terms of engine power distribution across the MFC vessels illustrates that the number of recreational vessels outcompetes the commercial counterpart within the “0.1–49 KW” and “50–99 KW” engine power categories (Table 2). This means that the artisanal-professional fishers are the ones enduring the highest level of competition by the recreational sector, especially when the latter targets fisheries that bring good prices within the local markets.

55], and the discovery of new “lucrative” areas by the trawling operators, which were not reflected within the Mediterranean regulation [15].

TABLE 2 | The recreational vessels (MFC)⁴ outnumber the amount of artisanal-professional vessels in the smaller-engine cohorts, thereby demonstrating the intense and one-sided competition posed by the recreational sector on the artisanal counterpart (Data provided by national government).

Engine size (KW)	Number of vessels	
	Artisanal-professional	Recreational
0.1–49 KW	549	1441
50–99 KW	218	348

Although the sale of recreational catches is prohibited by the EU Regulation 1967/2006 (Art 17[3]), illicit sales of fish have been observed to take place via various informal means⁵ by various parties including divers, ex-professional fishermen and new recreational fishers who own SSR and MFC registered vessels. Species include Red snapper (*pagrus pagrus*), grouper (*Epinephelus guazza*), Dentex (*Dentex dentex*), scorpion fish (*Scorpaena scorpa*), John Dory (*Zeus faber*), and amberjack (*Seriola Dumerili*), fish that are predominately sold in local fish markets as well as served as the “local fisherman’s catch” in typical Maltese restaurants. Small-scale fishers are angry as this illicit practice negatively affects their income. In the low tourist season when demand usually subsides, they cannot sell all of their own catch due to the availability of “black fish” and in even in the high season, illicit sales depress prices as many restaurants and fish shops source their fish from recreational fishers. According to one fisher, “When I try to sell fish to restaurants the owner tells me that he already bought the same type of fish at €1 – €2/ per kilo less from an amateur – and so the owner reduces the price of your fish... I know for a fact that these businesses have direct contacts with the recreational fishers because they can get a better deal with these people.”

There is little or no enforcement in place and the discrete sale of black fish is somehow permitted by the authorities despite the financial hardship imposed on their artisanal counterparts, who are already having difficulties sustaining their livelihood due to the privatization of the Bluefin tuna fishery and far reaching restrictions on the swordfish season (Said et al., 2016). Against a back drop of diminishing stock levels of all commercially-important fish, these contestations have developed into a blame-game within which fishers accuse one another for the dire state of the fisheries. For example, one artisanal fisherman argued that “the sea is destroyed by those that don’t need to live from it; not the fishermen who must live from it. But no one understands this – they (policy-makers and scientists) consider professional

fishermen as destroyers, and recreational fishermen as sustainable because they target fewer species, they say,” while another fisher has blamed the “divers with aqualungs and harpoons since they have destroyed lots of good quality fish”. A recreational fisherman, on the other hand, has argued that “the problem is certainly not the recreational fishermen... they [the authorities] better look at the damage that trawling is doing on the reefs” (MFF website), while another debated that “...if they really want conservation of fish they better start with laws for those who use trammel nets and trawling...” (MFF website). Another striking post on the same online thread exclaimed “After all, WE [the recreational fishermen] ARE NOT THE CULPRITS THAT ARE FINISHING OFF THE SEA!!!!!!!!!!” (MFF website).

In this blame-game, the local discourses converge on a similar standpoint that conveys a perturbing “overfishing” situation which needs to be somehow resolved if commercial fish catches are to be sustainable. However, the issue of catch management of the coastal fisheries within the FMZ does not seem to be receiving specific attention within the national management portfolio as the supranational EU policy pertaining to coastal fisheries provides only for the management of the large-scale fishing sectors operating within the FMZ. In this regard, the information gap between what is officially recorded and managed in terms of resources, and what is actually unfolding at sea in terms of fishing effort, remains a threat to marine governance of inshore waters.

Policy Gaps Are Catalyzing the Demise of Small-Scale Fisheries

It is clear that the supranational policies, which have in part stimulated greater competition in Maltese waters, have not also enabled or required the introduction of a more holistic approach to the management of multiple-use fisheries in inshore waters. Specifically, in terms of the sustainable exploitation of fisheries, as per provisions within the Mediterranean Regulation, the Member States are only required to implement management plans for large-scale and industrial activities including trawling and purse-seining, and not for other artisanal passive gears targeting commercial species—i.e., trammel and gill nets, bottom-long lines, pots and traps, and pole-lines. In other words, these gears, most of which can be lawfully used by the recreational sector, are not legally required to be managed for sustainability purposes. Moreover, although legal provisions within the same Regulation are in place to regulate recreational fishing, they are not attuned to mitigate competition with their commercial counterpart, so national authorities, in principle, are not legally obliged to control the exploitation of open-access fisheries contested by multiple users.

In fact, in Malta, we find that the regulatory framework for sustainable management of fishing effort and/or state of the fish stocks is weak and unenforced. It seems that the national authorities are permitting an open-access regime and giving no specific attention to the fishing capacity thresholds that the coastal fisheries can withstand. Both the small-scale coastal fishing activities and the recreational fishing effort, which in itself was a product of policy-enabling mechanisms, remain

⁴The engine power details of the small-ship register (SSR) vessels were not available hence they were omitted from this table. In hindsight, however, given the large number of registered SSR vessels (13,905), the pattern of recreational domination within the engine power cohorts is realistically higher than depicted in this table, and thus the processes of conflict are inevitably striking.

⁵Online public posts on the MFF also highlighted this activity, for example in a particular thread an individual stated that “recreational fishers must all appreciate that given the rampant practice of selling one’s catch” ... “we (recreational fishers) are not viewed in a very good light... During the Alungi (Albacore) season people are trying to offload their catch to cover expenses, same goes for deep bottom fishing, jigging, spearfishing etc.” (Posted on 22nd November, 2012).

unmanaged and obscured. There is no data that indicates what is caught and how by the recreational sector, as the government has since 2005, applied for an EU derogation that exempts it from collecting data on the recreational catches. This derogation was justified by national report-findings which suggested that “*the total catches from recreational fisheries constitute a very low percentage of the total catches*” (Department of Fisheries Aquaculture, 2006), and that recreational fisheries have low impact due to their engagement in “*minor gears such as set bottom longlines, traps, trolling lines and jigging*” (MSDEC, 2013b).

By reiterating this clause on an annual basis as part of the national program for the data collection framework (DCF) for the EU, the government has, for the past decade, refrained from doing any research on the exploitation rates of the recreational fleet. While this may have been understandable back in 2005, when the recreational fleet was less than half the size it is today, this assessment appears less justifiable today and suggests that the government may be deliberately maintaining such a derogation as a regulatory loophole to retain the status quo and avoid realistic management of the coastal socio-ecological systems. Moreover, although catch data is collected for the fishing gears used by the small-scale sector in line with the EU Data Collection Framework (Department of Fisheries Aquaculture, 2013), this data is not analyzed or studied to inform policies for the sustainability of the small-scale sector at the national level.

The national policy focus falls almost entirely on fish stocks connected to the large-scale fleet including (a) annual studies for the demersal trawling fishery⁶ and the small-pelagic purse-seining⁷ conducted to assess the status of the specific commercially-important stocks targeted by the trawlers and purse seines respectively, and (b) EU-funded management measures aimed at maintaining the sustainability of these segments. For example, between 2013 and 2015, funding from the European Fisheries Fund was earmarked by the national government for a fishing effort adjustment plan of the trawling fleet with the objective of “*managing the fishing effort in accordance with the aims of the Common Fisheries Policy, resulting in a more sustainable fishing sector*” (MSDEC, 2013c). Hence, the premise of sustainability appears to be solely focused on the industrial segment targeting coastal fisheries.

The Government’s legislative role in managing fisheries is strictly aligned to EU policies, and at the time of writing, there are no national plans to address overexploitation of fish resources resulting from intensified competition between the industrial, the small-scale and the escalating recreational catching capacity. There are no specific plans to study the sustainability of the small-scale segment and no political commitment seems in place to govern the situation. The only action toward managing this problem was through a setup of a government sub-committee consisting of members from the fisheries co-operatives and the federation for recreational fishers, as well as other government institutions, with the aim of proposing a set of

technical measures to manage the practices of recreational fishing (MSDEC, 2013a).

However, the measures never materialized due to the political pressure exerted by influential recreational fishers. These individuals, close to the national election in 2013, used the thousands of votes of the recreational fleet to “intimidate” politicians and, in a series of post-election meetings defied and challenged the Government’s approach on the basis that there are no clear EU directives which oblige Member States to implement recreational fishing management measures (pers. comm.). Since then, no decisions were taken and there does not seem to be particular political will to address this situation and to resolve the overfishing crisis in the Maltese coastal waters. In fact, the national authorities seem to have adopted a defensive attitude to protect their fisheries governing strategy of Malta’s coastal fisheries.

For example, in a newspaper letter to rectify the “*anti-thesis of the fish conservation policy*” declarations which a small-scale fisherman had highlighted through a newspaper article (Caruana, 2015), the government reported back stating that the fisheries management in Malta is done in line with EU policy obligations, and that the problem of reduced catches suffered is a result of overfishing across the Mediterranean—the “Dead Med” (MaltaToday, 2016). In other words, the government appears to be quoting supranational policies to defend its fishing governance portfolio, and simultaneously confining a localized problem of the Malta’s FMZ within the mainstream discourse of overfishing and regional catch decline. By turning a blind eye to these local problems and overtly “ignoring” the public pleas made by the small-scale fishermen for a more realistic management scheme, the unsustainable management of the marine commons is likely to persist, creating a bleak future for small-scale and recreational fisheries segments alike.

DISCUSSION

This paper, which is based on a case study in Malta explores how the small-scale fishing sector in the Mediterranean can become victimized by policy interstices in the absence of a holistic management framework, and to elucidate the socio-political realities that underpin the lag in inshore fisheries management, and the consequential governance challenges that arise. We explain how fisheries policies appear to be driven by a wider political agenda of rationalization that are in place to promote the growth of large corporate fishing sector at the expense of traditional artisanal fishers. We establish that a substantial number of recreational fishers are former artisanal fishermen who have fallen out of the professional sector directly due to policy changes, but who have been allowed to retain their gear and rights associated with fishing in such a way that they present a serious threat to the livelihoods of the professional artisanal sector.

This research further adds up to the literature on the array of challenges that small-scale fishing sectors are facing at EU and international levels due to resource-use policies which are embedded in the ecological and economic rhetoric of efficiency,

⁶Mediterranean International Trawl Survey - MEDITS.

⁷Mediterranean Acoustic Survey on Small-Pelagics - MEDIAS.

and do not cater for the social importance of fishing communities (Urquhart et al., 2011). In an era where sustainability has become more about efficiency than about the people (Weaver, 2015), globally small-scale fishers are consistently enduring consequences of policy misfits and it is becoming increasingly difficult for them to persevere (Symes et al., 2015). Evidently, this case study, which demonstrates how small-scale professional fishing is increasingly becoming relegated into the recreational segment, shows that the future of the small-scale fleet, as a lawful economically active sector, is a rather bleak one.

In this article, we diagnose a series of policy and governance gaps which are triggering overexploitation of coastal fisheries in the Maltese waters and are cumulatively pushing out the small-scale professional segment. We elucidate how this is happening within a neoliberal political economy, which is tapping on semi-legal opportunities and policy mixes to craft policies that satisfy narrow political needs and economic interests, rather than to effectively cater for the sustainable use of resources. We demonstrate this by correlating the initial and major driver behind overexploitation with the rationalization of the Maltese fishing sector in 2004 which led to the enlargement of the industrial segment, and to the creation of a recreational fishing segment, which are both co-existing and competing with the small-scale professional counterpart without any form of specific management that regulates their sustainability.

Similar patterns of this rationalization-related creation of recreational registers and consequent conflict with artisanal fishers, as well as lack of holistic management of the contested fisheries, have been recorded in other Mediterranean countries. In Croatia 68% of the artisanal-professional fishers were pushed into the recreational/subsistence sector on the basis they were not full-time fishermen (Matić-Skoko and Stagličić, 2018) and in Cyprus the present recreational fishers are ex-professional fishers who were allowed to retain their net-fishing in the weekends as well as commercialize their catch (Hadjimichael, 2015).

On these lines, it is our contention that since the Mediterranean regulation as a supranational policy only regulates up to a specific level to endow the Member States with the necessary adaptive flexibility to accord to their needs, such flexibility can create space for policy gaps at the national level. Such policy fissures typically occur in neoliberal dominated landscapes where policy mix is used to promote neoliberal agenda to strengthen capital, and simultaneously obscures the real cause of the problem (Mansfield, 2004). In fact, since the Mediterranean regulation obliges MS to implement management plans for large-scale fisheries (mostly trawling and purse seining), national management becomes deployed to myopically address only specific resilience (Stoll et al., 2016) of large-scale fishing interests. As a result of such policy interstice, the exploitative patterns of small-scale professional and recreational segments becomes disregarded, and ideological and spatial user-conflicts between these segments are allowed to emerge due to multi-scalar policy gaps which do not cater for a holistic management of the contested open-access fisheries (Ratner et al., 2014).

We have shown how, in such situations, where policies develop to be unclear and fail to define and regulate access to

the same pool of resources, socio-ecological systems develop to be less governable (Jentoft and Chuenpagdee, 2013; Coglán and Pascoe, 2015) and overexploitation becomes inevitable (Boonstra and Österblom, 2014). Such policy misfits between the sustainable management of fishing socio-ecological systems and the institutional framework is a sign of weak governance which is prone to trigger, rather than prevent, the overexploitation of open-access fisheries (Bodin and Österblom, 2013; Boonstra and Österblom, 2014). In Malta's case this governance challenge has grown since the government's political position has become somewhat squeezed between the agenda of the large-scale sector that are economically powerful, and the recreational segment which, due to its increasing number, has become a strong force not to be reckoned with.

We suggest that, given the governance challenges that national and supranational policy mix create on the ground and the concomitant regulatory problems that emanate from such gaps, a governance shift is needed. This can include additional EU mechanisms such as regulations that oblige Member States to implement sustainability plans for both small-scale professional fisheries and recreational ones, on the same lines as the large-scale fisheries. Some EU Member States have implemented measures to limit recreational fisheries through harvest controls, such as daily bag limits, fishing licenses and spatial restrictions (Pawson et al., 2008; Veiga et al., 2013). Other initiatives could include the lead of fishers' organizations in decentralized approaches to manage their fisheries, a system that has proved effective in the Northwest Mediterranean (Arceo et al., 2013). This could be a way of protecting the traditional socio-ecological systems and simultaneously resolving what is perceived as a prevalent problem of fisheries crisis that is likely to remain a global challenge for years to come (Coulthard et al., 2011; Froese et al., 2018).

Moreover, it is recommended that an overhaul in the neo-liberal ideology is necessary for the artisanal small-scale communities to re-institute their image within a pro-efficient climate, rather than just becoming (in)conveniently redirected into the recreational sector. Plausible short-term mitigations would include policy restrictions on the transferability of capacity between the artisanal and large-scale industrial fleets in a way that controls the neoliberal expansion of large-scale operations to engender the prolongation of the small-scale fleets. On the long-term, it is advisable to enhance collective action at the local level and introduce co-management mechanisms to address the situation of commons' governance through a more decentralized and effective system (Cinner et al., 2013).

CONCLUSION

By providing a diagnosis of multi-scale policy failures of open-access fisheries in a Southern European context, this paper shows how a neoliberal rationalization of the Maltese fishing fleet coupled with lack of holistic marine governance has fuelled the battle for the commons, and simultaneously catalyzed the demise of the traditional small-scale fisheries systems. By using the narrative of economic efficiency and

rationalization to facilitate the accumulation of resources into fewer industrial hands, the national authorities has tapped on supranational policy gaps in the Mediterranean regulation to push nearly half of the small-scale segment into the recreational fleet without carefully managing this major resource-use shift. With intensified competition between the industrial vessels, the small-scale professional fleet, and the burgeoning recreational segment, resource overexploitation is happening at a fast rate, and the national policy is not attuned to manage this crisis. We show how intersecting supranational and national open-access fisheries policy frameworks which demonstrate a case of policy mix do not do justice to the overall framework of sustainable fisheries exploitation, and the gaps unavoidably perpetuate governance challenges that become too complex to address. This paper gives an in-depth illustration of the need to dig beyond the generic narrative of economic efficiency and sustainability to decipher the complexities and unpack the socio-political processes that

have not yet been fully discerned in the global analysis of open-access fisheries.

ETHICS STATEMENT

This study was carried out in accordance with the recommendations of the American Anthropology Association Code of Ethics, Research Ethics Committee, School of Anthropology and Conservation. The protocol was approved by the Research Ethics Committee, School of Anthropology and Conservation. All subjects gave written informed consent in accordance with the Declaration of Helsinki.

AUTHOR CONTRIBUTIONS

AS compilation of data, analysis, and drafting of paper. DM analysis of data and drafting of paper. JT Theoretical feedback on paper.

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Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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