

Small-scale fisheries of the Eastern Mediterranean: a source of life accompanied with knowledge gaps

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Synopsis in Greek

Η μικρή παράκτια αλιεία αποτελεί σημαντική μερίδα της επαγγελματικής αλιείας παγκοσμίως απασχολώντας έως το 90% των επαγγελματιών αλιέων. Πολλές περιοχές της Μεσογείου είναι αναπόσπαστα συνδεδεμένες με αυτό τον τύπο αλιείας και η Ανατολική Μεσόγειος δεν εξαιρείται. Αντιμέτωπη με πολλές προκλήσεις διεθνώς-μεταξύ των οποίων ήρθε να προστεθεί το 2020 και ο ιός Covid-19, η μικρή παράκτια αλιεία στην



Ανατολική Μεσόγειο καλείται να αντιμετωπίσει και το πρόβλημα των ξενικών ειδών προερχόμενων κυρίως από την Ερυθρά θάλασσα μέσω της Διώρυγας του Σουέζ. Η σημασία της είναι μεγάλη, ιδίως για τις τοπικές παράκτιες κοινωνίες, αλλά ένα μεγάλο πρόβλημα έγκειται στην έλλειψη εξειδικευμένων γνώσεων από μεγάλη μερίδα αλιέων. Για την επίτευξη μακροχρόνιας βιωσιμότητας κρίνεται αναγκαίο να γεφυρωθούν

τέτοια γνωσιακά κενά. Η iSea, μια μη-κερδοσκοπική περιβαλλοντική οργάνωση που δραστηριοποιείται, κυρίως, στην Ανατολική Μεσόγειο, μέσω διάφορων δράσεων συνεισφέρει στην ευαισθητοποίηση αλλά και επιμόρφωση των αλιέων. Εξίσου σημαντική, ωστόσο, κρίνεται και η συμβολή που μπορούν να έχουν οι αλιείς στην Επιστήμη. Για το λόγο αυτό, η iSea συνεργάζεται εδώ και αρκετά χρόνια με αλιείς μικρής κλίμακας υπογραμμίζοντας τη συνεισφορά τους τόσο στην επιστήμη όσο και στην προστασία του θαλάσσιου περιβάλλοντος. Ενδεικτικά, αλιείς από όλη την Ελλάδα συμμετέχουν στο πρόγραμμα «Fishing for litter» στο οποίο συνδράμουν στη εξάλειψη θαλασσιών απορριμμάτων αλλά και σε άλλα προγράμματα για την καταγραφή απειλούμενων και ξενικών ειδών.



Small-scale fisheries (SSF) utilize vessels smaller than 12 m without towed fishing gear, employ more than 90% of the world's fishers for subsistence, or for income generation, and are typically family-based fisheries (FAO 2018). In the EU, SSF are of central importance for certain regions and this is particularly true for the Mediterranean and the Black Sea, where they represent over 84% of the total fishing fleet and employ nearly 62% of the total workforce. Greece is the country with the most extensive coastline among all Mediterranean countries, and with a fleet of about 14.000 SSF vessels which account approximately 95% of the total fleet. Although fisheries, including aquaculture contribute less than 1% in the GTP of the country, SSF play an important role in the cohesion of the coastal communities potentially more than any other EU Mediterranean country.

Greek SSF face many challenges such as competition with industrial fisheries, smaller catches due to overexploitation, climate change and pollution, flaws in relevant legislation, gear damage caused by marine life and bycatch. Recently, SSF have had to cope with an additional and ever-growing threat: alien species. The majority of alien marine species in the Eastern Mediterranean originate from the Red Sea and find their way up to the Mediterranean through the manmade Suez Canal. Alien species may become invasive if they manage to establish themselves and reproduce successfully in a new area. Consequently, it is highly likely that, when the latter happens, they cause the depletion of local native marine biota which may be of commercial interest for the fishers. Lastly, it is worth mentioning that 2020 came along with an unprecedented big challenge, not only for SSF but for the global economy: Covid-19. In Greece as well as the whole Mediterranean, SSF were heavily hit at the beginning albeit there were signs of recovery and the consequences were attenuating as some areas exited quarantine in late spring/early summer 2020. Unfortunately, according to a recent GFCM report, demand remains volatile, affecting prices and production, and uncertainty persists, with the longer-term impacts of an economic downturn and a weak tourism sector expected to continue having an impact on fisheries and aquaculture.



Although SSF are tightly related to local communities and there is a great number of people involved in them, emphasis should be put on the existence of severe knowledge gaps in both fishers and stakeholders. Since SSF often constitute family-based businesses, traditional knowledge and tactics are passed down through generations with little influence from external elements. This, in combination with a lack of proper, fishery-oriented education/training prior to starting a professional career in that sector are the primary reason behind these knowledge gaps. It is not uncommon

for fishers to miss essential biological knowledge about their targeted species or about the implications for their fishing activities.

“iSea” is an NGO based in Thessaloniki (Greece) working to maintain the biodiversity in vulnerable marine habitats, contributing to the overall diversity of our oceans. We work closely with the SSF community of the country, aiming to increase their sustainability and influence co-management of the resources. Besides acknowledging the dire need to raise awareness in people working in the SSF sector, we do believe that they may contribute to resolving several problems in the Mediterranean. Currently, iSea runs 4 projects that help improving our knowledge about SSF whilst at the same time increase the sustainability of the industry by capacity building, creating custom-tailored solutions in problems affecting their activity, and diversifying their catches and thus their resources.

In iSea, we work to close these knowledge gaps and to increase the sustainability of SSF in Greece. The best way to reach the goals of sustainability and management is through establishing a mutually beneficial relationship between fishers and the state. Fishers can provide crucial information through their day-to-day exposure to the fishing grounds and, upon creating a cooperative bond, it will be easier not only to educate the fishers but, also, to inspire confidence which will, ultimately, result in their refraining from illegal activities. In specific,



1. The project [Alliance for Survival II](#) which is implemented together with MEDASSET Hellas and the University of Patras, among others, aims to train SSF fishers on safe release techniques of elasmobranchs and sea turtles when incidentally caught and increase their knowledge about the applied legislation. The goal of the project is to empower SSF safeguarding the balance of the marine ecosystems.

2. The project [Pick the Alien](#), aims to promote the consumption of alien species among the Greek consumers in order to mitigate their adverse effect and diversify the catches of SSF. In this context, we try to build local pilot chains between fishers, retailers, and restaurants in different Cycladic and Ionian islands.



3. The project [By ElasmoCatch](#) focuses on studying the elasmobranch fisheries in the North Aegean with a special focus on discarded non-commercial species. The goal of the project is to collect data on species level, for all elasmobranch species that are captured by different fishing equipment in the North Aegean. In the context of the project we work closely with longliners in the area to monitor elasmobranch bycatch and increase fishers' knowledge about protected

and/or threatened elasmobranch species.



4. In the context of the project [Piloting Marine Litter Prevention and Mitigation Action](#), SSF fishers from Axios Delta National Park together with other stakeholders from the area work with iSea and the Management Authority of Thermaikos Gulf Protected Areas in the collection and proper management of abandoned, lost and discarded derelict fishing gear (ALDFG) in the area. This is a massive issue that threatens directly the existence of their activity.

Apart from those projects iSea works daily with small-scale fishers that act as citizen scientist reporting catches of rare or alien species directly contributing in scientific research. Aiming to influence co-management in the Greek SSF community, we design our future projects in line with their needs in order to increase their capacity and, consequently, secure their livelihood while transforming them into guardians of the Mediterranean.

