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**RESEARCH PAPER** 

## Assessing Foreign Fishing Activities in Türkiye's Contiguous Zone: A Decade of Insights and Management Implications

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Department of Marine Technologies, Faculty of Marine Sciences and Technology, Iskenderun Technical University, Hatay, Türkiye ⊠: aydin.demirci@iste.edu.tr Abstract: The protracted maritime jurisdictional disputes in Türkiye's EEZ in the Eastern Mediterranean have perpetuated economic disparities and engendered lacunae in fisheries management that could undermine marine biodiversity and regional collaboration efforts. This study interrogates the extent and frequency of extraterritorial fishing operations within the contiguous zone of Türkiye's territorial waters, with a particular emphasis on the years 2013 through 2023. Utilizing data acquired from Global Fishing Watch, the analysis delineates the monthly average fishing hours engaged by different gear types-namely small scale, trawl, undefined and purse seine-across various neighboring countries, including Cyprus, Egypt, Greece, Italy, Libya, and Morocco Findings reveal a persistent increase in fishing activities within these contentious waters over the observed period, reflecting a rise in the deployment of ship-tracking systems, which have potentially inflated reported fishing hours. This surge underscores the urgent need for comprehensive fisheries management strategies that harmonize economic pursuits with the preservation of delicate marine ecosystems. The study's methodology involved analyzing vessel movements via Marine Traffic and Global Fishing Watch data, assessing parameters such as fishing areas, periods, methods, and national affiliations. The results, illustrated in Tables and Figures without direct citation due to the aggregative nature of the data, show varied patterns of fishing activities. The significant increase in Türkiye's trawl fishing hours in 2022, peaking at 857.29 hours, underscores the intensification of certain fishing practices in the region. The need for resolving international disputes is pivotal for establishing effective fisheries management in the Eastern Mediterranean. The findings advocate for enhanced diplomatic endeavors and cooperative governance among littoral nations, supported by international entities to ensure sustainable exploitation of marine resources and to bridge management gaps illuminated by this decade-long empirical inquiry.

Keywords: Unclaimed exclusive economic zone, fisheries management gap, Mediterranean biodiversity, regional collaboration.

# Türkiye'nin Bitişik Bölgesindeki Yabancı Balıkçılık Faaliyetlerinin Değerlendirilmesi: On Yıllık Gözlemler ve Yönetim Etkileri

Öz: Türkiye'nin Doğu Akdeniz'deki MEB'inde uzun süredir devam eden deniz yetki alanı anlasmazlıkları, ekonomik eşitsizliklerin devam etmesine ve balıkçılık yönetiminde deniz biyolojik çeşitliliğine ve bölgesel iş birliği çabalarına zarar verebilecek boşluklara yol açmaktadır. Bu çalışma, Türkiye'nin karasularının bitişik bölgesindeki sınır dısı balıkçılık operasyonlarının kapsamını ve sıklığını, özellikle 2013-2023 yıllarına vurgu yaparak sorgulamaktadır. Global Fishing Watch'tan elde edilen verileri kullanarak yapılan analiz, farklı balıkçıların gerçekleştirdiği aylık ortalama balıkçılık saatlerini göstermektedir. Kıbrıs, Mısır, Yunanistan, İtalya, Libya ve Fas dahil olmak üzere çeşitli komşu ülkelerde küçük ölçekli, trol, tanımsız ve gırgır gibi balıkçılık faaliyetleri bulunmaktadır. Bulgular, gözlemlenen dönemde bu çekişmeli sularda balıkçılık faaliyetlerinde kalıcı bir artış olduğunu ortaya koyuyor; bu da bildirilen balıkçılık saatlerini potansiyel olarak şişiren gemi takip sistemlerinin dağıtımındaki artışı yansıtmaktadır. Bu artış, ekonomik uğraşları hassas deniz ekosistemlerinin korunmasıyla uyumlu hale getiren kapsamlı balıkçılık yönetimi stratejilerine olan acil ihtiyacın altını çizmektedir. Çalışmanın metodolojisi, Marine Traffic ve Global Fishing Watch verileri aracılığıyla gemi hareketlerinin analiz edilmesini, balıkçılık alanları, dönemleri, yöntemleri ve ulusal bağlantıları gibi parametrelerin değerlendirilmesini içermektedir. Verilerin toplu doğası nedeniyle doğrudan alıntı yapılmadan Tablolar ve Şekillerde gösterilen sonuçlar, balıkçılık faaliyetlerinin çeşitli modellerini göstermektedir. Türkiye'nin trol avcılığı saatlerinin 2022 yılında 857,29 saate ulaşarak önemli ölçüde artması, bölgedeki bazı balıkçılık uygulamalarının yoğunlaştığının altını çizmektedir. Uluslararası anlaşmazlıkların cözülmesi ihtiyacı, Doğu Akdeniz'de etkin bir balıkçılık yönetiminin kurulması acısından hayati öneme sahiptir. Bulgular, deniz kaynaklarının sürdürülebilir kullanımını sağlamak ve bu on yıl süren ampirik araştırmayla aydınlatılan yönetim boşluklarını kapatmak için uluşlararası kuruluşlar tarafından desteklenen, kıyıdaş ülkeler arasında gelişmiş diplomatik çabaları ve işbirlikçi yönetimi savunmaktadır.

Anahtar kelimeler: Açıklanmamış münhasır ekonomik bölge, balıkçılık yönetimi boşluğu, Akdeniz deniz biyoçeşitliliği, bölgesel işbirliği.

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### INTRODUCTION

The United Nations Convention on the Law of the Sea (UNCLOS) endows coastal states with rights and responsibilities over Exclusive Economic Zones (EEZs), which span up to 200 miles from their shores (Şimşek et al., 2019; Goodman, 2021). However, delineating these boundaries in the Eastern Mediterranean has been fraught with challenges due to disputes among the region's various states and displays of international power (Sotiriou, 2020). The protracted two-state issue in Cyprus has significantly impacted the economic exploitation and governance of Eastern Mediterranean waters, curtailing effective management and regulation of these maritime areas (Axt, 2021). The Arab Spring and the Syrian War have further compounded these issues, adding new dimensions to the regional conflicts (Rubin & Eiran, 2019).

To define the boundary between the Eastern and Western Mediterranean using geographical coordinates, the 18° East longitude is generally used. This definition includes countries in the Eastern Mediterranean such as Türkiye, Greece, Syria, Lebanon, Israel, Palestine, Egypt, and Cyprus. Despite the Mediterranean's geopolitical significance and history of military and security importance, external powers like the United Kingdom and the United States have maintained a military presence in the region. The Syrian War has also seen an increase in Russia's military presence in the Eastern Mediterranean (Litsas, 2017), adding to the complexities and challenges in the fisheries sector.

The discovery of oil and natural gas in the region has introduced additional complexities to the disputes, particularly regarding the delineation of continental shelves and coastal state rights (Østhagen, 2021). Cyprus, as the island's sole governing authority, has entered into bilateral agreements regarding these resources with other countries, excluding Türkiye (Stergiou, 2016, Demirci and Akar, 2023). However, Türkiye views these agreements as unjust and invalid. This dispute, centered mainly around the continental shelf, also impedes the establishment of economic zone agreements. Amid these tensions, while Türkiye has signed a maritime boundary delimitation agreement with Libya, it has yet to declare a definitive EEZ in the Eastern Mediterranean, reflecting a cautious approach in the region. Consequently, there are uncertainties and conflicts regarding fisheries management and control in areas beyond Türkiye's territorial waters in the Eastern Mediterranean (Demirci & Hoşsucu, 2016).

This study examines fishing activities beyond Türkiye's 12 nautical mile territorial waters, in the 'contiguous zone' as defined by International Law within its EEZ, using Global Fishing Watch data from 2013 to 2023. Under UNCLOS, the contiguous zone extends up to 24 nautical miles from a coastal state's baseline, within which a state can exercise control to prevent infringement of its customs, fiscal, immigration, or sanitary laws and regulations within its territory or territorial sea. Despite Türkiye's reservation about the contiguous zone practice it has not ratified under UNCLOS, the study explores the economic and ecological dimensions of fishing activities conducted by vessels from various countries within this framework.

The data used in this research provides valuable insights into the diverse fishing methods and monthly average fishing durations employed by different countries in this critical area beyond Türkiye's territorial waters. The findings aim to contribute to resolving current international disputes and to achieving sustainable fisheries management and effective resource control in the region. Such analyses underscore the necessity for greater cooperation and international coordination among coastal states to manage and conserve marine resources in the Eastern Mediterranean fairly and effectively.

#### MATERIAL AND METHOD

Utilizing application data from Marine Traffic and Global Fishing Watch for the analysis of fishing activities in the Eastern Mediterranean is crucial for understanding the behavior patterns and characteristics of fishing vessels operating in the region (Demirci, 2024). This analysis involves examining various factors such as fishing areas, periods, methods, and the nationalities of the vessels, thereby providing detailed insights into the fishing practices prevalent in the area. The evaluation of fishing vessel voyages through Excel facilitates the identification of fishing hotspots, seasonal trends, and preferred fishing methods. Analyzing the geographic distribution and inter port movements of these vessels enhances our comprehension of the routes taken by fishing ships in the Eastern Mediterranean (Figure 1).



Figure 1. Sample area for the fishing activities of foreign fishing vessels within the contiguous zone of Türkiye's maritime boundaries, covering an approximate area of 15,225 square kilometers, between the years 2013 and 2023 (Longitudes 36°14'E and 28°07'E).

According to the United Nations Convention on the Law of the Sea (UNCLOS), activities such as research or economic endeavors within the exclusive economic zone (EEZ) of a country cannot be conducted without the consent of that nation. This rule serves to safeguard the sovereign rights and jurisdiction of coastal states over their EEZs (Beckman & Davenport, 2012). Hence, any fishing activities within a country's EEZ must adhere to its legal regulations and standards.

It should be noted that the area depicted in the figure coincides with the adjacent region, yet this does not directly relate to the United Nations Convention on the Law of the Sea. The primary focus of this illustration is to emphasize the proximity to territorial waters, which necessitates consideration. The data on countries and types of fishing collected in this area have been aggregated monthly and presented as a 10-year dataset for statistical comparisons and evaluations.

# RESULTS

This study interrogates the extent and frequency of extraterritorial fishing operations within the contiguous zone of Türkiye's territorial waters, with a particular emphasis on the years 2013 through 2023. Figure 2 presents a comparative analysis of the annual apparent fishing hours between Turkish fishing vessels and those from other countries within the 12-mile maritime boundary (Contiguous Zone) of the Mediterranean Sea adjacent to Türkiye, from the years 2013 to 2023. When examining the apparent fishing hours by Turkish vessels across different fishing methods, there are distinct patterns and trends relative to the collective efforts of other countries. For purse seines, Turkish vessels displayed a pronounced decline in fishing activity over the decade, with a stark reduction from approximately 3,500 hours in 2013 to about 500 hours in 2023. This accounts for an 85% decrease in apparent fishing hours. In contrast, other countries' combined efforts in purse seines fishing have also decreased, though not as sharply, suggesting a general trend toward decreased use of this fishing method in the region or improved fishery management practices. Smallscale fisheries show more stability, with Turkish vessels' activities slightly diminishing over the years. The data indicates that Turkish small-scale fishing hours have remained predominantly consistent, maintaining a proportion of the total hours that oscillates mildly year over year. This suggests a sustained level of activity for Turkish small-scale fisheries relative to other nations. Trawling activities exhibit variability, with Turkish vessels reaching a peak in 2018 at nearly 8,000 hours, followed by a decline

to around 2.000 hours in 2023. This indicates a reduction to a quarter of the peak hours over five years. In comparison, the aggregate of other countries has not exhibited such pronounced peaks and valleys, indicating a more stable pattern of trawling activity over the same period. The 'Undefined' fishing activities for Turkish vessels display a mixed pattern without a clear trend, making it challenging to derive a proportional comparison. However, the latest year shows a decrease in activities, hinting at a possible reduction in undefined or less regulated fishing practices. Overall, the data suggests that Türkiye's share of fishing activities within the Contiguous Zone has experienced significant fluctuations and overall reduction in certain methods when compared to the collective activities of other countries. This could be indicative of changes in national fishing policies, enforcement of fishing regulations, and possibly shifting priorities in Turkish fishing. In Türkiye, the vessel tracking system is not mandatory for small-scale fishing. Therefore, although it is expected that there would be minimal fishing activity, the results showing zero can be explained in this way.

Figure 3 showcases a comparative analysis of the monthly average fishing hours from 2013 to 2023 for different fishing methods utilized by various countries within Türkiye's territorial waters in the Mediterranean. The data is segmented by country and fishing gear type, small scale, trawl, undefined, and purse seine each represented by unique symbols and colors. For Cyprus (CYP), there is a relatively consistent distribution of fishing hours across the months for all gear types, with no substantial peaks, indicating a steady fishing activity throughout the year. In contrast, Egypt (EGY) shows very limited data, suggesting sporadic fishing activity or less frequent data reporting. Greece (GRC) displays a notable seasonality with peaks during May through July, particularly for small scale and purse seine gears, which may correlate with seasonal fish migratory patterns and the regional climate. Morocco (MAR) has sparse data but shows heightened activity in July, particularly for the undefined gear type, which might be linked to specific seasonal fisheries. Italy (ITA) presents a varied picture; Italian vessels show a significant increase in average fishing hours during March and July for trawl gear, hinting at targeted fishing seasons. Libyan activity is largely undefined but does indicate some fishing efforts in the region.



**Figure 2.** The annual apparent fishing hours of Turkish and other countries' vessels engaged in various types of fisheries within the 12-mile maritime boundary (Contiguous Zone) in the Mediterranean Sea of Türkiye, from 2013 to 2023.



**Figure 3.** In the Mediterranean, within Türkiye's territorial waters, the monthly averages of fishing hours for different fishing methods from various countries from 2013 to 2023

Figure 4 provides a scatter plot illustrating the average fishing hours per month for Turkish fishing vessels operating within the contiguous zone of Türkiye's territorial waters in the Eastern Mediterranean. The data spans a decade from 2013 to 2023 and distinguishes between four types of fishing gears: small scale, trawl, undefined, and purse seine, each represented by unique symbols and colors. A clear seasonal pattern emerges from the visualization, with average fishing hours generally increasing in the spring and peaking during the summer months. This trend suggests a pronounced seasonal cycle in fishing activities, with the highest averages typically occurring in June, July, and August. The prolonged

daylight hours and improved sea conditions during these months likely contribute to the extended fishing durations. The scatter plot indicates that trawl fishing, in particular, exhibits significant peaks in activity, which could be due to the targeted species' migratory patterns and the opening of specific fishing seasons after breeding periods. Small scale and purse seine gears also show increased activity during these months, but with less variability, suggesting a more consistent fishing effort throughout the year.





**Figure 4.** In the Mediterranean, within the contiguous zone of Türkiye's territorial waters, the monthly averages of fishing hours for different fishing methods used by Turkish fishing vessels from 2013 to 2023.

In the Results and Discussion section, it should be noted that in the vessel tracking system, fishing vessels sometimes enter only the term fishing into the system, which necessitates the use of the term undefined. Table 1 presents the annual percentage of fishing activities by foreign countries in the adjacent region of Türkiye's territorial waters in the North East Mediterranean from 2013 to 2023. The top five countries involved in these activities include Cyprus, Greece, Morocco, Libya, Italy, and Egypt. The table delineates fishing activities from 2013 to 2023, categorized under different fishing techniques such as Purse Seine, Small Scale, Trawl, and Undefined. Analyzing the provided data on yearly average fishing durations by different countries in the Eastern Mediterranean adjacent to Türkiye's territorial waters reveals significant variations across years and fishing methods. For instance, South Cyprus's small-scale fishing exhibited a notable increase from an average duration of 27.50 hours in 2013, with a standard error of 8.94, to 30.62 hours in 2023, with a higher variability indicated by a standard error of 20.30. Trawl fishing in the same region showed a peak in 2016 at 61.06 hours, with a standard error of 19.06, followed by a decline. Egypt's undefined fishing category marked a high average duration of 141.84 hours in 2019, demonstrating the sporadic nature of fishing activities in the area. Greece's small-scale fishing displayed a dramatic fluctuation with a peak in 2016 at 386.12 hours, suggesting occasional intensive fishing periods. Italy's trawl fishing peaked in 2017 at 475.2 hours, indicating a year of significantly increased activity. Notably, Türkiye's trawl fishing reached its highest average duration of 857.29

hours in 2022, with a standard error of 240.61, reflecting the intensive utilization of this fishing method in the region.

The fishing activities shown in Figure 5,a which take place in the economic zone of Türkiye in the Mediterranean, can be described as small-scale fishing carried out by fishermen from countries such as Syria and Egypt, most of whom do not have a flag. These fishing activities involve the use of longline nets and fishing tackle. It should be noted that the majority of these fishing activities are conducted by fishermen from flagless. Area b indicated in Figure 5,b represents the deep-sea trawling zone, with an average depth ranging between 400 and 600 meters. This area has been targeted for deep-sea red shrimp fishing, and Italian-flagged vessels have been conducting fishing activities in this region for many years, departing from the southern part of Cyprus controlled by the Greek Cypriot administration. Area c, depicted in Figure 5, represents the third identified area where Greek fishing vessels operate, departing from the island of Meis. Furthermore, this area also encompasses a marine protected area in terms of deep-sea habitats.

 Table 1. Yearly Average Fishing Durations by Different Countries in the Eastern Mediterranean Adjacent to Türkiye's Territorial Waters

	Years										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
South Cypru	s										
Small scale	27.50 ±8.94	4.79	12.11	14.34 ±10.26	9.54 ±3.88	29.26 ±9.64			2.38	22.81	30.62 ±20.30
Trawl			50.39 ±1.24	$61.06 \pm 19.06$	25.11 ±15.92						
Undefined	13.46 ±7.03		22.28 ±8.47	39.10 ±12.87	2.83 ±2.05	17.29 ±7.51					$14.43 \pm 10.46$
Egypt											
Undefined							141.84 ±8.53	31.41 ±13.4			
Greece											
Small scale	19.39 ±8.89	11.58 ±6.86	17.78 ±1.07	386.12 ±209.7	209.3 ±110.5	145.5 ±83.3	327.43 ±165.3	87.39 ±44.3	132.37 ±91.86	152.48 ±77.61	117.51 ±55.41
Undefined	36.55		33.90	443.60 ±214.6	300.5 ±149.	153.2 ±73.1	$253.50 \pm 86.04$	12.73 ±3.32	23.61 ±4.11	$41.99 \pm 40.52$	44.14 ±29.35
Italy											
Trawl	23.93 ±7.71	135.3 ±92.6	19.38 ±6.98	2.78 ±0.87	475.2	21.32 ±21.0		154.1 ±65.1	246.96 ±126.4	92.69 ±59.13	94.87 ±1.81
Undefined				25.48	6.17						
Libya											
Undefined				3.71 ±0.76		10.54 ±3.75	39.57 ±37.80	41.53	17.90		19.95
Morocco											
Purse seine	0.66	41.33 ±26.4		7.03 ±2.27	7.25 ±3.02	17.23 ±9.72	72.82 ±21.32				1.98
Türkiye											
Purse seine	37.16 ±13.4	45.64 ±20.4	53.77 ±17.9	36.50 ±16.28	107.9 ±55.3	49.04 ±37.0	$333.90 \pm 225.0$	71.30 ±33.6	50.82 ±27.45	190.77 ±123.8	183.39 ±141.5
Small scale	86.12										
Trawl	30.71 ±16.9	5.95 ±4.41	144.7 ±84.	227.87 ±111.84	$223.85 \pm 80.20$	169.29 ±72.69	558.61 ±237.12	$213.83 \pm 68.35$	$284.82 \pm 131.66$	857.29 ±240.61	431.27 ±170.25
Undefined	$10.55 \pm 3.49$	$10.56 \pm 7.80$	39.21 ±22.3	7.32 ±2.55	$21.68 \pm 4.03$	3.96 ±2.87	$237.39 \pm 94.01$	4.46 ±1.95	$0.00 \\ \pm 0.00$	21.59 ±13.49	150.36 ±55.14



**Figure 5.** Foreign fishing activities along the Turkish coasts in the Mediterranean are represented by the following key: red line: Turkish territorial waters, yellow line: Turkish Exclusive Economic Zone (EEZ), red area (a): Foreign country fishing activities in the region (Longitudes 36°14'E and 28°07'E).

## DISCUSSION

The most interesting situation in the table is trawling. This fishing method is critical for catching deep water red shrimps belonging to the Aristeidae family. While this type of shrimp is found throughout the Eastern Mediterranean, only those suitable for trawling are located off the coast of Türkiye (Demirci, 2007; Pulcinella et all., 2023). In particular, this trawling is conducted in Turkish waters beyond the 12-mile limit, at depths of approximately 400 meters. Italian flagged vessels have been operating in this area for many years, and they meet all their logistical needs entirely from the Greek Cypriot part of Southern Cyprus. Türkiye utilizes this region in two ways. Since 2005, trawling boats in the region have been used during the summer months, when a fishing ban is in effect within the territorial waters (Demirci, 2007; Aydın & Tıraşın, 2022). There is an increasing activity of bottom trawling each passing day. However, due to overfishing pressure, the sensitive population structures of the fish species in this area have been adversely affected in a short time, causing these demersal stocks to lose their economic value. Trawling activity targeting Aristeid shrimps is in question in the region. However, these deep-water red shrimps do not have enough economic value in the local market in Türkiye due to taste preferences. The shrimps in this region have a very high economic value in Southern European countries. For this reason, it is understood that Italian fishing boats, in particular, are directed towards this area (Pulcinella et all., 2023).

Turkish purse seine fishing fleet in the region focuses on bluefin tuna, especially during the summer months. As can be understood from the status, there is intense bluefin tuna purse seine fishing activity in this region. During this period, boats capable of catching tuna from different parts of Türkiye direct their efforts towards this region, creating a significant purse seine fishing effort. Another intriguing aspect observed in this table is the lack of vessel records pertaining to some Arabic countries. In fact, fishermen from these countries have been conducting fishing operations, primarily using various small-scale fishing methods such as longlines and rod fishing, in the shallow areas off Türkiye for many years. Due to the absence of vessel tracking systems on these boats, or in cases where these systems are deactivated, the Global Fishing Watch is unable to provide any information about these vessels.

Fishing activities just beyond Türkiye's territorial waters necessitate enhanced monitoring and management to ensure the sustainability of vulnerable fish stocks and realize the expected economic benefits from fishing (Demirci, 2006; Petrossian, 2015). To achieve this, there

are significant gaps in the monitoring of the region that need to be addressed.

Firstly, the shallow region off Mersin and Karataş, colloquially known as "Island" by Turkish fishermen (Figure 5, b), harbors one of the most prolific areas in terms of fish diversity and species density. This undersea elevation, frequented by Turkish fishermen using trawlers and purse seines, is also accessed by fishermen from other Mediterranean countries. Small-sized boats from such distances face difficulties and dangers. Illegal fishing activities, involving foreign fishermen establishing stationary waiting areas with anchored buoys, are notably prevalent during the summer months when conditions are favorable. The Turkish Coast Guard has been proactive in removing boats with non-functional ship tracking systems. However, this biologically significant shallow area merits different, more effective protection strategies. Türkiye could extend the fishing management practices from its territorial waters to this region, ensuring similar species protection due to the comparable species density (Ayas & Çiftçi, 2018; Mutlu & Ergev, 2012).

In the international waters adjacent to Türkiye's territorial seas off Mersin's coast, rich and biodiverse shallow water ecosystems are found. The implementation of measures like size, season, and species restrictions, akin to those within Türkiye's territorial waters, is essential to preserve these ecosystems. These measures would align with the strategies that Türkiye enforces domestically to promote sustainable fishing and protect marine ecosystems (Demirci & Şimşek, 2019). Through collaboration with international bodies, Türkiye has the opportunity to enhance the biodiversity and health of these marine ecosystems and extend its conservation efforts to the international waters adjacent to its territorial seas.

Secondly, beyond the 12 nautical miles, two regions serve as trawling grounds with depths between 400 and 600 meters. Italian vessels operating in these areas are frequently cautioned. Türkiye's own trawler fleet could potentially gain a significant market share in the deepwater red shrimp fishery with proper adjustments and create an export potential, reducing the pressure of trawl fishing within its territorial waters. The General Fisheries Commission for the Mediterranean (GFCM), supported by the Food and Agriculture Organization (FAO), has facilitated knowledge accumulation to improve the stock status of deep-water red shrimp (Bjørndal, 2009).

Lastly, the fishing boundaries around Antalya and the Island of Meis need clearer definition. The distant fishing grounds from Türkiye's ports are rarely utilized by the Turkish fishing fleet but are frequented by Greek and Southern Cypriot vessels, posing economic implications for Türkiye. This area lies close to critical Mediterranean conservation zones (Topaloğlu & Öztürk, 2019).

While international oversight is in place, Turkish fisheries monitoring, especially of the purse seine fleet, could be improved. Intense summer fishing activities target tuna, a species heavily regulated by international commissions such as the Atlantic Fisheries Monitoring Commission, of which Türkiye is a member (Tanrıverdi, 2020). Despite a robust Turkish fleet and significant bluefin tuna occurrences in the eastern Mediterranean, Türkiye's quota remains limited, leading some Turkish entities to register under other countries to utilize North African quotas (Franquesa, Oliver & Basurco, 2008).

## CONCLUSION

With its expansive fishing fleet and sophisticated research infrastructure, Türkiye occupies a significant role in this region. Consequently, it is imperative for Türkiye to embrace a more proactive stance in managing the resources of the area, adhering to the principles of sustainable ecosystem management and fair social contribution, particularly in protecting the fragile fisheries and the unique ecosystem of the Eastern Mediterranean. Despite Türkiye's long-standing preference for a peaceful policy within the framework of international law, it has encountered ambivalent attitudes from the international community regarding the assertion of its rights and interests. The gaps created by international disputes over exclusive economic zones (EEZ) result not only in economic losses for Türkiye but also in detrimental effects on the sustainability of delicate marine life resources at its borders.

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