The exclusive economic zone debates in the Eastern Mediterranean Sea and fisheries

Doğu Akdeniz'de münhasır ekonomik bölge tartışmaları ve balıkçılık

Bayram Öztürk^{1*} and Sertaç Hami Başeren²

Abstract

Delimitation and proclamations of the Exclusive Economic Zone in the Eastern Mediterranean Sea is important issue for several reasons for the bordering nations. The Mediterranean Sea is unique case due to geographical characteristics and some conflicts already existed on maritime delimitations among some nations. It's a matter of fact that; all States will have to reach agreement, regarding proclamations of the delimitation of the Exclusive Economic Zone in the Eastern Mediterranean Sea. Equitable and reasonable principals and solutions are needed for the delimitation of maritime areas.

Turkey has 1577 km long coastline in the Mediterranean Sea starting from Fethiye to Samandag border up to Syria. 1851 fishing boats fishing in the territorial waters and high sea areas.

Turkey could not accepted *de facto* EEZ proclamations due to damage vital economical interests in the eastern Mediterranean Sea as limiting fishing rights in the high seas. Besides, the mineral and oil resources in the high seas are also substantial matter.

Turkey already has conduct a scientific programme protection of the eastern Mediterranean in term of prevention of the marine pollution, invasive species, monitoring of the impacts of the climate change to the marine biodiversity, cetaceans protection, establishing high sea marine protected areas, IIU fisheries and others. International cooperation, compromise, consensus and concerted action are needed for the sustainable exploitation of the living resources and

_

¹ İstanbul University, Faculty of Fisheries, Ordu cad. No.200, Laleli, İstanbul

² Ankara University, Faculty of Political Sciences, Dış kapı, Ankara

^{*} Corresponding author: ozturkb@istanbul.edu.tr

protection of the vulnerable Mediterranean environment. Probable Turkish EEZ borders in Eastern Mediterranean region are presented on a map.

Keywords: Eastern Mediterranean Sea, exclusive economic zone, living resources managements, high seas

Introduction

The Mediterranean is an almost closed sea communicating with the Atlantic ocean via the strait of Gibraltar with Red Sea via the Suez Canal, and with the Black Sea via Turkish Straits Sytem (İstanbul and Canakkle Straits) Mediterranean Sea, from west to east from Gibraltar to Syria, is about 4000 km. At its greatest breadth, from the coast of France to that of Algeria, the distance is 900km. The area of the Mediterranean Sea, including all of its adjacent seas except the Black Sea, is 2.523.000 km² and its volume is 3.708.000 km³ giving an average depth of 1470 m (Miller and Stanley, 1965). In the Mediterranean Sea about 30 % of the surface area and 50% of the total water volume is contained between the 2 and 3 km depth contours. In contrast, the area shallower than 200 m constitutes more then 20 % of the total area of the Mediterranean Sea but contains less then 1.5 % of the total volume. Eastern Mediterranean Sea consists of two major basins: the Levant and the Ionian Sea. One connects with the Aegean Sea in the North and the other with the Adriatic Sea. The water columns in the Eastern Mediterranean Sea are warmer and more saline then those in the western Mediterranean. Levantine water is identified as a layer of grater salinity, 38-39% (Miller, 1992). The Mediterranean Sea is one of the world's oligotrophic seas with the eastern deep Levantine basin representing its most oligotrophic part . Major causes for this oligotrophy is phosphorus limitation (Salihoğlu et al., 1991).

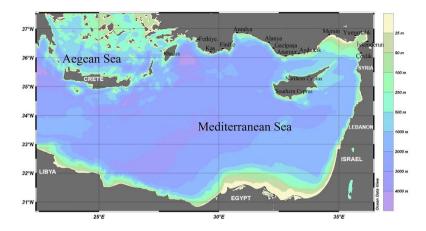
Turkey has long coastline in the Mediterranean Sea and has traditionally fishing rights all area due to citizen who lives in that area depend on fisheries. Beside that, this area has also economical and strategical importance due to three of the main harbours located there namely Antalya, Mersin and Iskenderun. These harbours play crucial role for the countries oil, commodity, goods and minerals imports and exports to and from Turkey.

Protection of the marine environment also important for Turkey due to significant tourism investments and capacity along Finike to Çevlik coasts up to Syrian Border.

The Mediterranean Sea is very peculiar for the maritime delimitations due to several islands mostly in Aegean and Adriatic Seas, historical gulfs like Gabes and two parts do not reach 200 nmiles. EEZ delimitation in this sea already discussed several experts e.g. (Lulic et al., 2001; Marsit, 2001, Başeren 2002). Exclusive Economic Zone delimitation between Egypt and Southern Cyprus has been signed without considering other nations interests in the eastern Mediterranean Sea. This agreement could not be accepted by Turkey in many ways; *inter alia*, delimitation is not equitable and fair and not protects the rights of Turkey. Greek Administration of Southern Cyprus can not authorize to represent all Cyprus Island and to do international agreement for the name of entire Cyprus Island. This unfair and unacceptable agreement has serious impacts to the Turkish fishing fleet. Fishing ground is limited and smaller in very narrow and restricted areas which is not reasonable such a big and strong fishing fleet and long coastline.

Turkey will have to dedicate special attention for the highly migratory fish stocks which will occur within its territorial waters and adjacent areas with the status of either the high seas or future EEZ of other Mediterranean countries which may proclaim them (Syria, Lebanon, Turkey, Egypt, Northern and Southern Cyprus, Israel and others). All these states will have to reach agreement, regarding coordination of the measures necessary for conservation and optimal utilization of these vulnerable stocks.

Total fishing boats number were 1851 and fishing within territorial and high seas as well (Kara and Aktaş, 2001). Among them 83 fishing boat fished in Turkey only for the Bullet Tuna (*Auxis rochei*, and Albacore (*Thunnus alalunga*) from Fethiye to Anamur in 2008. Total catch was estimated between 500 to 750 tons. This Fisherman started to fishery in May and completed in June generally at the high sea. They do fish up to 100 miles from the Turkish coasts to the offshore. These nets characteristics are different from those in the Aegean Sea (Öztürk et al., 2001).



Map I: Main fishing harbours in the Turkish part of the Eastern Mediterranean Sea.

This EEZ delimitation also negatively affected the sword fishery in the Mediterranean Part of Turkey. Swordfish is one of the commercial species and exploited in the entire Mediterranean Sea. Not only Turkish fisherman but also, Italian, Greek and Syrian fisherman fished this species in the Eastern Mediterranean Sea and a general consensus is needed to protect swordfish among all riparian fisherman with the help or guidelines of GFCM and ICCAT. Reliable statistics is needed and also important for the management of the stocks. Deep Sea Shrimp (*Aristomorpha foliacea*) resources also founded in the Turkish, Syrian and Lebanese high seas between 600-900 meters depths. These virgin stocks should be exploited with the sustainable manner and cooperation of the riparian states.

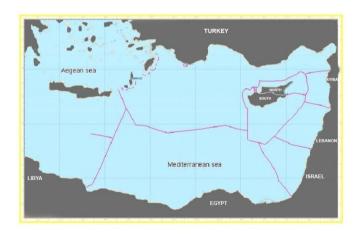
Global and national effort is also needed to solve illegal, unreported and unregulated fisheries practices in the Mediterranean High Seas. So far, the amount of yearly by-catch and IIU fisheries can not be estimated mostly at the eastern Mediterranean Sea due to gap of accurate information. Mostly Marine mammals by-catch is also underestimated due to lack of information in the eastern Mediterranean Sea. ICCAT and GFCM should play more effective roles for the sustainable fisheries and obtaining reliable fisheries statistics. Mostly on the Bluefin Tuna which seems to be overexploited in the entire Mediterranean Sea.

Having proclaimed its EEZ, Turkey will be entitled to establish measures regarding the protection of the marine environment, conservation and

management of the marine resources of the significant part of the Mediterranean Sea. Marine pollution mostly Marpol/73-78 implementation is very slow in the eastern Mediterranean Sea even main route for the oil traffic route. Ship-originated pollution in many areas is in considerable level due to lack of port receiving facilities. Concerted action also needed under the REMPEC for the mitigation of illegal discharges from the ships in the eastern basin mostly in high seas areas.

Turkey promotes international cooperation in the field of marine scientific research between other Mediterranean countries. Special priorities set up mostly for the migratory fish quotas, stocks assessment of the pelagic and migratory stocks, Total allowable catch and their maximum sustainable yield based on scientific research also important for the management of the bioresources.

Oil spill monitoring in entire Levantine sea, biological invasion and tropicalisation of the eastern Mediterranean sea are also priorities. In fact, Turkey leads two cruises for those purposes in the last two years in the area. Potential mineral and oil resources sharing also another core issue for debates



Map II: Probably Turkish EEZ maritime zone proclamations according to the equitable principles in the Eastern Mediterranean Sea.

The Mediterranean's living resources are shared between 21 bordering countries. Those resources should be used for the prosperity and sustainable development of the all riparian nations rather then political conflicts or debates.

Özet

Doğu Akdeniz'de Münhasır Ekonomik bölgenin ilanı ve sınırlandırılması birçok nedenle kıyısı olan ülkeler için önemlidir. Akdeniz coğrafi özelliği gereği çok özel bir deniz olup zaten deniz sınırlarıyla ilgili bazı anlaşmazlıklar bulunmaktadır. MEB sınırlandırması ve ilanıyla ilgili olarak doğu Akdeniz'e kıyıdaş ülkeler bir anlaşmaya varmalıdır. Hakkaniyete uygun çözümler ve prensipler deniz alanlarının sınırlandırılması için gereklidir. Türkiye; Fethiye'den Samandağ'a Suriye sınırına kadar 1577 km'lik uzun bir kıyı uzunluğuna sahiptir. 1851 adet balıkçı teknesi ve karasuları ve açık denizlerde sularda balıkçılık yapmaktadır. Türkiye hayati ekonomik çıkarlarına zarar verecek ve açık denizlerde balıkçılık alanlarını azaltacak münhasır Ekonomik bölge ilanına ilişkin oldu bittileri kabul edemez. Yanı sıra, Açık denizlerdeki petrol ve maden yataklarının paylaşımı da ayrı bir konudur.

Türkiye hali hazırda Doğu Akdeniz'de balıkçılık kaynakların işletilmesi, deniz kirliliği ve önlenmesi, yabancı yayılımcı türler, küresel ısınmanın izlenmesi, yasadışı balık avcılığının önlenmesi ve deniz koruma alanları oluşturulması gibi bilimsel araştırma programı yürütmektedir. Uluslararası işbirliği, uzlaşma ve karşılıklı anlayış ve Akdeniz'in hassas ekosistemini korumak konusunda uluslararası ortak eylem için işbirliği gerekmektedir. Bu makalede Türkiye'nin Doğu Akdeniz'de muhtemel MEB bölgesi sınırları bir haritayla gösterilmektedir.

Acknowledgement:

The authors thank to Dr. Ayaka Amaha Öztürk, Prof. Yücel Acer, Dr. Ayhan Dede and Miss Eda Topçu for their valuable contributions for this article.

References

Başeren, S. (2002). Doğu Akdeniz Kıta Sahanlığı Uyuşmazlığı Üzerine Bir Değerlendirme. Tüdav Yayınları, 12: 104-117.

Kara, Ö.F., Aktaş, M. (2001). Investigation on the Industrial fishery of the Mediterranean Sea. Bodrum Su Ürünleri araştırma enstitüsü yayınları seri.B. yayın no.7 . 59 p. Bodrum.

Lulic, M., Vio, I. (2001). The Adriatic Sea and UNCLOS: The Croatian maritime code and legal regime of its Exclusive Economic Zone, In: Problems of the Regional Seas (Eds., B. Öztürk. N. Algan). Published by Turkish Marine Research Foundation. İstanbul. Turkey. pp. 293-302.

Marsit, M.M (2001). Current problems in the Mediterranean Sea. In: Problems of the Regional Seas (Eds., B. Öztürk. N. Algan). Published by Turkish Marine Research Foundation. İstanbul. Turkey. pp: 303-304.

Miller, A.R., Stanley, R.J. (1965). Volumetric T-S diagrams for the Mediterranean Sea. *Rapp. P. V. Reun. Comm. Int. Explor. Sci. Mer.* 18(3): 755-759.

Miller, A.R. (1992). The Mediterranean Sea, A Physical Aspects. Ecosystems of the world 26. (Ed., Bostwick H. Ketchum). Chapter 9: 219-239. Elsevier. Amsterdam

Öztürk, B., Öztürk, A.A., Dede, .A., (2001). Dolphin by-catch in the Swordfish drifnet fishery in the Aegean Sea. *Rapp. Comm. Mer. Medit.* 36: 208.

Salihoğlu, I., Saydam C., Baştürk Ö., Yılmaz K., Hatipoğlu E., Yılmaz A. (1991). Transport of nutrients and Chlorophyll-a by mesoscale eddies in north eastern Mediterranean. *Mar. Chem.* 29: 375-390.

Received: 27.04.2008 Accepted: 05.05.2008