

Integrated Maritime Policy and Marine Spatial Planning in Turkey: How Close are They?

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ABSTRACT. The paper aims to present the status of the maritime economic sectors in Turkey and examines the prospects of development and implementation of integrated maritime policy (IMP). The paper also addresses the use of marine spatial planning (MSP) in Turkey and proposes some pilot projects. Economic maritime sectors are well developed in Turkey except marine energy (oil and gas, renewable energy). All of these sectors, except fisheries, however are currently less important in the Black Sea compared to the level of activities in other three seas. Marine economic sectors are administered by different ministries. Ministry of Transportation, Maritime Affairs and Communication (MTMAC) is the leading maritime authority covering marine transportation and ports, maritime safety and ship building. In 2013, MTMAC led the formation of the Maritime Coordination Commission that brings together 10 Ministries, public agencies, the Turkish naval forces, the Coast Guard and several Chambers of Shipping. This could be an important step towards development of IMP for the country.

KEYWORDS. marine sectors; marine spatial planning; Turkey; integrated marine policy; integrated marine management.

I. INTRODUCTION

Turkey is a country that has lengthy shorelines along three seas (Mediterranean, Aegean and Black seas) and possesses an inland sea (Marmara Sea). The total length of the Turkish shoreline including the islands is 8 333 km, of which 1 701 kilometres (20.4 %) belong to the Black Sea (Fig.1). These four coastal regions show distinct geographical features. Mountain



Fig. 1. Turkish seas and the lengths of their shorelines

ranges run parallel to the coast along the Black Sea coast, especially in the eastern part, limiting the width of the coastal area to extreme minimums on one hand and bringing a marked influence on the climatology of the region on the other. As the winds occur over the Black Sea dominantly from the northern sectors, the Turkish coast is often the down-wind side. The humidity brought by the marine winds consolidates over the mountainous slopes and fall as precipitation, making the Black Sea coast (especially the eastern part) the most humid region

of Turkey. A significant part of the coastal areas of Turkey, including almost all forests and woodlands, are owned by the state.

Turkish Statistical Institute has not been providing the provincial or regional GDP statistics since 2001. According to the latest available figures from 2000, the GDP per capita in Black Sea Region is about 73 per cent of the country average and ranks the fifth after Marmara, Aegean, Inner Anatolia and Mediterranean regions.

Socio-economic development score of 81 provinces of Turkey was calculated based on data from 2011 (TCKB SEGE 2013). The results are shown in Fig. 2. This map has been used since June 2012 as basis for provision of state incentives to economic development projects in different provinces. Among fifteen provinces facing the Black Sea, four provinces of the Marmara Region are very developed or developed (Istanbul and Kocaeli– Rank 1; Sakarya and Kocaeli – Rank 2). The remaining eleven provinces are middle developed (Rank 3 – Zonguldak, Samsun and Trabzon) or less developed (Rank 4 – Artvin, Bartın, Düzce, Kastamonu and Rize; Rank 5 – Giresun, Ordu and Sinop). There are no provinces within the least developed class (Rank 6). The GDP per capita figures and the results of the Socio-economic development score study indicate that, unlike the trend of coastal provinces worldwide, the Turkish provinces along the Black Sea are not the most attractive places for investors and they are behind the average socio-economic development level of the country. On the contrary, the western provinces facing the Black Sea in the Marmara Region (Istanbul, Kocaeli, Sakarya and Kırklareli) are among the most developed areas.

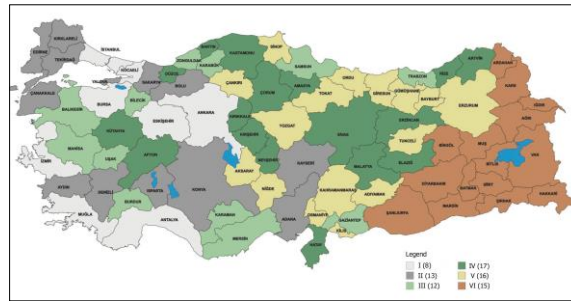


Fig. 2. Socio-economic development score of 81 provinces of Turkey in 2011

II. AN OVERVIEW OF TURKISH MARINE ECONOMY SECTORS

Following intensification of human development and activities in the coastal zone especially after the 1980's, Turkey has gained considerable experience in planning and management of coastal activities and developments in several sectors. For example, marine transportation, fisheries (especially in the Black Sea), urbanization, and conservation of natural and cultural heritage are the traditional sectors that have been dealt with in the coastal zone for a long time. Over the last three decades, several new sectors like tourism and recreation, mariculture facilities, technical agriculture (including greenhouse production) have also gained importance. Brief descriptions about the state-of-the-art of these marine sectors are given below:

A. Maritime Fleet and Transport

As of January 2014, the total volume of Turkish owned ships over 1000 gross ton size adds up to 30.4 Million DWT (31.4 % with Turkish flag and 68.6 % Foreign flag). With this capacity, Turkey ranks the 13th in the world.

There are thirteen ports along the Turkish Black Sea coast. More important ports are respectively Ereğli Erdemir, Samsun Yesilyurt, Zonguldak Eren, Samsun Port International,

and Trabzon. As to both total cargo and container handling, the Black Sea ranks by far the lowest compared to the Sea of Marmara, Mediterranean and the Aegean Sea.

Total cargo handling in 2013: All Turkish ports - 384.9 Million tons;
Black Sea ports - 34.5 Million tons (about 9 %)

Container number in 2012: All Turkish ports- 7 192 396 (7.9 Million in 2013);
Black Sea ports- 59 034 (about 0.8 %)

B. Ship building Industry

As of 2013, there are 72 operating shipyards in Turkey with a total capacity of 3 610 000 DWT/year. Of this number, 57 are located along the Sea of Marmara, 13 are along the Black Sea (8 in Karadeniz Ereğlisi and one in Inebolu, Kastamonu, Samsun, Ordu and Trabzon) and 2 in the Mediterranean. There are 49 new shipyards (of which 16 is in the Black Sea) with a total capacity of 3 640 000 DWT/year are at project or construction stage. As of December 2013, Turkey ranked the 6th in the world for ship building with 66 orders. The ship building industry provided 21 455 jobs in 2013 (dropped from the maximum of 33 480 jobs in 2007)

C. Maritime Surveillance and Safety

Directorate General of Coastal Safety within the Ministry of Transportation, Maritime Affairs and Communication is in charge of safe navigations along the Turkish straits and territorial waters. They offer vessel traffic and pilotage services through the Turkish Straits, carry out salvage operations in case of accidents and intervene with marine pollution caused by ship accidents. Turkey has developed significant levels of expertise in maritime safety and surveillance over the last 2-3 decades. Coast Guards of Ministry of Interior also contribute actively to maritime surveillance and safety.

D. Fisheries and Mariculture

Turkey has a modern fishing fleet mainly concentrated to the Sea of Marmara (Istanbul) and the Black Sea. The annual marine wild catch fish by the Turkish fleet has been around 400 000 tons over the 10-year period (2004-2013) with the maximum being over 500 000 tons and the minimum just under 300 000 tons (Fig. 3). The wild catch of the marine species other than fish has been slightly oscillating around 25 000 tons. The freshwater wild catch for the same period has gradually decreased from about 50 000 to 40 000 tons. The most remarkable change in the fisheries statistics over this 10-year period is the significant increase of the

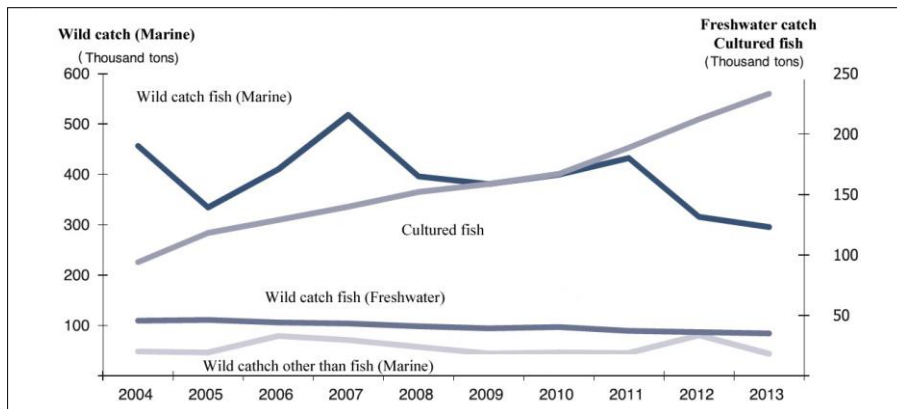


Fig. 3. Yearly change of the marine and freshwater wild catch, mariculture/aquaculture production⁽¹⁾

volume of cultured fish, from about 90 000 tons in 2004 to nearly 240 000 tons in 2013. One single species, anchovy, constitutes 60 to nearly 80 per cent of the total marine catch, which comes mainly from the Black Sea. This makes the eastern Black Sea the most productive part of the Turkish seas providing 56.3 per cent of the total catch, followed by the eastern Black Sea basin with 14,6 per cent (Fig. 4). The Black Sea, which constitutes only about 20 per cent of the Turkish coastline length, provides nearly three quarters of the annual catch. Wild fishery is the most important economic activity especially at the eastern part of the Black Sea. The ranking of the other three seas in contributing to the marine fish catch is the Marmara Sea (13.0 %), the Aegean Sea (10.2 %) and the Mediterranean Sea (5,6 %).

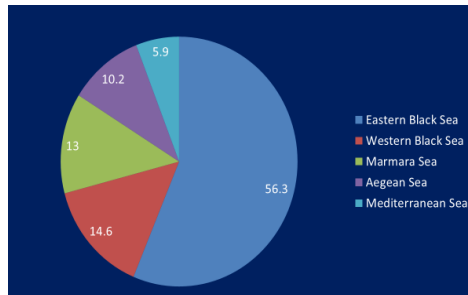


Fig. 4. Distribution of wild catch to Turkish Seas

E. Oil and Gas, Marine Energy

Turkey has been exploring over two decades oil and gas along the western sector of the Turkish Black Sea coast. Only offshore the town of Akcakoca, gas has been produced since 2009.

Turkey is the most important bridging country for oil and gas. There are crude oil pipelines from Caspian Sea (Baku) and Iraqi oil fields to Yumurtalik on the Mediterranean coast. The gas pipeline between southeast of the Russian port Novorossiysk and west of Samsun (Blue Stream) that crosses the Black Sea had been supplying gas since 2004. A new gas pipeline project between Russia and Turkey called Turkish Stream is at the project stage. Another likely pipeline connection could be from the Iranian oil fields to Turkey.

Investment to wind energy production has been ongoing since 1990s. Wind energy production capacity reached 2 677 MW in 2013, constituting 4.4 % of the total capacity. However, all the existing wind energy installations are currently land-based, none in marine areas.

F. Tourism and Recreation, Marine Tourism

Turkey is one of the top tourist countries in the world. In 2012, Turkey ranked the sixth top tourist destination with 35.6 Million visitors. With 29.4 Billion US \$ earnings, Turkey ranked the eleventh. Coastal tourism is concentrated mainly to two provinces, Antalya on the Mediterranean coast and Mugla on the Aegean coast. Coastal tourism along the Black Sea coast is very modest and limited to the western sector. A growing type of tourism in especially the eastern Black Sea is the nature and culture-based tourism.

Southwest coast of Turkey is one of the top areas in the Mediterranean for yachting vacations with the sport of attractive natural coves and modern marinas.

Cruise ship type tourism is a growing industry especially along the Aegean coast of Turkey, many travelling up to Istanbul. A total of 1573 cruise ship visits took place to twenty Turkish ports in 2013 with a total number of tourist equal to 2 240 776. Four Black Sea ports (Bartın, Sinop, Samsun and Trabzon) were among the visited ports with 67 total visits with a total of 18 967 tourists (less than 1 % of the total).

III. COASTAL AND MARINE POLICY AND GOVERNANCE

Management of coastal and marine development in Turkey has been strongly centralized and clearly sectoral, although there have been efforts since late 1980's to bring in "integrated" management and to decentralize the planning and implementation of coastal and marine development by transferring responsibilities to local administrations (municipalities and provincial governorates). Progresses in both directions however have been rather slow and yet ineffective to a great extent.

Turkey has not yet produced an integrated maritime policy. However, national policy and documents guiding development and management actions are developed in important marine and coastal sectors such as fisheries and mariculture, ports and maritime transport, coastal and maritime tourism, maritime industry and Energy. An effort has been ongoing for developing a national strategy for ICZM in line with the ICZM Protocol of the Barcelona Convention, but this has not yet been completed.

Sectoral legislation is well developed mainly since 1980s such as Fisheries Law (1971, 1986), Tourism Incentives Law (1982), Environmental Law (1983), National Parks Law (1983), Shore Law (1984, 90, 92), Decree for Specially Protected Areas etc. Some of the environment related legislation has been modified to comply with the EU directives along the accession process. EIA has been utilized as a tool since 1993^{(2),(3)}.

A. National Institutions Governing Marine Sectors

The national institutions in charge of important marine sectors and some dedicated legislation are indicated in Table 1.

Table 1. National Institution and Legislation Guiding Marine Sectors

Marine Sector	National Institution in Charge	Legislation
Maritime fleet and transport	Min. of Transport, Maritime Affairs and Communications	The Law Concerning Coastal Shipping (Cabotage) along Turkish Shores and Performance of Trade and Business in Turkish Ports and Territorial Waters
Ship building industry	Min. of Transport, Maritime Affairs and Communications	
Maritime surveillance and safety	Min. of Transport, Maritime Affairs and Communications Min. of Interior (Coast Guards)	The Law on the Protection of Life and Property at Sea
Fisheries and aquaculture	Ministry of Food, Agriculture and Livestock	
Oil and gas, Marine energy	Min. of Energy and Natural Resources Turkish Petroleum Inc.	
Tourism and recreation, Marine tourism	Min. of Tourism and Culture	

B. Maritime Coordination Commission

For the purpose of facilitating integrated decision making in maritime issues, Ministry of Transportation, Maritime Affairs and Communications created a dedicated inter-ministerial commission on 02 August 2013. All relevant ministries, Turkish Chief of Staff, Turkish Navy and its Navigation, Hydrography and Oceanography Department, Higher Education Council for representing Maritime Faculties and several major Chambers of Shipping are represented in the Commission. Several NGOs and one academic centre are observing members that do not have right to vote. The Commission meets regularly with an interval of four months and extra-ordinary meetings can be called for whenever needed.

The Commission takes decision with ordinary majority and the decisions have the power of being advisory decisions for the public institutions.

C. Marine Spatial Planning

Turkey has a long history of experience with land-use and sectoral planning with scales ranging from 1/100 000 to 1/ 1 000. Ministry of Environment and Urbanization is in charge of land-use planning.

During the last decade, the so called “Integrated Coastal Management Plans” have been prepared for several stretches of the Turkish coastline by private companies through tenders by Ministry of Environment and Urbanization. These plans however do not have the enforcing power for several reasons.

There is not yet a single example of maritime spatial planning in Turkey. There is no legislation available for appointing the responsible institution and for guiding the various details of the process.

There are several hot spot marine areas in Turkey where many marine uses compete for the same space. Therefore, preparation of marine spatial plans for such areas would be helpful for nature conservation, environmental protection and for optimization of marine uses and development. However, the system of “integrated marine management” that would facilitate the implementation of marine spatial plans would also be need. Such a management system is also not yet available in Turkey. It would take several years to develop the necessary legislation and the governance system.

Although the legislation and the implementation system are not yet available in Turkey, it pilot projects of marine spatial planning would be valuable to accumulate the country’s experience. The most important marine area that needs urgently marine spatial planning and integrated marine management is the Sea of Marmara. However, due to complicated use structure and the need for a frame work legislation for preparing and implementing the MSP, the Sea of Marmara should be left to be a future undertaking. Perhaps the ideal area for the first MSP exercise is the larger Fethiye Bay including Gocek coves. This area is one of the first three coastal and marine specially protected areas in Turkey. Therefore, collaboration of the Ministry of Environment and Urbanization with the Municipality of Fethiye will be sufficient for most of the management issues under the existing legislation. A relatively more complicated exercise would be the MSP for Izmir Bay due to a larger number of marine uses and the lack of a single national authority for management of the Bay’s waters. After these two pilot projects, if the necessary legislation for MSP and IMP are already in place, the planning of the Sea of Marmara could be handled.

MSP pilot projects at international scale, between Turkey and Bulgaria as well as between Turkey and Georgia could be feasible at a later stage.

IV. CONCLUSIONS

Several important coastal and marine economic sectors in Turkey such as marine transportation, ship building, maritime surveillance and safety, fisheries and aquaculture, and tourism and recreation are very well developed. National legislation institutions and legislation are in place for guiding and managing each single sector. Despite some coordination efforts, Turkey is not close to pursuing an integrated policy for marine management.

Legislation and institutional set up for marine spatial planning does not yet exists in Turkey. Pilot MSP projects, starting from relatively simple cases moving into more complicated areas, would help for building experience in integrated planning of marine areas with involvement of all stakeholders and this will constitute a major step towards Integrated Marine Management (IMM)

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Erdal Özhan: is an outstanding scientist in the field of ecology sea and coastline. He used his Pew Fellowship to incorporate MEDCOAST as a formal non-profit organization and is now enhancing its capacity and scope of activities. MEDCOAST has launched an annual international training program for beach management in the Black Sea, conducted the MEDCOAST Conference on Wind and Wave Climate in the Mediterranean and the Black Sea, expanding and planning a comprehensive Integrated Coastal Management.

