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The Role of Local Governments in Integrated Coastal Zone Management

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Review Article**The Role of Local Governments in Integrated Coastal Zone Management****Hakan Kaya** 

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Abstract

Turkey is surrounded by seas on three sides like a sea country, also has a great inland sea such as the Sea of Marmara. The majority of the population of Turkey is located at the shores of the sea. However, because of the rapidly increasing population in Turkey, a settlement has been subject to many coastal distorted. Many people and institutions responsible for this distorted residence, although, unfortunately, no one takes the blame on. That is the thesis that the study of coasts in Turkey in general terms about the mistakes made until now focused on who is fault. The real important what is the role of local governments, is examined in this defect. In addition, still regarded as pristine as what to do about the coasts, are emphasized. In particular it should be stated at what point the new local government structures are. While all these studies of integrated coastal areas management, a clearer understanding of what the role of local governments in the study area was taken as an example for the Marmara Region. Because, the Marmara Region of Turkey's most advanced, most cosmopolitan, most populous and most densely population region. At the same time zone landforms, climate, vegetation and so on. Factors of diversity is a mark all over Turkey. Most importantly, this region has coast at the Marmara Sea, Black Sea and the Aegean Sea. That's because of these reasons, be considered a reflection of Turkey's Marmara region. As a result of this study, the sampling area studies, from past to present, examining the laws and institutions, which ones play a role in the development of coastal areas, integrated coastal areas management to date on what is the role of local government and after that what should have been tried out.

Keywords: Coastal Zone Management, Local Governments, Turkey, Marmara Region**Introduction**

It is apparent that Coastal Zone Management, which is a modern planning activity that aims direct participation by the general population and the long-term, sustainable use of the properties of coastal areas as natural resources, will definitely be affected by each new law introduced. One of the purposes of the present study is to reveal the current and ideal state of the role of local governments in Coastal Zone Management as specified in related laws.

Within the scope of the present study, the laws, regulations and practices in Turkey were examined. All officials that could be contacted in the Marmara Region were visited personally. Here, the purpose is to determine the level of concurrence between the laws on paper and the development on land. In this way, it will be possible to base future projections on real foundations. The Marmara Region coasts were selected as the sample study region due to their geographical location and wide range of coastal activities, and the densely populated Marmara Sea coasts were studied. The Bosphorus (Strait of Istanbul) could not be examined within the scope of the present study as the region is governed by the Bosphorus Zoning Law (BZL). Similarly, the Dardanelles and the Gallipoli Peninsula could not be included in the present study due to being defined as protected areas. Many laws affecting coastal

areas were introduced since the establishment of the Republic, and although positive developments were achieved with these laws, the impact of the central government on planning activities related to coastal areas was not eliminated. Although local governments were authorized to lay out and approve zoning plans, it cannot be said that they are the sole and absolute authority in designing plans that are in line with the demands of the local population due to the direct and indirect impact of the central government. In this context, with the present study, local governments' level of representation in integrated Coastal Zone Management will be determined and it will be attempted to specify what local governments need to do in terms of integrated Coastal Zone Management. Activities related to coastal management carried out by the provinces and municipalities in the Marmara Region since their establishment were examined. In the detailed literature review, no studies on "The Role of Local Governments in Integrated Coastal Zone Management", which constitutes the problem of the thesis, were found. It is also evident that the subject was only mentioned in a few pages in the studies on Coastal Zone Management (CZM) in general.

Material and Method

In the present study, survey studies were referred to in addition to desk and field studies. In the desk study, all

publications related to the study subject were collected and a literature review was carried out. Related theses and books from the libraries of Istanbul, Istanbul Technical, Edirne, Namik Kemal, and Yalova Universities were scanned. Various sources, particularly the Official Gazette, were scanned for regulations and practices related to Coastal Zone Management and Coastal Law. The Marmara Region was selected as the study region mainly for reasons such as involving a variety of properties that are prioritized for Coastal Zone Management, being adjacent to three different seas, having a dense and diversified population structure, etc.

Within the scope of the field study, all coasts in the study region were investigated, all relevant and related local units were visited, and survey studies were carried out in addition to personal interviews. In all these data, it was aimed to reveal the current and ideal state of local governments' role in integrated Coastal Zone Management. As in the rest of the world, ICZM (Integrated Coastal Zone Management) is a fairly new and constantly developing concept in Turkey. In this context, problems related to ICZM in Turkey and the Marmara Region in particular can be classified under three main categories: Management, Legislation and Planning. The sub-categories in the context of Management, Legislation, Coastal Development and Planning can be classified as Academic and Application Studies, Information Gathering and Management (Remote Sensing, CBS and e-Government), Designated Protected Areas, Protection of Coastal Environment, CZM Tools, Education and Global Problems (Gazioğlu et al. 2008; Gazioğlu et al., 2016; Simsek and Arabaci, 2021). In addition to these, there are various forms of pressure on coasts as a result of global environmental problems.

Management

In Turkey, there is no private institutional structure for Coastal Zone Management. Coast branch offices within various ministries (Ministry of Environment and Urban Planning, etc.) carry out narrow-scoped tasks such as document classification with limited authority and responsibilities. The reason for the complication regarding coastal areas is the presence of a number of institutions with overlapping and conflicting authorities over coastal areas, causing gaps between each other for the sake of authority. In addition to the lack of infrastructure in central and local institutions established with various purposes to ensure full authority over their areas of responsibility, the inability to establish coordination between related stakeholders lies at the basis of the disorder of authorities and duties regarding the protection of our coasts "for the public interest". Protection-oriented decisions are often counteracted by utilization-oriented decisions. The constant conflict between these hierarchically disconnected institutions in terms of authority and responsibility makes it essentially impossible for coastal areas to be managed with an integrated philosophy. The absence of an overarching structure regarding coastal areas, and disorder or multi-

headedness within the institutional structure causes a coordination problem.

There is a lack of coordination from the central government down to the regional and local levels. The number of coastal zones that are similar to the Marmara Region, where all kinds of coastal problems are independently and/or simultaneously in effect, is limited even in the rest of the world.

The weak and influenced position of local governments in Turkey against the central government was reflected in the investigations performed in the Marmara Region, which was selected as the study region. Although the region is a powerhouse that contributes to national economy by single-handedly providing 60% of the total added value produced in the country, it cannot receive the necessary level of support from the central government. Central governments are not willing to share their authority with local governments in issues such as decision-making, budget-making and spending, fundraising, cooperation, etc. Furthermore, there is no demand regarding this matter. The fact that the budgetary items of local governments and how they are utilized are under the initiative of the central government is among the most significant indicators of the central authority's influence on local governments.

The failure to prepare a basic program or CZM masterplan on a national or regional scale due to the limited number of projects related to Coastal Zone Management in Turkey limits the interest towards CZM by local governments as well as central.

In addition to the central provinces, the coastline is also heavily affected by rapidly increasing rural migrations. In time, the demands on coasts will increase even further, and this will cause the concept of sustainability underlying the CZM philosophy to be harder to follow. Until recently, the basic urge in national development was to accept development in any shape or form, however, with the increasing level of development, demands such as the establishment of sustainability and non-conflict with environmental factors are emphasized in the basis of national, regional and local development. Therefore, in order to achieve sustainable development in coastal areas, the "Integration" philosophy must be gradually reflected in the programs (national, regional and local) that will be prepared for CZM models with priority. Although local governments have been standing out in recent years and demanding more responsibilities, and even the participation of the local population in related programs has increased, the bureaucracy is still far from the urge to implement models reflecting the participation and demands of large masses of people. In the service system of the central bureaucracy, which fully maintains its hierarchical structure, the organizational philosophy that will provide the necessary support towards the "direct participation of the population" is not yet present.

The presence of the unwieldy structure of our local government organization is an undeniable reality. The

provincial private administrations, villages and local administrative unions outside of municipalities have transformed into very complex and slow structures, particularly in bureaucratic terms. The layered bureaucratic structure between local governments and the central government plays a significant role in this unwieldy organizational structure. The establishment of Metropolitan Municipalities and the closure of Provincial Private Administrations, District Private Administrations, Civil Defense and Sports Directorates in this context are important steps taken towards this direction.

Despite the successive laws enacted in recent years, the authorities of local governments should be expanded and given a more autonomous structure in order to increase local democracy and participation in Turkey. Institutions auditing these should be fully independent and free from political influence.

In Turkey, a hybrid model that is professional and coherent as in Northern European countries, and that emphasizes the sense of clientelism as in Southern European countries should be implemented. The hierarchical organizational structure in Turkey must be reorganized by developing a unique model in light of these objectives.

Legislation

Although many practices, laws, legislations, and particularly zoning works concerning local governments were introduced in Turkey and significant process was achieved, expectations could not be fully met. At this point, the desired level in ICZM has not yet been reached in terms of both legislation and implementation. Constant progress has been achieved with the laws introduced from past to present, however, the concept of integrated Coastal Zone Management could not exceed the context of academic research and find adequate inclusion in the said laws up to date. With the explicit inclusion of Integrated Coastal Zone Management in municipal, coastal and zoning laws, the efficiency of local governments can stand out more clearly (Akkaya et al., 1998).

The organizational structure in Turkey has a top-down hierarchical model. In this context, today, the influence of the central government is apparent in the planning decisions related to coastal areas, as was the case in the past. It was determined that the central government was involved in the already-limited CZM plans of local governments in practice, as well. Countless institutions are involved in the investments related to coasts. As stated above, in addition to the lack of an administrative mechanism on Coastal Zone Management, there is also a lack of legislative regulation in Turkey (Gazioğlu, 2018). The tasks, powers and responsibilities assigned to various institutions with laws and statutory decrees are interpreted to include coastal areas. Numerous laws, legislations and practices cause conflict and overlap between institutions and organizations that are in different hierarchical positions both vertically and horizontally, and enable the creation of wide gaps

between them due to the absence of an integrated approach. It is necessary to establish an upper structure that will provide integration.

Turkey is one of the first countries in the world to have introduced coastal laws. However, the fact that the legislations assigned authority and responsibility to too many institutions also created an authority gap on coasts. It has been revealed in the survey studies and personal interviews with authorities that the coastal law needs to be improved as it is not yet fully inclusive despite being subjected to various improvements over time. Perhaps the most important factor affecting the nature of the law is the lack of a geographical definition and the definition of coastal areas in only meters. Expanding the definition of coastal areas in the coastal law and specifying them for all of the shores in Turkey based on geomorphological criteria will allow for the production of plans, investments and practices that are more coherent with natural balance. Although the legislations developed in recent years have adopted the principle of local administration as a philosophy, the necessary regulations have not yet been made by the central government. A structure in which the demands of the local population are emphasized is yet to be established. Although the regulations on this subject allow for participation in very limited areas, the legal mechanisms related to the matters that are essential to the governance mechanisms of developed societies are still inadequate, ineffective and devoid of a formal structure.

Concrete implementations of the outcomes of certain autonomous powers granted to certain institutions by the central government are observed in coastal areas. Particularly the "Law for the Encouragement of Tourism", which was developed as a reflection of the sense of tourism that limits tourism to the triangle of sun-sand-sea, involves elements that contradict all unique philosophies of ICZM and excludes coastal areas from public ownership. Essentially, the said law excludes local elements (local government, NGOs, the public, etc.) in the name of touristic development. Similar authority is present in the law on the Housing Development Administration of Turkey (TOKİ). Investments that may contradict the existing plans of the region can be implemented in all public areas with purposes such as creating or funding housing estate zones.

In addition to the lack of determinative legal regulations on the criteria and principles of governance in regions consisting of marine, wetland and land in coastal areas, in practice, the lack of central, regional and/or local directive institution(s) to organize the powers and responsibilities in the field has been observed as a flaw in terms of management. The biggest flaw is the absence of a legislation that is fully dedicated to this subject.

With the reinforcement and development of local democracy over time, the authority of local governments will increase while the influence of the central authority will decrease, or it is necessary for such a development to occur. Although certain progress has been achieved in

terms of legislation, the biggest problem is that the laws possess a more bureaucratic nature than scientific due to their predefined structure. Another significant flaw is that the defense mechanism against return is weak. With their expanded authority as a result of their increased qualities over time, it is necessary for local governments to have prioritized authority over coastal areas: In Turkey, there are very few measures to be implemented in terms of integrated Coastal Zone Management, particularly within the borders of metropolitan municipalities in our study region. That is because the unplanned housing that occurred earlier has caused a disconnection in Coastal Zone Management, which is regarded as the biggest obstacle for coastal areas to further benefit from the sea. In regions with deteriorating natural environments, the idea of "urban transformation" is increasingly prevalent. It is important to reflect the philosophy of improvement and reformation with an integrated approach in CZM plans. One of the ways to enable Turkey, which is a maritime country, to develop more rapidly is to integrate the country's seas with the terrestrial areas in the interior regions. The Marmara Sea coasts are noted as those with the highest return in Turkey in all aspects.

Secondary housing is a very significant problem not only in terms of local governments but also for coastal areas, as well. The perspective of both the central and local governments on secondary housing is contradictory. The biggest impact of secondary housing is felt in population planning. The difference between the winter and summer populations can be very high. The central government provides the necessary economic, political and other forms of support to local governments based on the "Address-Based Population Registration System", in which population numbers are determined. However, continuity in local services is independent of the summer-winter populations. The necessary support should be provided in regions with dense secondary housing with a different structure. The other problem related to secondary housing is the inclusion of secondary housing areas in urban regions as part of the nature of urban transformation. It is necessary to reevaluate secondary housing zones, which are developed as regions with potentially limited infrastructure, within the framework of ICZM. Due to the fact that reformation, transformation and development are long and exhausting processes that involve additional costs, local governments are prevented from implementing activities that will allow for the radical solution of the problem within their limited electoral periods.

The concept of "Urban Transformation", which is widely used in countries with degraded urban patterns and worn areas, has become a widely encountered concept today. In essence, urban transformation should be carried out by central, local and/or private initiatives in order to more efficiently use urban patterns with no historical or cultural characteristics. Reinforcing local governments in this aspect can allow for the direct participation of the general population in addition to the reflection of local demands in urban transformation projects.

Coastal Development

It is clear that in CZM, which can be defined as an administrative mechanism between demands on coastal areas and the natural structure, human geography and geomorphology are not adequately utilized in the production of coastal laws and the planning of processes involving coastal regulations. The aggravating disagreement between the stakeholders of coasts originates from the fact that the coastal law does not involve geomorphological elements. The definitions and concepts involved in the coastal law are not in line with the natural environment, and it has a strictly legal perspective that reflects natural processes in a stationary manner. The related concepts should be reevaluated in the light of geomorphology.

The main emphasis in the law is on the specification of the coastline, although the main emphasis in geomorphological terms should have been on the concept of coasts. The geomorphological perspective in question also carries an integrative perspective in which the temporal dimension is included in natural processes. Additionally, the processes affecting the formation of parts of low-depressed coasts should be clearly determined, and units such as foreshore and backshore should be defined. Storage and erosion activities, which are not included in the law, should be explained with geomorphology, and oceanography should be used for activities such as waves and currents, which are mainly formed with the impact of marine and atmospheric forces. Geomorphological elements must be redefined based on their origin (Erol, 1989).

The geomorphological properties of the coasts in Turkey are very diverse. The geomorphological properties of all of the coasts should be determined. An improved ICZM plan should be autonomous and in line with the climatological, geomorphological, geological, geographical and other related properties of the shores. It should not be expected for ICZM plans that are not supported locally, do not involve the participation of the population and do not regard the geomorphological realities of the region to produce solutions towards the problems of any coastal area.

Due to the lack of experts on coastal structures and investments in the country, this field is generally regarded as one in which almost any engineer, architect and/or planner can produce ideas. Additionally, the impact of socio-economic demands aiming the use of natural resources on the shaping of coastal structures is managed with political processes, and they are mainly closed to the participation of the general population. Planning, project design and investment processes are subjected to political influence, pressure and shaping.

Planning

Another important matter regarding coastal areas is the failure of establishing a relationship between CZM and basin planning. The sense of planning proposed in the 1960s and the years of planning widely lost its influence

after around 1985, and completely abandoned today. The overall unpreparedness is apparent in CZM projects, as well. The plans related to a few CZM projects carried out are devoid of coordination and integration. It is a universal development criterion rather than an academic reality that planning is inevitable for the determination and/or management of whether the increasing socioeconomic demands will be met with coordination in regions such as coastal areas, in which many related or unrelated parameters are dominant. The adoption of this principle by large masses and its implementation by local governments as well as central should constitute the basis of planning. In addition to the sense of tourism on a local scale from past to present, protected areas designated by the Ministry of Culture and Tourism (Natural Archaeological and Urban Sites), touristic promotion areas, the autonomous zoning authority granted to TOKİ, the influence of the Ministries of Environment and Urban Planning, Transportation and Infrastructure, and National Defense on coastal areas and the fact that many other similar institutions and organizations have a direct or indirect say in matters concerning coastal areas necessitate comprehensive coordination. The lack of coordination affects the investments that are planned to be implemented by local governments. It is necessary to specify the direct participation of the population or at least the investigation of the public support towards the investments related to the region as the first step of planning, and there should be no responsibility and/or purpose towards fulfilling every demand regarding coastal areas. "Sustainability" should constitute the basis of the philosophy of CZM. Although it was proposed in various sources to gather physical planning authorities under one roof and designate others as institutions that support these authorities, as is the case in England, where the foundations of the Anglo-Saxon organizational form were laid, we argue that the "White Table" model in Italy, which is a Mediterranean country that is closer to our country in terms of cultural development level and one we are in close cultural interaction with, will be more suitable for our country. In the concept of "White Table", in addition to the central and local government, all stakeholders in the region are granted equal rights for a certain period of time. After a planning decision is made within the said period (excluding annotations), it is immediately moved to the planning and even implementation phases of the investment. After the objection period of the said annotations are complete, plans and/or investments are reevaluated. The said structure can be generally accepted in countries with hierarchical organizational structures such as Turkey, as it can replace the authority with the final say. However, it is necessary to have alternative planning and/or a stepwise implementation process for objection periods that will fundamentally change the inflexible structure of planning (Okuş et al., 2007., Kaya et al., 2008).

First of all, it was determined that the absence of a sense of protection in large masses of people who are not fully aware of their belongings, the fact that local governments originate from this segment and even the

lack of awareness in central authorities are among the most prominent obstacles to overcome in terms of the protection of coastal areas. On a local scale, protected areas in particular are perceived as restricting the activities of the local population. The restrict-hide mentalities of all central and local administrations in the past have been effective in this perception. On the other hand, today's philosophy has started to change into "sustainable use through protection". However, the said perception remains in all segments of society. At this point, the local population and the related prohibitory institutions must cooperate in order to achieve sustainable planning for the benefit of both segments.

Coastal management tools

It is observed that mostly inexperienced, unqualified and fully profit-oriented institutions are involved in the preparation of Environmental Impact Assessment (EIA) reports, which play the most significant role in the direction of investments related to not only our coasts but also the environment in general and reveal the relationship between the investment and the environment. The reports are generally prepared based on the sources on the related region without conducting on-site studies. The documentation of general species is made using general information on the region. Particularly in areas such as coastal areas, which require special expertise, the necessary care and attention are lacking in the preparation of the said reports. Endangered coastal/marine animals and rare coastal/marine habitats are almost not mentioned at all. The accuracy of the information in EIA reports is evaluated by narrow-scoped commissions and close to the opinions of non-governmental organizations as well as direct participation by the population. In this context, investments are evaluated with missing or inaccurate information. The "Public Participation" meetings held within the scope of EIA are carried out to fulfill the formal requirement, and negative cultural and socio-economic effects are overlooked as well as potential negative environmental effects. Additionally, problems occur in the inspection of the measures, precautions and related investments within the scope of the EIA report by local authorities and the related units of the Ministry of Environment and Urban Planning.

Training

It was determined during our studies that local government personnel are not acquainted with the concept of "Integrated Coastal Zone Management". In-service training on this subject should be provided to local government personnel. There is no crystallization in the public's perspective towards coasts. The public perceives coasts as income-oriented or touristic areas. This perception should be corrected and the public should be informed about the integrated nature and versatile use of coastal areas.

Particularly universities should specialize in fields related to coasts in order to disseminate the concept of Integrated Coastal Zone Management and to develop

training programs and projects related to the subject. In this context, necessary regulations should be implemented within the governmental personnel regime. The lack of manpower should be eliminated starting from local governments. In this context, experts within the related directorates, who can serve in the fields of CZM, Coastal Engineering, Coastal Geomorphology, etc., should be assigned and subjected to in-service training and certification activities.

Many solvable problems cannot be overcome due to the absence (or lack of emphasis) of geography and geographers within the scope of ICZM, and a wider perspective cannot be provided to ICZM. In this context, the employment of geographers who mainly integrated their education with GIS (Geographical Information Systems) should be increased in the public and private sectors.

International Dimension of Coast-Related Problems

While the majority of problems in Coastal Zone Management are on a national scope, the number and impact of problems with an international dimension and basis have been increasing. Despite varying development levels of nations, cooperation on common problems has gained great importance. Particularly as a result of climate change and with the impact of the CO₂ levels in the atmosphere, between 2025 and 2050, it is estimated that there will be an increase of 1.5°C to 4-5°C in the average temperature while the average sea level will increase by up to 0.5m in the first phase and 1.0m afterwards. The fact that sea levels are already on the rise at different levels in different regions around the world is a primary problem that concerns humanity.

The fact that problems such as the exposure of low coastal areas to floods, the projection that regions below sea level and wetlands will be inundated and coastal erosion will increase, salinization of fresh water resources on coasts and the endangerment of the integration of coasts, etc., will all occur on a global scale throughout all coasts and that such changes will take place within one human lifetime are the biggest issues. Irreversible damage will occur in the unique ecosystems of coastal areas. The most significant socio-economic effect of sea level rise is that densely populated coastal plains will be inundated. An increase of 1.0m in the sea level in the Mediterranean will cause 15% of Egypt's fertile lands to be inundated while similarly, this rate is calculated as 14% for Bangladesh. Projections should be made for our country based on various predictions, necessary measures should be taken for agricultural areas that are predicted to be inundated, and hydrological studies should be carried out on the preservation of fresh water resources.

The most significant secondary-priority problem is marine and coastal pollution independent of borders. The water quality of the world's seas has been decreasing day by day. There are kilometers of litter cycles in oceans. As a result of the decreasing biological productivity of the world's seas, biodiversity is decreasing and endemic

species are becoming extinct. Invasive species transported for various reasons (opening of channels, transportation by ballast waters, etc.) become the sole species in the medium in various geographies. Such situations disrupt and negatively reshape the socio-economic activities behind coastal areas, primarily coastal fishing. Coral bleaching, which can be regarded as a type of desertification that occurs as a result of the global transformation in Coral reefs, which are of great ecological importance for our world, is widely spreading in almost every region.

Disrupted coastal areas with facilities and coasts that have lost their former charm as a result of the widespread misuse of coasts in the 1960s, particularly in countries such as Spain and Italy, are the biggest problem of such countries, and it was determined that 93 out of 109 countries with Coral ecosystems suffered heavy losses.

In maritime transport, which is the artery of international trade, coastal pollution originating from shipyards, handling areas and ports on coasts as well as ships is a problem with increasing impact. The increasing energy and mineral exploration in seas and the processing activities in this context involve negative environmental effects and dangers (Hébert, et al., 2005; Kaya vd. 2006, Kaya, 2010., Gazioğlu vd. 2013., Kaya and Gazioğlu 2019; Salar and Gazioğlu, 2021).

Discussion and Conclusion

In conclusion, an exemplary integrated Coastal Zone Management plan in terms of local governments should be geographically holistic and inclusive as well as long-term, continuously inspectable and correctable. Additionally, direct participation by the public should be prioritized and a structure that is in line with natural processes should be established based on the locality principle. In addition to the participation of all related and authorized institutions and organizations, all non-governmental organizations declaring themselves as related to the subject should use today's modern technological resources in cooperation. Coastal Zone Management Masterplans and policies should be established on a national and regional scale. After all scientific conditions are met in the direction of such plans and policies, local-scale plans should be prepared in a unique and individual manner.

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