

REVIEW ARTICLE

Investigation of requirements and legal framework of integrated management of the Persian Gulf Coast in Iran to present ideal legal models

R. Jalali¹, M.T. Ansari², M. Pournouri³, P. Farshchi⁴

¹Department of Environmental Law, Science and Research Branch, Islamic Azad University, Tehran, Iran

²Islamic Azad University, North Tehran Branch, Tehran, Iran

³Central Tehran Branch, Tehran, Iran

⁴Science and Research Branch, Islamic Azad University, Tehran, Iran

E-mail: mostafa.taghizadehansari2018@gmail.com

Received: 05.05.2018. Accepted: 17.07.2018

Coastal zones are the most productive and dynamic zones of the world and the bed for big economic and social activities at the world. Along with increased population and development of activities in these fields over the past decades, high pressure has been imposed on these zones and they have been exposed to types of pollutions and destructions. Iran's coasts are not also an exception and especially Persian Gulf Coasts have been exposed to types of pollutions and development of land uses beyond the tolerance of these zones. Hence, over the past years, some efforts have been taken to improve the conditions and the conditions dominated on this field. In this regard, wide exploitations in field of fishery, tourism, business transportation and other fields can double the importance of integrated management of Persian Gulf Coasts. With approval of article 63 of The Fourth Development Plan Act and its Executive Code, it is expected that the problems with Iranian coasts can be solved generally and the Persian Gulf coasts can be organized specially based on the executive mechanisms and the obligations predicted for executive systems in the regulations. The organization process should be the result of studying and planning in frame of environmental integrated management process.

Keywords: Integrated management; coasts; Persian Gulf; development plan act

Introduction

Over the decades, unreasonable exploitation of coastal zones has made these zones encountering critical and dangerous situation, so that the pressures imposed on them have gone beyond their environmental tolerance. Increased population, excessive exploitation of resources, pollution of coastal zones, and development of environment-incompatible activities and inadaptability of activities in coastline are the most underlying factor causing pressure on these zones. All mentioned problems and difficulties have made many countries of the world, especially developed countries, to codify and implement various regulations and policies for optimal use of these fields, so that concentration of different uses by public and private sectors is possible only with observance of these regulations (Morales-Nin et al., 2005).

Statement of problem

As major part of world population is concentrated in coastal zones, coasts as important morph dynamic zones can be very important. Coastal zones across the world are under severe pressure. Over the past years, some efforts are taken for organization and optimal use of these zones. However, for various reasons, these measures couldn't result in desired outcomes and the problems with coastal zones of Iran show off generally and generally the problems of Persian Gulf coasts more and less. In this field, the question is that how integrated management of Persian Gulf Coasts can lead to enhanced performance and improved quality of exploitation of these coasts with presentation of suitable legal pattern? Accordingly, organization of deployment of activities in Persian Gulf Coasts, for which tourism, fishery and marine transportation functions have been predicted, should be considered in priority of state development plans and certain plans should be implemented for optimal use of these fields (Clark et al., 1992). In this study, the author has tried to analyze the abilities of Persian Gulf Coasts and the challenges of integrated management of Coasts in this region to find way for solving the problems.

Literature review

Integration approach on organization of coasts was begun since 1965 in America; although it was accelerated after 1992. In 1992, 108 Integrated Coastal Zone Management (ICZM) plans were reported in 44 countries of the world. The number was increased at 150 cases in 60 countries in 1993. In early 2002, 145 countries of the world took measure to establish 622 efforts in field of integrated coastal zone management in national and international levels. Statistics show that during 1993-2003, number of countries experiencing integrated coastal zone management was reached to 2.5 times and number of measures was increased to 4 times. Organization of coasts and creating integrated management in coastal zones has been now changed into a global necessity. United Nations Conference on Environment and Development (called Earth Summit), in 1992 in Rio de Janeiro, asked all countries with coastal zones to create all required mechanisms for adaptability and integrated management and sustainable development of coastal zones and marine resources in local and national areas (Conacher, 2002).

Necessity of organization and optimal coastal management

Coast lexically means seashore or near the river or the coast, the seafront with the horizontal sea level. Moreover, coasts can be considered as the most important economic and industrial zones and center for economic prosperity and growth of every country (Conacher, 2002). Islamic Republic of Iran, in south and some parts of north, has long coasts and various uses of coasts in Iran has led to creation of some disorganizations, especially in Persian Gulf Zones to an extent that excessive use of coasts in this zone has been change into a critical issue. Majority of people private and public, tend to take maximum exploitation of coasts under different titles and methods. Major part of the exploitations and some land uses in coasts have been taken regardless of interests and necessity of optimal and collective exploitation; although it is clear to everyone that any kind of use of national and public resources such as jungles, sea, coasts and plains is depended on observance of codified principles and regulations. Observance of the regulations can cause optimal coastal management for public exploitation of these zones (Sharifi et al., 2012). Coastal zones include fertile and varied habitats, which are very important in terms of concentration and accommodation and local livelihood and development. More than 50% of world population lives in distance of 60 km from the coasts (Pak & Farajzadeh, 2007) and the number will be increased to 25% in 2020. Many poor people of the world live in coastal zones. Coastal resources play vital role for many poor people, especially in developing countries. Despite to national, regional and international efforts, the current methods to control and manage marine and coastal resources have not been improved to an extent that sustainable development can be achieved. Hence, many coastal zones, especially in developing countries, are exposed to types of pressures caused by human activities and have tolerated irreparable damages. In chapter 17 of Agenda 21 Charter of the World Community on development and environment problems in summit of 1992 in Rio de Janeiro, Brazil; protection of oceans; types of seas including closed and relatively closed seas, coastal zones and protection and rational and right exploitation and development of living resources have been emphasized. The importance of protection of coasts and controlling the way of exploitation and optimal use of these areas and deployment of various human activities in these areas can be vital according to special geographical condition such as security, military, tourism, environmental, economic and social components. Hence, the adaptability of uses should be provided and due to ability of coastal zones; permissions for activities should be issued. Lack of consideration of this issue can lead to undesirable effects and outcomes and can be focused on many capabilities of these areas, so that inattentiveness to this issue can cause various environmental and social problems in Iranian coasts, especially Persian Gulf Coasts, which has been recently considered as one of the main issues in this field. Accordingly, necessity of considering these areas and taking urgent measure for organizing that should be highlighted.

Legislative procedure of coasts in Iran legal system

During about 1 century of modern legislation in Iran, about 100 acts, regulations and bills are approved in field of coast and coastal zones by the legislator or board of ministers (Table 1). With studying the gradual and historical process of approval of regulations, it could be observed that legislator or the board of ministers has approved some regulations in any period of time for coasts or seas due to necessities and social, economic and political needs. Some of the regulations are different or even despite to some former regulations and codification of relevant regulations has affected coasts and seas and exploitation of these zones in special way and this process has been continued to the recent years. In first step, integrated coastal zone management studies, which have been begun since late 70s decade in Iran, have provided detailed investigations in field of determination of status of Iranian coasts in terms of problems and limitations and also capabilities of coasts. Then, according to determination of coastal zone and its limits, the studied area in Iran was identified. Accordingly, the coastal zone and its borders were specified. In second step, integrated coastal zone management studies, which were started since early 2005 and continued till 2009, studies were taken in specialized fields required in integrated coastal zone management by the specialized consultants in each field, along with cooperation of foreigner consultant. Specialized fields studied in these investigations included Environmental Management Plan (EMP), Shoreline Management Plan (SMP), Land Use Plan (LUP), political-security studies, organizational structure plan, legal plan and Monitoring Evaluation Plan (MEP). In Table 1, the legislative procedure of relevant regulations of Iranian coasts is presented.

Table 1. Relevant regulations of coasts in view of statistics.

Legislative period	Number and percent	Laws			
		Acts	Regulations	Approvals	Total
Before Islamic Revolution (71 years)	Number per period	30	5	8	43

	Percent per period	70%	11%	19%	100%
After Islamic Revolution (25 years)	Number per period	15	14	24	53
	Percent per period	28%	27%	45%	100%
Total		45	19	32	95

Organization of coasts in third development plan

In the Third Economic, social and cultural Development Plan Act approved in 2000 by Islamic Council, the legislator has mentioned in article 104:

To protect the environment and for sustainable use of natural resources, it is essential to implement following items: - to prevent pollution and organize Caspian Sea coast, the government shall take measure to release the seafront".

It could definitely be said that this is the first time that legislator has made sentence for importance of coast and prevention of its pollution and to organize that and has also made obligation to release the seafront. However, in this article, only pollution and organization of Caspian Sea has been noted and nothing is said on other water resources and marine resources of Persian Gulf, Oman Sea and Uremia Sea and it is not specified that is there any pollution in these zones or shall not be met. According to note 3 of article 2 of the law of fair distribution of water approved in 1982, making any kind of property in legal area of coasts and rivers is prohibited; unless with permission of Ministry of Energy. Also, it has been mentioned in Coastal Land Laws approval of 1975 that the obligation of releasing coastal lands has been assigned to the den Ministry of Agriculture and Natural Resources (Ministry of Agricultural Jihad). Article 104 of third development plan act has also discussed in this field from environmental point of view and in chapter relevant to environment. Hence, it is unclear that which authorized system is responsible for this obligation and no special regulation is also codified in this field to specify the obligations. Hence, this may be the reason that the article was not executed legally and was remained just in limit of a composition. After approval of third development plan act, board of ministers approved executive solutions in field of third development plan. The approval can be hesitated from different aspects, since no attention is basically paid to article 104 of third development plan and prevention of pollution and considerable parity and multiplicity is observable in an approval with the aim of enforcing 5-year plan.

1. In solutions of water and Agriculture sector, the government has announced that during third development plan, some regulations would be provided and submitted to the Islamic Council. One of the regulations is the Comprehensive Water Act of Iran. One of the main issues in this act is determination of the obligations of river's bed and the way to prevent violation of the limits and water establishments and management of Iran Coast according to role of different executive systems. Therefore, one of the main fields of Comprehensive Water Act is the issue of national coasts management. However, the desired act was not codified during the third development plan and was not submitted to parliament and the government didn't act to its commitment in this field.

2. In the executive solutions of infrastructural affairs and in subset of transportation sector, Interior Ministry and Ministry of Transportation were obliged to provide the "Integrated Coastal Zone Management Plan" and submit it to board of ministers within 6 months after approval of the third development plan act. Unfortunately, no attention in this paragraph was paid to the said date and periods, since it was ordered to present the organization plan within 6 months of approval of the act (third development plan act in 5/04/2000). However, the approval of executive solutions was approved in 9/04/2000 and 9 months after approval of this act. In other words, at the time of approval of this act, the deadline was passed and hence, enforcement of the paragraph was impossible in the said deadline and required attention was not paid to take this measure unfortunately even in field of correction of the deadline. In the approval, the main reference is to integrated coastal zone management; although no integrated coastal zone management was existed at the time of approval, but also they must refer to "providing integrated coastal zone management plan". Not only no practical action was taken and submitted to board of ministers during 5 years, but also to the end of period of third development plan in field.

3. In section of executive solutions of social affairs and in subset of domestic policies, it was mentioned that to organize the coasts and to provide the requirements for public use of sea, Interior Ministry is obliged to codify required regulations and submit them to board of ministers to the end of first year of the plan with the cooperation of Ministry of Culture and Islamic Guidance and Ministry of Housing and Urban Development. In this paragraph, again board of ministers predicted no special sentence for organization of coasts, but also it prescribed that the required regulations should be provided and presented within 1 year of the plan; although about 11 months was passed from the first year of the plan at the time of approving this sentence and it was almost impossible to codify the required regulations for organization during about 40 days and it was done practically and the interior ministry codified no similar regulation not only in first year of plan, but also to the end of fifth development plan.

According to the mentioned, it could be observed that third development plan act and executive solutions of this plan were never enforced and article 104 of third development plan act and different sections of executive solutions of the act remained just as approval and regulation. Such inattentiveness and lack of enforcement of regulations should be hesitated and it seems that the main reason of failure also can be attributed to the legislator. This is because; it was required for the legislator to assign special system or ministry to take responsibility of enforcing the plan instead of issuing general sentence and only for the Caspian Sea Coasts and predict budget and human resource in this field, so that the state doesn't remain on the beginning point and even behind that after several years and end of third and fourth development plans.

Organization of coasts in fourth development plan

Importance of coasts and problems for systems, institutes and ordinary people in coasts made the legislator again to codify acts. This time, the legislator said in article 63 of fourth development plan act approved in 1/09/2004:

"The state government is responsible for enforcing and monitoring within one year the plan for organization and prevention of pollution and destruction of coasts with priority of Caspian sea, a comprehensive plan guaranteeing urgent measures such as determination and release of privacy, deployment of integrated coastal zone management, environmental standards and regulations and the standards of sailing, fishery and aquaculture, along with determination of responsibility of relevant systems in field of policy making, enforcement and monitoring.

Note: the government is responsible for organizing all ministries and governmental institutes in such way that retreat of 60 meters from the sea is done for hundred percent to the end of the plan".

The executive regulation of this article was provided in 2/06/2007 and was approved by the Cabinet. In accordance with article 2 of this regulation, comprehensive plan of organization of coasts was defined as follows:

"Comprehensive plan of organization of state coasts is a trans-sectional document aimed at preventing destruction and pollution of coasts, sustainable development in coastal zones, guaranteeing public exploitation right of coasts and organization of using state coasts with priority of Caspian Sea and releasing the seafront and determination of environmental standards, sailing and fishery standards and providing tourism industry development, revise and completion of regulations and deployment of integrated management based on the measures described in the regulation by the Department of Housing and Urban Development within 1 year and confirmed by the working group inserted in article 3 (including members of High Council for Urbanism and Architecture of Iran and Provincial and coastal Governorates) of the act".

In accordance with paragraph 2 of the article, Agriculture Ministry of Jihad, with the cooperation of ministries of energy, state, court, housing and urbanization and transportation and environment protection organization and the deputy of planning and strategic supervision of presidency (former institute for management and planning) is obliged to present criteria to determine seafront (with priority of Caspian Sea) within 4 months and present them in article 3 of regulation. Executive regulation of the article was provided by state organization for management and planning, environment protection organization, housing and urbanization ministry, Agriculture Jihad, transport ministry, ministry of energy and other relevant systems and was approved by the board of ministers (Thia-Eng, 1993).

Concept of integrated coastal zone management and its necessity

Integrated coastal zone management (ICZM) provides a complete and real definition of coastal zones. The definition helps to know that coastal zones should be considered as an extended ecosystem. Definition and determination of coastal zones from the past to the date has been one of the main problems with integrated coastal zone management. Various definitions have been presented in the literature by the scholars for ICZM. Among the definitions, it seems that a general agreement is on this issue that coastal zones include a part of coastal waters and some costal lands and the range of this zone is depended on the issues and activities, which should be managed (Kassler, 1973). Therefore, according to the mentioned, some definitions have been provided for ICZM:

- 1- ICZM is a dynamic process, in which a matched strategy is provided and is enforced to allocate natural, social, cultural and institutional resources, so that multiple goals of sustainable protection and development of coastal zones (McCall, 1985, p.32).
- 2- ICZM is one of the best processes identified to pay attention to current and long-term issues of coast management such as losing plant and animal species, destruction of quality of water, change in hydrologic cycles, and destruction of resources and adjustment with rise of sea level and so on.

In general, the aim by providing ICZM is showing response to this basic problem that social needs to use costal zones and relevant sources are basically more than ecologic capacity of these zones for spontaneous responsiveness to these needs. Hence, to prevent increasing destruction of coasts and relevant sources and protection of these sources for next generations, it is necessary to apply an adapted and suitable integrated management plan in coastal zones (Sarnthein & Walger, 1973). The main goals of coastal zone management can be counted as follows:

1. achievement of sustainable development in multiple uses of coastal zones
2. preserving vital ecologic processes and systems protecting biologic life and diversity in costal zones
3. reducing vulnerability of coastal zones and the residents against natural and manmade disasters
4. analysis of signs of development, contradicting uses and the internal relations of physical processes and human activities in coastal zones
5. Encouraging he adaptability of coastal sectors and activities.

Iran with about 2300 km coastline in south and 700 km in north has long coastlines in Caspian Sea, Persian Gulf and Oman Sea. In addition to have access to important sources in coastal zones, many problems and challenges are existed and it is essential to take basic measures in this field (Thia-Eng, 1993). Despite to many coasts of the world, Persian Gulf Coasts, especially over the years, have been widely exploited in field of oil exploitation and transportation. Hence, the problems with that have been severely increased. Recognition and understanding the problems in coastal zones and efforts to meet the problems show that need to ICZM in Iran seems essential similar to many other countries of the world. Almost same problems in majority of coastal zones of the world are existed in Iranian coasts; although the intensity and severity of the problems may vary (Nouri et al., 2008).

Problems with Persian Gulf Coasts and need to integrated management

Iran includes about 5800 km coastline and 840 km of the coastlines are distributed around the islands. Persian Gulf Islands with about 3821 km coastline, regardless of island coasts and 5314 with regard to island coasts is one of the most powerful

zones in terms of natural features of geologic and geomorphologic structure of adjacency to various ecosystems in dry land and sea and human geography. At the first step, these coasts need identification of upcoming potentials and challenges for exploitation. Number of southern coasts provinces is equal to 4 provinces and about 29.000 km of coastlines is located in coastal zone. According to division of coastal zones, 1760 km of the zone is located in water fluctuation zone, 6473 km in danger zone and 20738 km is located in coastal use zone. The coastline length in this line is determined to 4900 km (Kesavan & Swaminathan, 2006). Studies of valuable and sensitive coastal ecosystems and beautiful landscapes can be one of the most important issues of ICZM. With identifying them in 3 parts of dry land, seafont and coastal waters, it has not only emphasized sustainable exploitation of these zones but also it has attempted to make the best plans for management of these zones to preserve the valuable heritage for future generation based on national and international treaties and conventions. According to the studies done in level of state coasts, coastal zones are various in terms of geographical area and social and economic diversity. Hence, they have different problems. According to the classification in this field, the problems can be divided to two parts of spatial problems including north and south coasts and subjective problems including general, natural, environmental, economic problems and land use and social-cultural problems. In this regard, coastal zones of Persian Gulf are the most powerful and dynamic ecologic sources and the bed for bid economic and social activities. Valuable ecologic resources, biodiversity, oil and gas reservoirs and big economic activities have changed these zones to the most sensitive and valuable zones for comprehensive development. Over the decades, inaccurate exploitation of these valuable resources has made critical situation for majority of coastal areas, so that the pressures imposed on them are significantly more than their environmental tolerance. With review of environmental status of Persian Gulf during 2004-2013, the most underlying threats to Persian Gulf can be factors including increased population in coastline residences, industrial activities, increase coastal tourism, unauthorized hunting of birds and fishes, high use of agricultural fertilizers, inappropriate extension of urban and rural swage and low quality of wastewater treatment system, lack of existence of integrated management of urban and hospital waste and on agricultural drainage. Excessive exploitation of sand from seashore and rives, change in land use, increased activities of oil exploitation and relevant industries and decreased biodiversity and destruction of habitats and entrance of non-native invasive species. In this regard, integrated coastal management can be considered as a guideline for management of all resources, so that it can meet economic and social needs and create cultural homogeneity and life protection systems with increase in justice and equality in development and improvement of quality of social life and providing high environmental quality. In this field, improvement of environmental management to reduce its damages can be the first step to achieve goals if ICZM. Persian Gulf coasts can be considered as oil-gas, fishery and residential coasts. These coasts can be considered as the best coast of Iran for economic development in terms of geographical location, depth of coastal waters, number of bays, nearness to main Asian ports and tens of other bonuses, especially in terms of international business, fishery and special potential industries. Along the Persian Gulf coasts, the role of marine communication and transportation caused by national and international, legal and illegal business, activities caused by oil and gas and fishery are 3 main economic approaches in this coastline. Hard climatic conditions, coastal water pollution, erosion, lack of tourism establishments and infrastructures, economic bottlenecks for life of coastal residents and destruction of environment, traffic of oil patrols, increased demand for construction of marine structures, development of free economic zones regardless of adjusted plan can be the most important weaknesses in this coastal zone. Undoubtedly, the large volume of capacity to increase capabilities and to reduce weaknesses in these zones need integrated management. The question raised here is that what are the most underlying functions of ICZM in Persian Gulf? To analyze the necessity of ICZM in Persian Gulf in terms of political and security considerations; one can refer to oil and gas, fishery and business as the main functions of Persian Gulf. Hence, smuggling commodities has been introduced as the most important security problem in this zone; although with regard to environmental functions of Persian Gulf, it could be found that environmental damages and destructions in this zone can be also changed into security problems. According to sensitive marine zones in Persian Gulf coast, Mangrove forests, coral reefs, turtle habitats and marine mammals, the necessity of implementation of ICZM in these zones can be cleared more than before. 35 islands in Persian Gulf and Oman Sea have been identified without considering small islands, which are active relatively in about 4900 km of coastline of south provinces; 37 petrochemical centers, 74 ports and 31 business ports. Currently, in 4 coastal provinces in South of Iran, six international wetlands, a biosphere reserve, two natural national effects, four wildlife sanctuaries, two national parks and 10 protected areas are under management of Environmental Protection Agency. In margin of Persian Gulf Coastline, some habitats are existed with population more than thousands of people and the most underlying challenge with these habitats can be inadequate conditions of wastewater treatment. Other problems with Persia Gulf coast can be existence of water sweeteners, especially in southern part of Persian Gulf, which is related to neighbor countries and has made abundant problems for quality of water in Persian Gulf. Another problem with Persian Gulf coast can be exploitation of oil fields. Hence, national, international and regional legal instruments should be applied in field of coasts and seas. Another challenge for Persian Gulf coastal zone is construction of artificial islands in southern states of Persian Gulf, which has created some abnormalities in this zone. Making artificial islands in southern margins of Persian Gulf taken with the aim of attracting tourists can leave negative ecologic effects on the zone. However, effects of these structures can less affect Iranian coasts because of southward slope of Persian Gulf Bed. In addition to heavy costs of making these projects and environmental destruction of sea, these islands have no long life because of being artificial and maintenance of the structures created on them needs heavy expenses. Because of non-native nature of construction technology of artificial islands and inattentiveness to sea environment conventions, in majority of these projects, many marine environmental standards have been neglected by Western constructors of these structures non-academically. Moreover, traffic of fossil fuel transport ships in Persian Gulf has always affected aquatic environment and cola reef and other atmosphere items. Another challenge with Persian Gulf Coasts can be change in land use and occupation of coasts by

creating establishments and new constructions in some states such as Emirate, which can be concerning. Therefore, according to the most important coastal challenges of Persian Gulf such as smuggling fuel, lack of organization of urban swage, extraction of water and seas and coasts, fisheries, developmental unstable activity in free zones, importance of ICZM of Persian Gulf and codifying relevant regulations can be specified more than before. The legislative procedure in 5-year development plans is upward and this is in addition to independent regulations approved out of 5-year development plans of Iran in Islamic Council. Moreover, Ira is the most committed regional state to international conventions and relevant environmental protocols, which has had good and acceptable face for international conventions since last times because of observance of environmental issues of sea and coasts in the zone. Hence, in this regard, integrated coastal zone management in frame of a comprehensive plan, in addition to be able to use guidelines of international convention in future to enhance environmental security, it can prevent destruction of marine environment in regional level. One of the plans of government in matching is creating adaptability in Persian Gulf ICZM to avoid parallelism and to make plans in such way that interests of the country and people are considered in long-term and less time is spent to modify that, since the most important issue threatening Persian Gulf Coasts can be separate functions of systems and beneficiaries in coasts. Today, lack of on integrated management plan has encompassed coastal zones and this needs trans-sectional planning and the authorities have to reduce interference and meet the conflicts among activities. Protection of coastal environment in dry land and sea, protection of biodiversity and reduction and prevention of pollution in coasts, using coastal sources in limit of ecologic ability of the zone and paying attention to economic and social growth in coastal zone in line with sustainable development, prevention of interference and occupation of seafront and excessive fishery and providing the conditions for recreational use of coasts for all people and generally, management of human activities in coasts to protect and empower coastal zones and sources can be the main goals, which are expected to be considered in the ICZM approach of Persian Gulf Coasts.

Conclusion

Coastal zones are important in the development process of country, so that Persian Gulf coasts have military, fishery, oil and service functions. Hence, implementation of sustainable development and along with environmental considerations in it is essential. Persian Gulf coasts encounter abundant challenges and environmental problems. Hence, integrated coastal zone management (ICZM) can lead to reduction of conflicts and causing parallelism among activities of different systems relevant to coasts. Determining role and portion of coasts in sustainable development of Iran, introducing potentials and advantages of coasts to different social classes and authorities, directing state management towards ICZM and determining its position in realization of Iran's Perspective Document of 2025 and enhancement of its portion in fifth development plan can be counted as active strategies in field of ICZM doctrine. The approach of sustainable exploitation in this field of management tends to match the activities of coastal zone with environmental capabilities. The ICZM plan is unique in terms of extension among Middle East states with sea. Despite to similar worldwide revision, the plan is completely local and adjusted with natural, social and political geography of different coastal zones of Iran. The main objective of ICZM is maximization of the interests obtained from coastal zones and minimization of conflicts and destructive human impacts. Implementation of ICZM plan can be defined with the aim of constructive plans and sustainable development approach, job creation and fixation of population and means intelligent utilization of coasts. Implementation of the project can prevent waste of national capital and can cause establishment of industries based on principles to make sustainable development meaningful. The most underlying achievements of ICZM in Persian Gulf can be bordering to determine limited coastal zones, zoning dangers and environment of coasts and favorable land use plan. Also, political-security considerations of coasts, coastal environmental management plan and monitoring and valuation plan for recovery of the pan can be added to this list. With regard to "protection-oriented approach", "development-oriented approach" and "integration-oriented approach" in plans and policies, it should be mentioned on protection-oriented approach that this approach means protection of coastal zone environment and considering principle of sustainable exploitation of resources. In development-oriented approach, rational use with the aim of empowering development capacities of coastal zones, along with public exploitation of these resources, can be the most fundamental condition. In integration-oriented approach, with creating a unit, integrated and trans-sectional strategy in coastal zones, in addition to reduce the conflict among activities of different users, maximum sustainable exploitation and balance in exploitation of these resources can be provided.

References

- Clark, J. R., Garcia, S. M., & Caddy, J. F. (1992). Integrated management of coastal zones. FAO: Rome. No. 327. pp. 93-95.
- Conacher, A. (2002). A role for geomorphology in integrated catchment management. *Geographical Research*, 40(2), 179-195.
- Kassler, P. (1973). The structural and geomorphic evolution of the Persian Gulf. In *The Persian Gulf*. Springer, Berlin, Heidelberg, pp. 11-32.
- Kesavan, P. C., & Swaminathan, M. S. (2006). Managing extreme natural disasters in coastal areas. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences*, 364(1845), 2191-2216.
- Morales-Nin, B., Moranta, J., García, C., Tugores, M. P., Grau, A. M., Riera, F., & Cerda, M. (2005). The recreational fishery off Majorca Island (western Mediterranean): some implications for coastal resource management. *ICES Journal of Marine Science*, 62(4), 727-739.
- Nouri, J., Karbassi, A. R., & Mirkia, S. (2008). Environmental management of coastal regions in the Caspian Sea. *International Journal of Environmental Science & Technology*, 5(1), 43-52.
- Pak, A., & Farajzadeh, M. (2007). Iran's integrated coastal management plan: Persian Gulf, Oman Sea, and southern Caspian Sea coastlines. *Ocean & Coastal Management*, 50(9), 754-773.

- Sarnthein, M., & Walger, E. (1973). Classification of modern marl sediments in the Persian Gulf by factor analysis. In *The Persian Gulf* (pp. 81-97). Springer, Berlin, Heidelberg.
- Sharifi, F. S., Ezam, M., & Karami Khaniki, A. (2012). Evaluating the results of Hormuz strait wave simulations using WAVEWATCH-III and MIKE21-SW. *International Journal of MARine Science and Engineering*, 2(2), 163-170.
- Thia-Eng, C. (1993). Essential elements of integrated coastal zone management. *Ocean & Coastal Management*, 21(1-3), 81-108.

Citation: Jalali, R., Ansari, M.T., Pournouri, M., Farshchi, P. (2018). Investigation of requirements and legal framework of integrated management of the Persian Gulf Coast in Iran to present ideal legal models. *Ukrainian Journal of Ecology*, 8(3), 241-247.



This work is licensed under a Creative Commons Attribution 4.0. License
