



Legal Components Shaping Sustainable Ecosystem Management in Turkey

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Abstract: Nature should be protected and used instead of being used unlimitedly; it should be utilized as an ecological value and transferred to future generations. The biodiversity, natural, cultural, historical and landscape resource values of natural areas should be protected not only for today but also for future generations to benefit from these values. In this context, natural areas, which are considered important due to their resource values, are protected by national laws and international conventions. Environmental protection laws in Turkey include various regulations in line with the principles of environmental protection and sustainable development. Environmental Law No. 2872: Enacted in 1983, this law sets out the basic principles for environmental protection and helps Turkey harmonize with international environmental standards. Law No. 5312: Contains regulations on the principles of emergency response and compensation for damages in case of pollution of the seas with oil and other harmful substances. Law No. 7261 on the Establishment of the Turkish Environment Agency and Amendments to Certain Laws: Enacted in 2020, this law provides for the establishment of the Turkish Environment Agency and amendments to certain laws related to environmental management. These laws enable Turkey to take important steps to protect the environment and achieve sustainable development goals. In this respect, the article presents some noteworthy achievements in the name of environmental protection in Turkey.

Keywords: Environment, sustainability, national laws, international laws, environmental associations

1. INTRODUCTION

Today, an awareness of protecting environmental values and natural resources and transferring them to future generations is being raised. This can be best explained by the concept of sustainability. After the industrial revolution, the irresponsible use of natural resources for the sake of economic development all over the world has caused both pollution in the physical environment and major deteriorations in the social environment (Ekinici, 2012). It has become increasingly clear that environmental degradation will continue to increase without any boundaries and that efforts should be made to prevent these deteriorations, considering that they will affect all of humanity. Considering that these environmental problems will negatively affect the lives of all of humanity, it has been felt necessary to prevent this deterioration. When the future of humanity is considered, the unacceptability of environmental degradation is obvious (Demirayak, 2002; Ekinici, and Sönmez, 2013). This situation has forced people to evaluate interrelated issues such as maintaining economic development and preventing environmental degradation on the same platform and produce results. From this point of view, the understanding of maintaining economic development and protecting environmental values has begun to emerge (Ekinici and Akkaya, 2013a, b). The concept of sustainable development, which expresses the balanced development of the environment and development, is the meeting of the basic needs of humanity, the improvement of living standards and the assurance of the future. This concept expresses the provision of the most basic environmental, economic and social needs to everyone without harming the ecological and social systems (Ekinici, and Karataş, 2012; Kahraman and Türkay, 2012). Again, sustainability is defined as “all plans and principles that include the ability of present generations to meet their own needs without endangering the ability of future generations to meet their needs and desires” (Tetik, 2012; Bahar and Kozak, 2005: 138). The concept of sustainability has become a phenomenon that has become increasingly important in the 1970s and that should be considered on a global scale, going beyond national borders (Demir and Çevirgen, 2006).

In this respect, the “Human Environment Conference” organized in Stockholm in 1972 with the help of the United Nations Development Program (UNDP), which was established within the United Nations Organization in 1965, was the first important step towards sustainable development (Kahraman and Türkay, 2012). In 1983, the United Nations Secretary General established a commission under the presidency of Geo Harlem Brundtland. The commission completed its report in 1987, in which it stated the environmental degradation on the earth and presented suggestions for sustainable development studies that would eliminate these, and submitted it to the United Nations General Assembly. In this report, also known as “Our Common Future”, sustainable development was defined as “meeting the needs of today without compromising the needs of future generations”. One of the important steps was taken in Rio in 1992, and the Rio Conference was organized with the participation of representatives from 182 countries, voluntary organizations and 11 groups from different segments of society. The concept of sustainable development was brought to the agenda at the conference, and the agenda 21 action plan was prepared to ensure international cooperation and coordination. With the emergence of Agenda 21, the principles related to sustainable development have gained importance on a global scale (Ekinçi, 2024). Local Agenda 21 covers the preparation and implementation of strategic action plans that will enable the development and implementation of a vision for the future. In 2002, the United Nations World Summit on Sustainable Development was held in Johannesburg, South Africa. The summit emphasized the socio-cultural, economic and environmental factors of sustainable development. Common promises were made regarding the elimination of poverty, the protection and management of natural resources. Among the difficulties encountered in achieving the goals, factors such as the widening gap between the rich and the poor, the deterioration of biodiversity, the negative effects of globalization and the decrease in trust in democratic systems were shown (Doğan, 2010). Areas with natural privileges such as floodplains, deltas, lagoons and important bird areas are areas that need to be protected and also promoted and known (Ekinçi, 2006, Ekinçi et al., 2007).

In Turkey, the Gediz Delta, Dilek Peninsula, and the Büyük Menderes Delta National Park are exemplary locations in this regard. Similarly, France's Tour du Valat, Germany's Müeritz National Park, and Bulgaria's Central Balkan National Park can also be cited. France's Tour du Valat is one of the most important protected areas in the world, and the Camargue region is a region in southern France close to the Mediterranean and consists of marine and freshwater ecosystems and residential areas. Germany's Mueritz National Park is especially preferred to raise awareness among schoolchildren. The Central Balkan National Park is equipped with various tools and activities for visitors and especially children to receive nature education. However, it is of great importance that these activities are synchronized with the concept of sustainable tourism. A sustainable tourism approach should be adopted as a development method in which natural, historical, and cultural resources are protected and renewed, ecological balance and biodiversity are not damaged, and they are passed on to future generations. Until recent times, the world's tourism industry has developed in the form of mass tourism for many years. As a result of these developments, irreversible damage has occurred to natural and cultural resources. Mass tourism, perceived as the sea-sand-sun trio, has become widespread rapidly and has begun to consume existing resources, creating negative effects on the ecological, social and cultural environment. These environmental and ecological degradations that the world is facing have created the need for the protection and sustainable use of these processes. The tourism industry, which is rapidly developing in the world, is dependent on natural and cultural resources. In this context, it is important to use the environment and resources without damaging them and considering the future. In this respect, the concept of sustainability is of great importance for the tourism industry. In order to ensure sustainable development in tourism, it is necessary to ensure that the natural, historical and cultural resources, basic ecological processes and biological diversity of the host region are not damaged and their continuation is ensured. The concept of sustainable tourism has emerged as a response to the negative effects that tourism has created on the host society by developing haphazardly and inappropriately (Demir and Çevirgen, 2006).

Effective and sustainable protection is only possible by introducing the values, making them understand their importance and embracing them. Properly introducing protected areas with extremely sensitive ecosystems and raising public awareness constitutes one of the most effective tools for establishing a balance between protection and use and ensuring sustainable development. One of the important tools used in the protection of natural areas is the establishment of “Protected Areas”.

However, in order for protection to be effective and to ensure sustainability, the resource values of these areas must be known in detail and promoted. Protected areas are also a point of attraction for visitors due to their resource values and landscape richness. In recent years, interest in nature has been increasing and the number of people visiting natural areas has been increasing in proportion to this. While this situation brings some negativities such as pollution and pressure on the one hand, it also creates a good opportunity for educating and raising awareness of people visiting these areas without any age, gender, etc. restrictions. Important natural areas in our country are protected with 18 different protection statuses. In fact, sometimes several protection statuses are given to a single area. Some of these protection statuses are declared according to national legislation, while others are established based on international agreements. However, there are limited opportunities to implement all these statuses and therefore the areas cannot be managed effectively. With the National Parks Law No. 2873, dated August 9, 1983, a total of 839,663 hectares of natural area corresponding to 1.07% of Turkey is protected. Within the scope of this law, protection statuses such as national park, nature conservation area, nature monument and nature park are classified.

National Parks are areas with national and international scientific and aesthetic importance; natural and cultural resource values, protection, recreation and tourism areas. Nature Conservation Areas are areas that contain rare, endangered or endangered ecosystems and species that are important in terms of scientific studies and education. The areas must be absolutely protected and their use is allowed only for scientific and educational purposes. Natural Monuments include areas with extraordinary features and scientific values created by natural events. Natural monuments must be protected within the principles of national parks. National Parks are natural areas with important vegetation and wildlife features, suitable for people to rest and have fun within the integrity of the natural landscape and are protected with this status. One of the most important tools for educating visitors and local people coming to protected areas, using and promoting the resource values without destroying them and raising public awareness is undoubtedly the visitor center, information boards, walking paths, observation towers and cabins and other supporting services including park structures. In the promotion, information and awareness-raising activities for visitors in protected areas, the planning and implementation of park structures and services undertake important functions. There are also civil society organizations that have priorities in terms of protection and aim to do so. The main ones are; Turkish Nature Conservation Society (TTKD), Natural Life Conservation Society (DHKD and WWF Turkey), Greenpeace Mediterranean Campaign Office, Hunting and 160 Wildlife Protection and Development Foundation, Turkish Environment Foundation (TCV), Environmental and Cultural Values Protection Foundation (ÇEKÜL), Turkish Erosion Combat and Afforestation Foundation (TEMA, Coastal Areas National Committee (KAY), Clean Sea Association (TURMEPA), Species Marine Research Foundation (TÜDAV), Rural Environment and Forestry Problems Association (KIRÇEV), Underwater Research Association (SAD), Mediterranean Seal Research Group (AFAG), Bird Research Association (KAD), Ecological Agriculture Organization Association (ETO), International Union of Local Authorities (UNO for Local Authorities, IULA), Aegean Natural Life Conservation Association (EgeDoğa), Nature Association, Bird Bank (Özesmi, and Maurer,2006).

2. AIM AND SCOPE

The importance and problems that ecosystem problems caused by humans have gained today have reached great dimensions. This situation requires urgent measures, especially in protected areas and natural protected areas. Again, the global climate changes and the possibility of this process extending to mass extinction have begun to attract attention in the academic world (Ekinci 2024a, b). Although a series of recommendations and social interactions have increased, it is clear that these are not enough. Protection of the environment can undoubtedly only be possible with legal regulations. In this respect, it will be revealed which legal regulations exist in Turkey, which has a very special environment that needs to be protected.

3. LEGAL FRAMEWORK SHAPING ECOSYSTEM MANAGEMENT IN TURKEY

Ecosystem management has been shaped in accordance with national legal regulations such as the Land Hunting Law, Forest Law, Aquatic Products Law, Cultural and Natural Assets Protection Law, as well as international agreements to which our country is a party, such as the Convention on Biological Diversity in Areas Requiring Protection, European Union Bird Protection Regulation, European Union Habitats and Species Protection Regulation, and the Convention on the Protection of World Cultural and Natural Heritage. The main ones of these agreements are as follows:

3.1. International Legislation

3.1.1. *Convention on Biological Diversity*

The Convention on Biological Diversity is an important multilateral environmental agreement that aims to protect and sustainably use biodiversity (Topçu, 2008). Biological diversity, which generally includes all plant, animal and microorganism species in a place, or simply biodiversity, consists of three main parts, from largest to smallest. These are ecosystem diversity, species diversity and genetic diversity. Each ecosystem has more or less differences compared to other ecosystems in terms of its climate, soil and biotic characteristics. Thus, ecosystem diversity emerges. Species diversity refers to the number of living species present in a region. Genetic diversity is the diversity within a species; it refers to the variety of hereditary information in the gene pool required for a species to adapt to changing environmental conditions.

3.1.2. *European Union Bird Protection Directive (79/409/EEC) and European Union Habitats and Species Protection Directive (92/43/EEC)*

Natura 2000 Areas, European Union Bird Protection Directive and EU Habitats and Species Protection Directive require the determination of SPAs and SACs, respectively. The totality of SPAs and SACs constitutes the international protected area network called Natura 2000. According to this regulation, each EU member state is obliged to protect areas of international importance in terms of animals, plants and habitats on its territory. With the decision of the European Court dated 1998, the IBA criteria developed by BirdLife International were accepted as the most valid method for determining SPAs. Although Turkey could not become a member of the EU, these regulations emerged as a document that needed to be harmonized with our national legislation during the integration process with the EU. The Ministry of Environment and Forestry, together with many official institutions and the contributions of non-governmental organizations, is trying to create a single legal basis for the protection of biological diversity (Pekçetinöz, 2006).

3.1.3. *Convention for the Protection of the World Cultural and Natural Heritage*

The General Conference of the United Nations Educational, Scientific and Cultural Organization, convened in Paris from 17 October to 21 November 1972, Noting that the cultural and natural heritage is increasingly threatened with extinction not only by traditional causes of decay but also by the more dangerous phenomena of decay and destruction which are aggravated by changing social and economic conditions, Considering that the deterioration or destruction of any part of the cultural and natural heritage constitutes a detrimental impoverishment of the heritage of all the nations of the world, Considering that the protection of this heritage at the national level often remains incomplete because of the vastness of the resources required for protection and the inadequacy of the economic, scientific and technical resources of the country in whose territory the cultural property is located, Recalling that the Charter of the Organization provides for the preservation, increase and dissemination of knowledge, by ensuring the preservation and protection of the world heritage and by recommending the necessary international conventions to the nations concerned, Recalling that existing international conventions, recommendations and resolutions concerning cultural and natural property are of the utmost importance for the protection of these unique and irreplaceable cultural properties, regardless of the people to whom they belong, Considering that the importance of its protection for all the peoples of the world is evident, Considering that parts of the cultural and natural heritage are of exceptional importance and therefore must be preserved as part of the world heritage of all humanity, Considering that, in the face of the enormity and seriousness of new dangers threatening cultural and natural heritage, it is the duty of the entire international community to participate in the protection of the cultural and natural heritage of outstanding universal value by providing collective assistance which will effectively complement, but not replace, the action of the State concerned, Considering that, to this end, it is necessary to adopt in the form of a convention new provisions establishing an effective system for the collective protection of the cultural and natural heritage of exceptional value on a permanent basis and in accordance with modern scientific methods, Having decided at its sixteenth session to make this question the subject of an international convention, Adopted this Convention on 16 November 1972.

Turkey became a party to the convention adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) on November 16, 1972 for the protection of the World Cultural and Natural Heritage on April 14, 1982. For the purposes of this convention, Monuments, building groups,

Sites are considered cultural heritage. Again, according to this convention, natural monuments consisting of physical and biological formations or groups of such formations that have exceptional universal value from an aesthetic or scientific point of view, geological and physiographic formations that have exceptional universal value from a scientific or conservation point of view, and strictly defined areas where animal and plant species under the threat of extinction grow, natural sites or strictly defined natural areas that have exceptional universal value from a scientific, conservation or natural beauty point of view are considered natural heritage. Monuments, building groups and other natural areas defined within the scope of this convention are accepted as cultural heritage. Areas protected under this convention are defined as World Cultural and Natural Heritage Areas. Convention on the Conservation of European Wildlife and Habitats Prepared under the leadership of the European Union (EU) member states and approved by other states wishing to become members of the EU, the parties aimed to protect wild plants and animals and their habitats with this convention. In this context, the convention includes lists of plant and animal species that must be strictly protected, protected animal species, and prohibited hunting methods. Our country became a party to this convention on January 9, 1984 with the Council of Ministers Decision dated 84/7601. Parties to the convention can declare Areas for Special Conservation Interest (ASCI) in their countries. Preliminary studies are being carried out for this status in our country and 9 areas have been defined as emerald net areas within this scope.

3.1.4. Barcelona Convention and Protocol on Specially Protected Areas in the Mediterranean

Within the framework of the Convention for the Protection of the Mediterranean Against Pollution, adopted in Barcelona on February 16, 1976, it is envisaged that marine areas and their surroundings be protected as specially protected areas in order to prevent the destruction of natural areas and cultural heritage in the region. For this purpose, Turkey ratified the Protocol on Specially Protected Areas in the Mediterranean on October 7, 1988 with the decision of the Council of Ministers numbered 88/13151. The areas determined within the framework of this protocol are defined as specially protected areas and this status was legalized in Turkey with the Decree Law No. 383 on the Establishment of the Special Environmental Protection Agency. The Specially Protected Areas specified here are areas that are integral in terms of historical, natural, cultural etc. values and have ecological importance on both the national and global scale.

3.2. Ramsar Convention

The Ramsar Convention (Convention on Wetlands of International Importance, Especially as Waterfowl Habitat) is an international convention that aims to protect and ensure the sustainable use of wetlands. The convention was named after the Convention on Wetlands of International Importance, signed on February 2, 1971 in Ramsar, Iran, with the participation of 18 countries, and the convention entered into force in 1975.

As it is known, wetlands are defined as all waters, marshes, reeds and turbidites, natural or artificial, permanent or temporary, permanent or seasonal, with stagnant or flowing waters, fresh, bitter or salty, with depths not exceeding 6 meters during the ebb and flow of the seas, and which are important as habitats for living creatures, especially waterfowl, and places that are ecologically submerged from the shoreline of these areas towards the landward side. Countries all over the world have started to become parties to the Ramsar Convention to protect their wetlands, while at the same time creating their own domestic legislation and putting it into effect. It was published in the Official Gazette dated 17.05.1994 and numbered 21937 with the decision of the Council of Ministers numbered 94/5434 on 17 May 1994. Thus, Turkey became a party to the Ramsar Convention in 1994. The purpose of the regulation is to determine the principles of protection and development of all wetlands, whether they are of international importance or not, and cooperation and coordination between institutions and organizations responsible for this issue. As can be seen, an important step was taken with the Regulation on the Protection of Wetlands, and the principles of protection and use regarding wetlands, determination and application principles of protection zones, declaration process of Ramsar Areas and the duties and working procedures of the National Wetland Commission were determined. The National Wetland Commission established with the Regulation is the first and only commission consisting of all institutions related to wetlands and nature conservation. The commission makes decisions on issues related to wetlands and gives opinions on wetland protection zones and wetland

management plans. Based on the provisions of this agreement, the National Wetlands Protection Regulation was published on January 30, 2002. This regulation aims at the protection and development of wetlands. Within the scope of the regulation, internationally protected Ramsar areas can be declared, as well as other wetland protection areas at the national level. Since this is a new legal regulation, the list of wetlands protected at the national level has not yet been determined and their classifications have not been made. However, within the scope of the general provisions of the regulation, all wetlands must be protected and used rationally. With a structure that changes the logic of natural area protection applied in Turkey, protection zones consisting of 4 different zones, namely Absolute Protection Zone, Wetland Protection Zone, Ecological Impact Zone and Buffer Zone, have been put into effect as a system that supports sustainable use instead of a prohibitive mentality, while gradually providing protection. Among the institutions and units working in the field of nature protection in our country, the only protected area borders that are put into effect by determining the borders on the land together with all interest groups are Wetland Protection Zones. Wetland Protection Zones are established with the participation of the technical team of the National Wetland Commission, the municipality where the wetland is located, the land registry office, civil society organizations and academicians from relevant universities. Between the first publication date of the regulation in 2002 and 2012, the protection zones of 41 wetlands, including the Kocasu Stream Delta, which was included in 2007, were determined and put into effect.

3.3. Water Framework Directive and Basin-Based Management

The EU's water policies have been changing for a long time. The development of EU Water Policies gained a different dimension with the "Water Framework Directive" (2000/60/EC) adopted in 2000. The directive, which is accepted as the fundamental basis of the European Union's water policy, is important in terms of determining the framework of water policies up until now, as well as containing important innovations (Tubitak, 2009).

The first wave in the development of European Water Law took place between 1975-80, and during this process, "Environmental Quality Standards" and "Emission Limit Values" were determined. In the second wave, covering the years 1980-1995, the "Urban Waste Handling Directive" and the "Nitrates Directive" dated 1991, the "Integrated Pollution Prevention Control Directive" adopted in 1996 and the "Drinking Water Directive" adopted in 1998 were important developments. The third and final wave is the period from 1995 to the present, and during this period, it was emphasized that a fundamental reconsideration of water policies was necessary. In addition, again from 1995 onwards, instead of many and scattered laws, a more holistic and comprehensive law was envisaged. In this context, preparations for the Water Framework Directive were initiated and continued from mid-1995 until 2000. The Water Framework Directive entered into force on 22 November 2000 (Çiçek, 2009). The increasing importance of water pollution has forced countries to take serious measures in this regard, which has resulted in the formation of many regulations in this field. In this context, the Water Framework Directive, which aims to achieve good water quality, was adopted by the European Union in 2000. The EU Water Framework Directive, which draws a consistent management framework on a basin basis for the protection and improvement of all water resources, envisages the participation of the public, especially the implementers, at all levels at the local level, in the sustainable water resources management principle based on river basins.

The Directive introduces a new perspective in terms of water management, based on River Basin Districts, requiring all surface waters and groundwater within defined river basin districts to achieve good water status by 2015, and explains how this will be achieved by establishing environmental and ecological targets for all water bodies. For surface waters, 'good status' is determined by 'good ecological status' and 'good chemical statuses.

Ecological status is determined by biological quality elements supported by hydro morphological, physical-chemical quality elements. The reference point is defined as pristine conditions, which have had little or no human influence. Good groundwater status means that the groundwater body is at least in good condition in terms of both quantity and quality. In addition to the requirements for good groundwater status, any significant and sustained increase in the concentration of pollutants must be identified and this trend reversed through a programmed of measures. The target of good water status for all water bodies is to be achieved within 15 years of the entry into force of the legislation in 2000.

Since its entry into force, Member States have taken the necessary steps to successfully implement the WFD. The objectives of the WFD can be summarized as follows: to maintain very good status in water bodies that are in very good status; to prevent any deterioration in the current status of the waters; and to achieve at least good status in all waters by 2015.

The directive states that these goals and objectives will be clearly stated in the river basin management plan; the river basin management plan should also include a program of measures aimed at ensuring that these goals are achieved. Good water status will be achieved by taking into account environmental, economic and social factors. The implementation of the WFD is challenging and poses many challenges within a tight program. It is important to ensure a coordinated and holistic approach to implement the program of measures to achieve these goals. This process has formed a component of the Twinning Project on Capacity Development for the Water Sector in Turkey. The Water Framework Directive establishes a framework that integrates water-related directives such as the Urban Wastewater Treatment Directive, the Hazardous Substances Directive and other sister directives, the Bathing Water Directive, the Nitrates Directive, the Habitat and Bird Directives, which aim to achieve good water status in ecological and chemical terms, and provides the general principles of integrated river basin management (MoEF, 2010). For this reason, the WFD also covers all water-related legislation such as the Directive 91/271/EEC (1991) on the Treatment of Urban Wastewater; Nitrate Directive (1991), Drinking Water Directive (1998), Integrated Pollution Prevention and Control (IPPC) Directive (1996), and Bathing Water Quality Directive (1991) that were previously published (Tübitak, 2009). For this purpose, a common implementation strategy was created by the European Commission. This common implementation strategy sets forth the scientific and technical principles regarding the method to be followed during the implementation phase of the directive. In addition, the SFD required member states to create implementation plans related to the directive by 2009. One of the important features of the SFD is that it defines the exact dates for the stages to be achieved in the implementation. The most important milestones and timetables defined by the Directive are as follows:

- Entry into force of the Directive, 2000.
- Compliance with national legislation, 2003.
- Definition of river basins and relevant authorities, 2003.
- Characterization of river basins: Pollutant sources and economic analysis, 2004.
- Establishment of monitoring networks, 2006.
- Collaboration with the public, 2006.
- Presentation of draft river basin management plans, 2008.
- Completion of river basin management plans (including measurement programmes), 2009.
- Establishment of pricing policies, 2010.
- Implementation of operational measurement programmes, 2012.
- Achievement of environmental targets, 2015.
- End of first management cycle, 2021.
- End of second management cycle, final date for achieving targets, 2027.

The most important concept in the WFD is “River Basin Management” and it is requested to create a River Basin Management Plan (RBMP) for each river basin. Candidate countries are required to fulfill the WFD requirements during the accession process. Conducting studies such as the characteristics of the river basin, the effects of human activities and the economic analysis of water use is important in terms of fulfilling the goals foreseen by these directives.

River basin management is actually an approach method that includes environmental measures to be implemented on the basis of the sub-basins of the river. Being able to list the measures requires examining and examining all the background information about the basin in detail.

In integrated basin management, it is essential to prepare river basin management plans (RBMP). Proposing any prescription, path or approach for the preparation of these plans is one of the most debated issues of our day. According to the Water Framework Directive (WFD), the elements of the RBMP are listed below (Tubitak, 2009);

- Characterization of the river basin,
- Summary of significant pressures and impacts of human activities,
- Determination and mapping of protection areas,
- Map of monitoring networks,
- List of environmental objectives,
- Economic analysis,
- Program of measures,
- Listing and summarizing detailed measures,
- Informing and consulting the public on the subject, summarizing the results of the mutual exchange of ideas and information sharing,
- List of competent authorities,
- Determination of contact points and procedures to be followed for obtaining background information and comments from the public
- Urban Wastewater Treatment Directive, (1991); (2006 in Turkey), Nitrates Directive (1991); (2004 in Turkey), Drinking Water Directive, (1998); (2005- TS 266–2005 in Turkey) Integrated Pollution Prevention and Control (IPPC) Directive (1996); Bathing Water Quality Directive (1991); (2006 in Turkey) (Tubitak, 2009).

In the meantime, the Environment Chapter negotiations were officially opened at the “Intergovernmental Participation Conference” held in Brussels on December 21, 2009. The most important and costliest among the relevant sectors is the “Water Quality Sector”. Although the institutional infrastructure has been strengthened and legal legislation has been developed in our country, especially in recent years during the EU accession process, a national “Water Framework Regulation” that can serve as an umbrella has not yet been developed. In this context, the most important closing criteria for Turkey is a legislative arrangement that will cover the WFD. The other is the transformation of Basin Protection Action Plans into River Basin Management Plans. The General Directorate of Environmental Management affiliated to the Ministry is responsible for general coordination and implementation in terms of the Water Quality Sector.

The General Directorate of Environmental Management continues its revision studies within the scope of the Environmental Law and SKKY in line with the closing criteria, and also continues its studies on the Basin Protection Regulation, which will include the WFD. In addition, the “Water Pollution Control Regulation, Communiqué on Procedures and Principles Regarding the Studies on Determining Special Provisions in Basins”, which will be the basis for the studies on this subject, was published in June 2009. (Tubitak, 2009) Subsequently, studies on determining special provisions for the sustainable management of water resources used for drinking water purposes were initiated (Ekinici, 206, 2013).

3.4. National Legislation

3.4.1. Land Hunting Law

The purpose of this law is to ensure the protection and development of game and wild animals together with their natural habitats, the control of their hunting, the regulation of hunting, the evaluation of hunting resources in a way that will be beneficial for the national economy and cooperation with relevant public and private legal entities for sustainable hunting and wildlife management.

In addition, the law covers game and wild animals and their habitats, their protection and development, game and wildlife management, the establishment, operation and management of hunting grounds, the regulation of hunting, hunting tourism, the production and trade of wild animals, the awareness raising of the society, the education of hunters, crimes and misdemeanors related to hunting and wildlife and their follow-up and penalties.

The Land Hunting Law, which was first published on May 5, 1937 with the number 3167 and updated on July 1, 2003 with the number 4915, includes two area protection statuses. Both wildlife protection areas and wildlife development areas are declared by the Ministry of Environment and Forestry in places included in the forest regime, and by the Council of Ministers in other places. The principles and procedures regarding the separation and management of these areas will be determined by a regulation to be issued by the same ministry. This regulation is in the preparation phase as of November 2003. It is thought that with the preparation of the regulation, significant progress will be made in the on-site protection of species in Turkey thanks to this status. Here, the Wildlife Protection Area covers areas where wildlife values, habitats that need to be protected, are absolutely protected together with plant and animal species and where continuity is ensured. The Wildlife Development Area includes areas where game and wild animals and wildlife are protected, developed, game animals are settled, measures are taken to improve the habitat and hunting can be done within the framework of a special hunting plan when necessary.

3.4.2. Forest Law

There are four protection statuses that contribute to the in-situ protection of nature within the scope of the Forest Law adopted in August 1956. The main purpose of these protection statuses is not the protection of nature but the sustainable use of forest resources.

Conservation Forests: These may include state forests, maquis or shrubbery covered areas located in areas exposed to hazards such as landslides and rainfall; protecting macadam roads and railways against dust and sandstorms; preventing riverbeds from filling up or whose protection is deemed necessary for national defense. State forests that have been permanently destroyed or have been subject to fire may also have the status of conservation forest until they become production forests.

Gene Conservation Forests: These are natural stands selected and managed for the purpose of preserving the genetic diversity of a species in its natural environment (in situ). Gene conservation forests aim to protect the genetic richness existing in nature and to transfer it to future generations.

Seed Stands: These are stands that are located in a specific geographical region and subject to special management and operation for seed production, where trees with superior characteristics are located in terms of desired characters under current conditions. The aim of seed stands is to obtain high quality and sourced seeds.

Forest Rest Areas: These are areas created to meet the various sports and resting needs of the society and to enable touristic movements. These are divided into three types: A, B and C. Type A is areas with high resource values and visitor potential, such as tents, caravans and bungalows, which can be used for overnight stays and can also provide daily use. Type B is areas in the close vicinity of city centers, with high visitor potential and daily use. Type C is areas with very limited resource value and visitor potential, generally created to meet local needs and providing daily picnic opportunities.

3.4.3. Fisheries Law

Aquaculture Production Areas defined under the Fisheries Law No. 1380 dated March 23, 1971, under the authority of the Ministry of Agriculture and Rural Affairs, can also be counted among the area protection statuses. Article 23 of the same law also includes issues related to the regulations regulating the places where aquatic species can be hunted, hunting methods and principles, and hunting times.

Aquaculture Production Areas mentioned here are water areas suitable for fishing, in or on which any means of fishing can be established and used. Within this framework, assuming that all coastal and inland waters of our country are fishing production areas, the places where fishing cannot be done are specified in the circular issued within the scope of the Fisheries Law. In the latest circular published in December 2002, many regulations as well as regional and location bans were defined. Within the scope of this circular, certain protection measures are being taken in relation to the areas identified as sea turtle breeding areas and also a hunting ban is being implemented for certain periods in our inland waters.

3.4.4. Law on the Protection of Cultural and Natural Assets

The Law on the Protection of Cultural and Natural Assets, which was published under the authority of the Ministry of Culture with the number 2863 on July 21, 1983 and amended with the number 3386 on June 17, 1987, includes regulations regarding protected areas. As it is known, Protected Areas are the products of various civilizations from prehistory to the present day, and are cities and city ruins that reflect the social, economic, architectural, etc. characteristics of the periods they lived in, places where important historical events took place, and areas that need to be protected with their identified natural features. Protected areas are divided into urban protected areas, archaeological protected areas, historical protected areas, and natural protected areas. Areas with extraordinary and universal value in terms of natural beauty and scientific aspects are designated as natural protected areas.

4. RESULT

Research and experience show that declaring an area as a protected area and surrounding it is not enough for effective protection. Effective protection can only be provided through legal legislation. Some informal practices can be carried out individually and socially to protect the environment. For example, reduce, reuse, recycle, save water and energy, smart shopping, correct transportation choices, use environmentally friendly products, plant trees and protect green areas, and spread environmental awareness. However, these may not always be sufficient. Therefore, legal regulations are indispensable. In this respect, Turkey has also become a party to some Transnational Agreements. These are:

- Vienna Convention (1985): This convention on the protection of the ozone layer aims to limit the use of substances that deplete the ozone layer.
- Montreal Protocol (1987): This protocol on substances that deplete the ozone layer aims to gradually reduce the production and consumption of these substances.
- United Nations Framework Convention on Climate Change (1992): Encourages global cooperation to combat climate change.
- Kyoto Protocol (1997): Aiming to reduce greenhouse gas emissions, this protocol sets binding targets for developed countries.
- Convention on Biological Diversity (1992): Develops global strategies for the conservation and sustainable use of biological diversity.
- CITES (1973): Regulates international trade in endangered wild animal and plant species.
- Ramsar Convention (1971): Aims to protect wetlands of international importance.
- Barcelona Convention (1976): Aims to protect the marine environment and coastal zone of the Mediterranean.

In our country, there are no areas under protection as “Important Sea Turtle Breeding Areas, I. and II. Protection Zones” and “Mediterranean Monk Seal Living and Breeding Areas” among the areas under protection in accordance with the “Convention on the Conservation of European Wildlife and Natural Habitats” (BERN Convention), which was published in the Official Gazette dated 20.2.1984 and numbered 18318 and entered into force. In accordance with the “Convention for the Protection of the Mediterranean Against Pollution” (Barcelona Convention), which entered into force upon publication in the Official Gazette dated 12.6.1981 and numbered 17368, there are areas designated as “Specially Protected Areas” in our country in accordance with the “Protocol for the Protection of Specially Protected Areas in the Mediterranean” published in the Official Gazette dated 23.10.1988 and numbered 19968, with respect to the areas included in the List of “100 Coastal Historical Sites of Common Importance in the Mediterranean” published by the United Nations Environment Programmed, as per the Genoa Declaration dated 13.09.1985. There are also the Coastal Areas that are the Habitat and Feeding Environment of the “Endangered Marine Species Specific to the Mediterranean” included in Article 17 of the Genoa Declaration, and the Cultural, Historical and Natural Areas that have been granted the Status of “Cultural Heritage” and “Natural Heritage” by the Ministry of Culture and Tourism, in accordance with Articles 1 and 2 of the “Convention for the Protection of the World Cultural and Natural Heritage”, published in the Official Gazette dated

14.2.1983 and numbered 17959, and entered into force. The Convention on Biological Diversity, the European Union Bird Protection Regulation, the European Union Habitats and Species Protection Regulation, and the Convention Concerning the Protection of the World Cultural and Natural Heritage are the main international agreements to which our country is a party.

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