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An analysis on the "protection-utilization balance" in Turkish forests

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Forest resources, due to their basic requirements and structure, have features that affect human life directly. Preserving the forest resources is becoming an extremely difficult task due to changing global balances and increasingly intimidating utilization of the resources. As a precaution, tools and methods for protection of forest resources are being developed on a global level and efforts for international cooperation and coordination are getting increasingly more intense. Hence the protection-utilization balance is becoming more and more important. This approach which foresees the more intelligent use of the resources, is based on the principle of providing for the continuity of the natural resources and meeting the needs of the society. One of the main tools used for preserving this balance is the legal regulation. The article is aimed to evaluate the level of this balance in the Turkish Legislation on forests and point out the key points for the establishment of the balance. Current legislation is analyzed on the main laws related to forests and a SWOT analysis is also given to evaluate the status of Turkish forestry.

Key words: Forests, legislation, natural resources-environmental protection-protection and utilization balance.

INTRODUCTION

Turkey has been going back and forth between the issues like increased level of inappropriate urban development and land utilization trends that totally disregard all applicable regulations and norms of development and the important developments experienced during the process of EU harmonization. Various fast and sudden changes made to the regulations as well as the administrative and organizational mechanisms that try to comprehend and adapt themselves these changes put a hallmark on this process. Various developments have been experienced also in the area of procedures and principles related to the usage and protection of natural resources and most of the regulations were amended or renewed completely; and attempts to fill the legal gaps were made via various new legislations passed. As a result, a collection of rules and procedures which are complex, often conflicting, causing authorization and duty overlaps, and which have changing sanctions and have no clear purpose, has emerged. Lack of a framework law related to natural resources has caused a pollution of regulations and the work carried out in this area has still not reached the agenda of the Parliament.

The goal of the study is to analyze of the legislation related to forest resources in terms of the protectionutilization balance. The status of forest inventory and a short definition of Turkish forestry are also given before this analysis. Afterwards the legislation is analyzed with protection-utilization criteria obtained from national and international data and documents. With this analysis, the approach of Turkish Law on the balance between protection and utilization is exposed and a projection is set forth for the future. At this point, another expected outcome of the study is to inspect the sufficiency on the protection of forests provided by the law.

General overview of Turkish forest and forestry

In Turkey, due to their social, economical and environmental significance, forests are accepted as common goods and kept under the care and control of the state. Forests classified according to the ownership as state forests, private forests and forests belong to public legal entity. Having the share of 99.5% of all forestlands state ownership dominates over the other two. All Forests as public domain have a special status among public properties (Onar, 1960, Cin, 1980; Akipek 1973; Düren, 1975; Doğanay, 1974, Ayanoğlu, 2000). Forests are administrated with a more protective regime than that applied to other public properties. Forests cover

Table 1. Forest area in Turkey (Anonymous, 2007).

Forest type		High fo	Coppice	- Total		
	Coniferous	Broad leaved	Coppice			
Productive	6 280 245	1 298 806	1 361 163	8 940 214	1 681 006	10 621 220
Degraded	5 123 546	532 730	843 104	6 499 380	4 068 146	10 567 526
Total	11 403 791	1 831 536	2 204 267	15 439 594	5 749 152	21 188 746

Table 2. EU country forest statistics (FAO, 2005).

Country	Forest area (1000 ha)	Land area (1000 ha)	Forest area (%)		
Austria	3.862	8.273	46.7		
Belgium	667	3.028	22.0		
Denmark	500	4.243	11.8		
Finland	22.500	30.459	73.9		
France	15.554	55.010	28.3		
Germany	11.076	34.985	31.7		
Greece	3.752	12.890	29.1		
Ireland	669	6.889	9.7		
Italy	9.979	29.411	33.9		
Netherlands	365	3.388	10.8		
Portugal	3.783	9.150	41.3		
Spain	17.915	49.944	35.9		
Sweden	27.528	41.162	66.9		
United Kingdom	2.845	24.088	11.8		
Czech Republic	2.648	7.728	34.3		
Estonia	2.284	4.239	53.9		
Cyprus	174	924	18.9		
Hungary	1.976	9.210	21.5		
Latvia	2.941	6.205	47.4		
Lithuania	2.099	6.268	33.5		
Poland	9.192	30.629	30.0		
Slovakia	1.929	4.808	40.1		
Slovenia	1.264	2.012	62.8		
Romania	6370	22987	27.7		
Malta	0.35	32	1.1		
Luxembourg	87	259	33.5		
Bulgaria	3625	11063	32.8		
Turkey	10.175	76.963	13.2		

27% of the country area and rest of surface area is meadows and pastures (27%), settlement areas (11%), waters (1%) and agricultural land (34%) (Anonymous, 2007) However, approximately half of the forest area which has a high ratio of 27% of the country area is degraded forests as given in Table 1.

As only the productive forests are taken into account in FAO studies (FAO, 2005) the forest area ratio of Turkey is accepted as 13% (Table 2) by FAO. With this 13% forest ratio, Turkey is at very low levels with regards to other EU member countries. The chapter heading of

environment has been opened as part of Turkey's EU accession negotiations at an intergovernmental conference in Brussels on December 2009. Turkey will continue to negotiations over 80 important directives and more than 270 arrangements (Tuncay 2006). The level of forest area is an important indicator for Turkey with increasing responsibilities on natural resources during the accession negotiations.

Studies are carried out and importance is given to planning activities in Turkey to protect and improve the forests. As a result of the planning activities, which are

Table 3. SWOT analysis.

Strength	Weakness					
A strong institutional structure	Topography					
Forestry Plans	Land use classification does not comply with the usage of					
The importance given to the international coordination	resources					
Rich biodiversity	Authority confusion in forest legislation					
Experiences in forestry education	Inadequate sanctions					
Qualified workforce	Impacts of political process on decision mechanism.					
Competent education at university level	Low income level on forest villages					
	Endless cadastre studies and ownership conflicts					
	Lack of harmonization to the EU acquis					
	Lack of environmental data base					
	Lack of R&D studies					
	Lack of an effective public participation procedure					
	Lack of integrated approach between natural resources					
	Lack of monitoring and controlling mechanism activities					
	Approach that accepted forest as an economic good					
Opportunities	Threats					
Establishing environmental politics	Difficulties to reach environmental information					
Presence of supportive processes in the international	The judicial procedures that may reach out cancellations					
environmental law and increasing corporation facilities	The anxiety of change in the legislation (not understood)					
Increase of the environmental consciousness in the public opinion						
Development of forest product alternatives	Resistance in the traditional forestry approach by whom					
	Inadequate participation and transparency in Forest institute					
	Rapid population growth, distorted urbanization					
	illegal earning expectation from the forests					
	3 1					

very important in natural resources management, the deficiencies of forestry, threats in the future and also the strong points of the system had been figured out. It is possible to have a brief overview of the Turkish forestry with the help of SWOT analysis¹ that is given in Table 3.

MATERIALS AND METHODS

It is not an easy task to determine the protection-utilization balance within the context of the law for environment and natural resources. This challenge stems both from the detailed and comprehensive nature of the law in question and from the ambiguity of concepts. These concepts that correspond to the concept of sustainable development as well have an important influence in terms of determining the future of natural resources. Accordingly, intelligent utilization of natural resources, protection of the global ecosystem and a balanced social development, are defined as a prerequisite for sustainable development. Here, the purpose is defined as decreasing the negative impact of utilization of natural resources as

part of economic development³, preventing the destructive utilizetion of the ecosystem with awareness about the value of ecosystem services and improving the management of the ecosystem.⁴

Forest allocation for purposes other than forestry activities

In order to carry out an analysis which is the main subject of this study and which aims to handle the natural resources legislation with regard to protection-utilization balance, the criteria of these two terms should be set. Failure to set these particular criteria will result in a study that is not any different from the action of re-emphasizing the related provisions of the legislation as has been done by experts for many times⁵. Thus, analysis of the natural resources legislation with regard to the criteria set is important for having a more solid perspective towards the issue and for determining the degree of compliance of the actual situation with the relevant legislation. In order to determine the criteria for the protection-utilization

¹ The SWOT analysis is based on data from Turkey's 9th Five Year Development Plan and other national plans with author interpretation.

² Decision No 1600/2002/EC Of The European Parliament And Of The Council of 22 July 2002 Laying Down The Sixth Community Environment Action Programme

³ Brussels, 21.12.2005com(2005) 670 Final Communication From The Commission To The Council, The European Parliament, The European Economic And Social Committee And The Committee Of The Regions thematic Strategy On The Sustainable Use Of Natural Resources{Sec(2005)1683}{Sec(2005) 1684}

⁴ Communication From The Commission To The Council, The European Parliament, The European Economic And Social Committee And The Committee Of The Regions, Thematic Strategy On The Sustainable Use Of Natural Resources, {Sec(2005) 1683}, {Sec(2005) 1684}

⁵ As per the typing rules of the declaration, inspection had a quite limited span and evaluation of the legislation could only be a summary. However, the comprehensive nature of the study is continued by covering all natural resources.

Table 4. The "protection criteria".

Provisions related to defining the natural resource	Definition
Provisions related to forming the inventories of the resource and creating the data base	Inventory
Provisions related to supporting the protection activities in the economic sense	Incentive
Provisions related to resource planning	Planning
Provisions related to public participation	Participation
Provisions related to research and education	ResEduc
Provisions related to receiving support from science and technology and setting standards	Technology
Provisions related to disclosure of organizational structure	Organization
Provisions related to inspection and monitoring	Inspection
Provisions related to sanctions	Sanction

Table 5. The "usage criteria".

Provisions related to resource utilization criteria					
Forming an inventory and related utilization rights	Inventory				
Creation of plans related to resource utilization	Planning				
Encouraging traditional utilization modes					
Provisions related to incentives, co-investment opportunities and ease of utilization provided by the state to the investor	Sectoral				
Provisions related to formation of an infrastructure	Infrastructure				
Public participation in resource utilization					
Determining the authorizations and responsibilities of the us	User				

legislation; the international treaties of which Turkey is a party (Ayanoğlu and Coşkun, 2002), the legal texts of the EU related to the issue, and existing technical reports and studies were analyzed and common issues filtered from this analysis was shaped into the criteria below by gathering these issues under certain topics (Tables 4, 5 and 6). The latter section gives the summary of the legislation and an analysis of the legislation according to criteria given below.

Forests in Turkish natural resource legislation.

Natural resources legislation has many rules indirectly related to forests as well as the direct ones. A short description of the legislation for forests would be helpful as an introduction to the subject. Regarding the norm of hierarchy, firstly the constitution should be evaluated. The Constitution dated 1982 contains provisions relating to the environmental and forest protection. In this regard, Article 56 with the heading of "Environmental Protection", states, "Everyone has the right to live in a balanced and healthy environment. Developing environment, protecting environmental health and preventing environmental contamination are the duties of the State and citizens."

This opinion is approved and completed by Article 63 which says:

"The State assures the protection of the values regarding historical, cultural and natural presence and in this respect, takes relevant supporting and encouraging measures."

Article 43 of the Constitution is titled "Utilization of shores". Accordingly, shores are under the protection and rule of the state and public benefit is given priority with regard to utilization of the

shores. According to the article 44 of the Constitution, the authority to take necessary measures for more efficient utilization, protection and development of land and for preventing erosion are given to state responsibility. Also, to this end, it covers the issue of determining the land width based on different agricultural regions and types. According to Article 45 of the Constitution; the state is obliged to prevent the misuse and destruction of arable lands, meadows and pastures. Article 166 of the Constitution gives the State, the duty to plan the efficient utilization of national resources by forming an inventory and evaluation of these resources. This provision, clearly farseeing the creation of an inventory and emphasizing the necessity of planning the utilization these resources is crucial in terms of preventing a constitutional assurance with regard to natural resources. Article 168 of the Constitution with the provisions on the detection and operation of natural resources under State's supervision regulates the utilization of these resources without rendering any damage thereupon. The Article says:

"Natural wealth and resources shall be under the command and possession of the State."

Except the general clauses on the natural resources mentioned above, the Constitution has a detailed article on forests (Günes, 2004). Article 169 of the Constitution carries the heading of "Protection and Improvement of Forests" and contains the provisions to this objective. Pursuant to article

"The State puts into effect the legal regulations for the protection and improvement of the forest and in this regard, shall take mea-sures. New forests shall be grown up instead of those destroyed byfire, and no agriculture or feeding activity may be permitted in these places. The supervision of each and every forest shall be conducted by State.... Any activity

Forest legislation protection	Def.	Inventory	Incentive	Plan	Participation	Research- education	Techn.	Corp.	Insp.	Sanc
Constitution	-	Χ	-	Χ	-	-	-	Χ	Χ	-
Civil code	-	-	-	-	-	-	-	-	-	-
Environmental law	-	-	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Forests law	Χ	X	Χ	Χ	-	Χ	-	Χ	Χ	Χ
National parks law	Χ	-	-	Χ	-	-	-	Χ	Χ	Χ
PNTAL	Χ	X	Χ	Χ	Χ	-	-	Χ	Χ	Χ
NFECC	-	-	Χ	Χ	-	Χ	-	Χ	Χ	Χ
Tourism law	-	-	-	Χ	-	-	-	Χ	Х	Χ
Mining law	-	X	Χ	-	-	-	Χ	-	-	Χ

detrimental to forests may not be allowed. Any political propaganda causing the damage of forests may not be permitted; any amnesty or any partial amnesty for the crimes of forest may not be affected. The crimes committed for the purpose of setting fire, exterminating or narrowing of forests may not be included within the coverage of amnesty or partial amnesty...."

Constitutions define guiding principles and enforce notional rules on the topics. However, the Turkish Constitution has very concrete, detailed and descriptive clauses on natural resources and specifically on forests considering these provisions that consist of protective rules about natural resources, the sensitivity of the Turkish Constitution may clearly be seen. State ownership principle that is stated in Constitution has also been supported in the Turkish Civil Code (TCC). According to article 715, forests are public good (res nullius), under the protection of the State and "not being available as private property" (Onar, 1966; Kırbaş, 1998; Ayanoğlu, 1997). In addition to this article, TCC states that "anybody, if not prohibited by law, may enter into other party's forest and pasture following custom and habits, and collect and acquire mushrooms and other small vegetal items". But in this provision, what it is dealt with is not state's forest.

Approximately 99% of the forests in Turkey are under the possession of the state. The utilization of state's forests is subject to the conditions clearly set forth in the Forest Law No.6831. Consequently, the article of TCC doesn't mean in practice. Environmental Law⁶ is another frame law to mention. The purpose of the Law is to preserve the environment, the common asset of all living creatures, in line with the notions of sustainable environment and development. While in the initial format of the Law, "appropriate utilization and protection of the natural resources" was expressed explicitly as one of the goals of the law, all natural resources were accepted as part of the environment and were not emphasized separately.

Results of forest legislation analysis

There are numerous other laws that are directly related to forests other than the general provisions on natural resources stated above. The first one to mention of these is the Forest Law⁷ dated 1956. The law that defines forests, gives classifications according to ownership and features and brings the principles of utilization had been modified numerous times. Unfortunately despite these

modifications aiming to meet the social expectations, the law is still far from meeting the necessities of today as the law that has been in power approximately for fifty years is in a structure that regulates the forest rather as an economic property and a source of wood. The law that has no article to state the aim instead gives the definition of forest in its first article.

Although settling the forest territory is an issue that occupies a wide portion of the law, forest cadastral studies started in 1937 have not been completed yet. Therefore, when the forest law is mentioned in Turkey, the first thing in mind is the thousands of suits on ownership conflicts.

National Forestation and Erosion Control Campaign Law (NFECC), is a legal arrangement that totally emphasizes protection. The purpose of the Law 8 is to set the principles and procedures related to forestation and erosion control efforts for expanding forests and increasing tree wealth, re-establishing and developing the balance between soil water and vegetation, and preserving environmental values (DPT,2007). Protecting the Cultural and Natural Assets Law⁹ (PNTAL) is another important one that contains provisions relating forestry. Law aims to determine the definitions related to movable and immovable cultural and natural assets that have to be protected and to set the establishment principles and duties of the personnel of the organization that will set the relevant principles and make decisions. The concept of SITE that mentioned in connection with its importance in terms of forestry is explained detailed in Law. Any place with designated natural capacity "..." is described as the area that should be protected as a SITE.

The forest areas having specific capacities may be considered as natural SITE areas. Consequently, the general and special Act governing forests must be applied in complementary basis. The purpose of the National Parks Law¹⁰ is to set the principles for determining the areas of national parks, nature parks, natural monuments and zones of nature protection that have national and international level in Turkey, and for preserving them while maintaining their quality and features. Though there are other laws related to forests except these four laws given in above paragraphs, this article gives only the laws that form the fundamentals of the legislation. However, as the Forest Law consists of an article about "Allocation of forests for purposes other than forestry activities" and as this article has been frequently leading to legal disputes because of changing the protection-utilization balance and destroying the forests, and this article is directly related two other Laws, for the completeness of the material these two laws have to be evaluated

⁶ Official Gazette dated 11.August 1983 no.18132 Law. No.2872

⁷ Official Gazette dated 3 September 1956 No 9402 Law no.6831

⁸ Official Gazette dated 26 July 1995 No.22355 No.4122

⁹ Official Gazette dated 23 July 1983 No. 18113 Law. No.2863

¹⁰ Official Gazette dated 11August.1983 no. 18132 Law No.2873

Table 7. Analysis of forest legislation according to "utilization criteria"

Forest legislation utilization	Definition	Inventory	Incentive	Plan	Participation	Research education	Tech.	Corp.
Constitution	Х	-	-	-	-	-	-	-
Civil code	Χ	-	-	Χ	-	-	-	-
Environmental law	-	-	Χ	-	X	X	Χ	Χ
Forest law	Χ	-	-	-	-	-	-	-
National parks law	Χ	-	Χ	-	-	-	-	-
PNTAL	Χ	Χ		-	-	Χ	-	-
NFECC	Χ	-	Χ	-	-	-	-	-
Tourism law	Χ	-	Χ	-	X	-	Χ	Χ
Mining law	-	Χ	Χ	Χ	-	X	Χ	-

Table 8. Analysis

Legislation	Date of effect	Orientation	
Constitution	1982	Protection	
Civil code	1926 (2001)	Protection	
Forest law	1956	Protection	
National parks law	1983	Protection	
PNTAL	1983	Protection	
NFECC	1983	Protection	
Environmental law	2006 (Amendment no 5491)	Protection	
Tourism law	1983(Amendments made (2003-2006-2007-2008)	Utilization	
Mining law	1985(2001-2004-2007-2009)	Utilization	

as well. The first law to be mentioned in this aspect is the Tourism Encouragement Law¹¹ and the other is the Mining Law.

The purpose of the Law for Encouraging Tourism; is to make the arrangements and take the measures to organize, develop and provide a dynamic structure to the tourism sector. As part of this goal, forest areas will be allocated for certain tourism activities outlined in the law.

The article that allocates the forests was the subject of a cancellation by the Constitutional Court with its initial format and was rearranged as a result (Coşkun, 2009). Mining Law¹² that regulate the searching and operating the mines, is seen in allocation of the forests and all the other natural resources for mining activities.

This Law transfers all the authority from the MoEF to the Cabinet. The Constitutional Court cancelled the related article of Law in 2009 with the reason that it was against the principles of environmental protection of the Constitution. Since the cancellation the gap in the law about this matter has not been filled yet.

The natural resources legislation is quite extensive as can be seen in above paragraphs. However, having numerous regulations is not enough for conformity to international principles or establishing the protection-utilization balance. In the following section an analysis of the forest legislation is given regarding the protection-utilization balance using the principles determined in the material and method section.

RESULTS

Almost half of the forest inventory of Turkey is degraded. Therefore it is also very important to establish precautions to improve the forests as well as protection. The legislation that is directly related to forests analyzed above aims the protection and improvement. The 169th article of the Constitution titled "Protection and Improvement of Forests" is the first one to mention. As can be seen in Table 7, all of the Turkish Civil Code, Forest Law, National Parks Law, Protecting the Cultural and Natural Assets Law and National Forestation and Erosion Control Campaign Law are protection oriented. However, the Tourism Law and the Mining Law have just the opposite structure. These laws aim the utilization of forests and hence increasing the national income (Table 8). The results are interesting. On one side there are laws that are only focused on protection; on the other there are laws that approach the forests only as an economical asset and aim only on the utilization. This shows us that the balance of protection-utilization, which is the main principle of the sustainability, is not established and the legislation shuttles between two extremes. No doubt that people need to utilize the natural resources. It is

¹¹ Official Gazette dated 16 March 1982 No. 17635 Law. No.2634

¹² Official Gazette dated 15 June 1985 No.18785 Law No 3213

important to mine as well as have an income from the tourism activities. However, when the necessary balance is not be established, utilization oriented rules may prevail the protection oriented rules or vice versa. It is forgotten that the sustainability of forests can only be established by having this balance.

Therefore it is necessary to have regulations establishing definite utilization principles based on scientific data, to properly operate the Environmental Impact Assessment (EIA) system, to build a system in which supervising and auditing mechanisms are operative and to have serious sanctions against unsuitable utilizations. However the SWOT analysis in Table 3 shows us that these topics are the weak points of the Turkish forestry. Therefore, without strengthening these weak points it is dangerous to have new regulations on utilization. It is a must to overcome the weaknesses first and than to have the protection-utilization balance. To achieve this it is necessary to have a harmonization between national regulations and international regulations that are based on "sustainability" and underline the "protection-utilization" balance. Turkey has been a side to many international treaties about the natural resources 13. Since the international agreements are also a part of the Turkish Legislation, this harmonization should start with the guidance of international agreements.

REFERENCES

- Akipek J (1977). Prior Right on States Forests, Ankara University, Publication of Law Faculty, Ankara. Anonymous (2007). 9Th National Development Plan, Special Forestry
- Commission Report, Ankara.

- Anonymous (2007). Action Plan of Afforestation and Erosion Control. 2008-2012. Promulgated in Official Gazette November 1, dated, no.26687.
- Ayanoğlu S (1986). Forest Property and Fundamentals of Forest Ownership from The Legal Point Of View, Phd Thesis, Istanbul.
- Ayanoğlu S (1996). State Forest Ownership and the Principal of State Forest Exploitation, Alternative Methods In The Utilization of Natural Resources And New Aspects Ankara., p. 73.
- Ayanoğlu S (1997). A Critical Approach to the Turkish Forest Regimen, XI. Dünya Ormancılık Kongresi, Bildiri Kitabı, Antalya, Türkiye.
- Ayanoğlu S, Ve Coşkun A.A (2002). Türkiye'nin Uluslar arası Çevre Sözlesmelerinden Doğan Sorumlulukları, İ.Ü. BAP Projesi. İstanbul .
- Doğanay Ü (1974). Ownership on the Forest and Forest Land, Ankara. DPT (2007). Su ve Toprak Kaynaklarının Kullanımı ve Yönetimi, 2007-
- 2013, Özel İhtisas Komisyonu Raporu, 9. Beş Yıllık Kalkınma Planı, Ankara.
- Düren A (1975). Public Property, Ankara.
- FAO (2005). Global Forest Resources Assesment, FAO Forestry Paper Rome.
- Güneş Y (2004) Conservation and Preservation Movement and Their Influences on the Environmental Legislation, İ.Ü. Yayın. Yavın. İstanbul pp. 31-36.
- Güneş Y, Ve Coşkun AA (2004). Çevre Hukuku, Kazancı Yayınevi, İstanbul.
- Kırbaş S (1998). Devlet Malları, Adım Yayıncılık, Ankara,
- Onar SS (1960). Management Law II, Publication of Istanbul University, Istanbul.
- Onar SS (1966). İdare Hukukunun Umumi Esasları 3.B. c.1,Akgün Matbaası, İstanbul.
- Tuncay U (2006). Turkey in the EU Environmental Deliberations. Turkish Research Institute of **Economics** Politics. (http://www.tepav.org.tr/tur/admin/dosyabul/upload/cEVRESUNUM2. ppt) accessed 13.12.2009

¹³ International Convention For The Protection Of Birds (1966); Convention For The Protection Of The World Cultural And Natural Heritage (1983); Convention On The Conservation Of European Wildlife And Natural Habitats (1984); Barcelona Convention For Protection Against Pollution in The Mediterranean Sea (1988); The Convention On Wetlands Of International Importance, Especially As Waterfowl Habitat (1994); The Convention On The Protection Of The Black Sea Against Pollution (1994); The Convention On International Trade in Endangered Species Of Wild Fauna And Flora (CITES) (1996); The Convention On Biological Diversity (1997); United Nations Convention To Combat Desertification(1998); The European Landscape Convention (2000), Kyoto Protocol (2009)