

T.C.
MARMARA ÜNİVERSİTESİ
AVRUPA TOPLULUĐU ENSTİTÜSÜ
AB SİYASETİ VE ULUSLARARASI İLİŐKİLER ANA BİLİM DALI

**ENVIRONMENTAL GOVERNANCE IN THE EUROPEAN UNION: A
COMPARATIVE APPROACH WITH SPECIAL REFERENCE TO TURKEY**

YÜKSEK LİSANS TEZİ

Hüma BALCI

İstanbul - 2006

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ABSTRACT

The aim of this thesis is to assess whether the European Union is an efficient regional example to the global environmental governance in which the USA is a powerful actor. It is not only an attempt to analyze the European environmental governance and policies but also an attempt to combine the socio cultural, technological, economical, and legal approaches towards environmental protection all around the world. In this thesis, the multidisciplinary analysis, especially on raising environmental awareness at the grass root level, improvement of the environmental legislation, environmental economics, and the environmental responsibilities are also discussed on a wider scale. In this point, EU initiates unique policies to control the market related failures. Consequently, the importance of the USA as powerful environmental actor is taken into consideration in terms of Transatlantic environmental relations and finally, Turkey is examined as a case study by giving importance to the environmental participation, education, and institutionalization with regard to EU Turkey accession partnership.

ÖZET

Çevre son zamanlarda ülkelerin ajandalarında ilk sıralarda yer almaya başlamıştır. Bunun temel sebebi çevre sorunsalının boyutlarının canlıların yaşamını tehdit eder hale gelmesidir. Bu durum uluslararası düzeyde çözüm arayışlarını gerektirmektedir ve çevre yönetişimi fikrini doğurmaktadır. Bu çalışma , Avrupa Birliği'nin çevre yönetişiminin küresel düzeydeki yönetişime bir örnek teşkil edip edemeyeceğini araştırmayı hedeflemektedir. Bu karşılaştırma yapılırken küresel düzeydeki girişimlere Amerika örnek alınmıştır. Bunun sebebi ekonomik ve politik gücüyle Amerika'nın etkinliğinin küresel alanda hissedilmesidir. Karşılaştırmalar yapılırken Türkiye'de Avrupa Birliği'ne üyeliğe aday bir ülke olarak bu konudaki tarihsel geçmişi tartışılarak çalışmada yer almıştır.

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LIST OF ABBREVIATIONS

ACIA: Arctic Climate Impact Assessment
ASEAN: The Association of Southeast Asian Nations
CBD: Convention on Biological Diversity
CDM: Clean Development Mechanism
CI: Conservation International
CIPP: Community Integrated Product Policy
CITES: Convention on International Trade in Endangered
CSD: Commission on Sustainable Development
ÇEVKO: Environmental Protection and Packaging Waste Recovery and Recycling Trust
ÇEVRETED: Association Environmental Technology Constructors
DG : Directorate General
EAP: Environmental Action Plan
EBA: Everything but Arms
EC: European Commission
ECOSOC: United Nations Economic and Social Council
EEC: European Economic Community
EIONET: European Environment Agency and Joined The European Information and
Observation Network
EPA: Environmental Protection Agency
EPI: Environmental Policy Integration
ET: Emissions Trading
EU: European Union
FAO: Food and Agricultural Organization
FOE: Friends of The Earth
G8: Giant Eight
GDP: Gross Domestic Product
GEF: Global Environmental Facility
GIWA: Global International Waters Assessments
GNI: Gross National Income
GNP: Gross National Product
IA: Integrated Assessment
ICT: Information and Communication Technologies
ILO: International Labour Organization
IPCC: International Policy on Climate Change
JI: Joint Implementation
MDG: Millennium Development Goals
MEA's: Multilateral Environmental Agreements
METU: Middle East Technical University
MGD: Millennium Development Goals
NAFTA: North Atlantic Free Trade Organisation
NGO: Non Governmental Organisation
OECD: Organisation For Economic Cooperation
SEA: Single European Act
TEC: Treaty on European Community
WHO: World Health Organisation

WTO: World Trade Organisation

WWF: World Wild Fund

QMV: Qualified Majority Voting

UK: United Kingdom

UN: United Nations

UNCCD:United Nations Convention to Combat Desertification

UNDP:United Nations Development Programme

UNEO:United Nations Environmental Organisation

UNEP: United Nations Environment Programme

UNFCCC: United Nations Framework Convention on Climate Change

UNESCO:United Nations Economic Social And Cultural Organisation

USA: United States of America

INTRODUCTION

At the beginning, environmental governance in the European Union evolved through the product harmonisation , but today, it is regarded as an influential global environmental actor. Comprehensive knowledge about the dynamics and factors behind the evolution of environmental governance in the EU, is needed to help local and international political actors, to respond successfully to the challenges by adapting the different ways how the Union govern its environmental issues. Newly accessing countries on the other side of the policy spend efforts to adopt a systematic approach. Environmental governance; with its supranational nature, needs more attention as it shows critical facts for international policy making.

The approach towards the analysis of governing structures in this thesis begins with the observation of existing links, and interdependencies between the emergence of traditional and new environmental perceptions. It is assumed that a concrete policy analysis can first be drawn by scrutinizing the evolution of recognition of environmental problems as well as the responses associated to the topic. The analysis therefore presents an overarching comparative framework to the study of environmental governance.

This thesis not only aim to produce a true synthesis of EU environmental governance path but also try to show the interaction between the global and European environmental policies. The scientific objective of this research aims to analyse the role of institutions and policies. Finally, cross-country comparision of policy specific issues are discussed.

The primary methodology in this thesis is mainly comparative analysis of emergence, evolution and transformation of different governing models over time, across and within industrialized societies. In order to support, the comparative studies are made between the US and the EU governance models. The argument is based on the fact that EU's Environmental Governance relies heavily on member states. By covering main pillars of EU's environmental policy, further policy reformulation is suggested to maintain the governance structure. The overall aim is to consolidate the different perceptions of environmental issues in different parts of the world (mainly EU and the US).

Chapter 1 briefly describes the initial conceptions of the defintion of environment especially through distinguishing among different means and specifications of the term. The types of environment are categorized on a more concrete definition, varying policy instruments and approaches.

The scientific perception of environment may lead to unlimited criticisms of the whole topic; however by distinguishing among physical, natural and social definitions of environment, this chapter sets the base for multi-track policy approach to environmental problems and It covers the basic technical details of environmental pollution through concrete exemplification. This chapter diversifies among the types of pollution capturing a wide range of degradational issues throughout the globe and illustrates pollution-specific examples on a wider scale. Finally, the first chapter initialized the political and social spectrum of the thesis through its engagement with environmental social movements. The primary objective in this section is to examine the social responsiveness of the communities to the different environmental problems. During this analysis, social responses are seen as a driving factor behind the political responses to environmental problems.

Chapter 2 covers analysis of the political environment with regards to environmental governance issues. As environmental politics include the relationship between global political forces and the environmental change, it also includes the role of states, multilateral institutions and agreements, trade, international finance, corporations, non-governmental organizations, science, technology, and grassroots movements. Therefore, this section brings focus on the implications of local-global interactions for sustainable environmental governance as well as the implications of environmental change for the world politics.

Comprehensive focus during the policy analysis in this chapter is on the role of the information technology, which is expected to act as a key tool for information transferring and monitoring the environmental issues.

Chapter 3 scrutinizes the aspects of the global environmental governance through the industrial development. The analysis presents global applications of certain conventional policies. It is assumed that policy intervention associates with political outcomes. Universalizations of environmental problems are also covered to reflect the spillover effects on environmental degradation.

Chapter 4 carries the core analysis to a European sphere; especially in regard with policy-based responses of the Community. It is assumed that, EU insisted on implementing unitary governance models; however, its political and economical base lacks certain tools and sanctions for newly accessing countries. This assumption is then related to the observation of how institutions, procedures, and instruments developed over time within the EU. These sections also suggest that the evolution of the environmental governance structure is not driven by rigidly defined policies and clear rules, but by trial-and-error methods based on experiences made across the whole range of EU nations.

Chapter 5 examines risk and uncertainty which are two common concepts of natural sciences. They have an important role in today's understanding of late modernity by underlying the new fashion themes like pollution.

The idea to compare risk management process in USA and EU show more openly the priorities of the two, because it is known that the risk management approaches of both countries are efficient parameters to measure the level of importance of the environmental issues and gives more prospects for future.

Chapter 6 gathers all relevant data and portrays to show where Turkey stands in this whole governance picture. Attention is drawn on the role of education for environmental protection in order to determine the level of public awareness of the problem. Then certain policy comparisons are conducted to reflect Turkey lacks several conventional tools to comply with the EU's governance structure.

Moreover, several policy consequences are discussed to reflect the adaptability of the problem within the EU governance structure. Chapter 6 also explicitly discovers the vague policy base of Turkey's environmental governance and also intends to develop several preliminary solutions during the accession process of Turkey to the European Union.

1. THE CONCEPT OF THE ENVIRONMENT AND DRIVING FACTORS BEHIND ENVIRONMENTAL PROBLEMS

The term environment has broad implications. Generally, on the one hand, environment can be explained as “a complex of surrounding circumstances, conditions, or influences in which thing is situated or developed or in which a person or organisms live modifying and determining its life or character. On the other hand, in biology, ecology and environmental science it is defined as the complex of physical, chemical and biotic factors that surround and act upon an organism or ecosystem”(Free Encyclopedia,2006).

This chapter examines the differences among perceptions on environment. Comparisons, which are presented in this chapter, summarizes the fact, that environment is a broad concept which incorporates varying institutional and scientific variables. The term environment is assumed to incorporate multiple variables than nature does. This can be related to the fact that environment is the composition of variables which join with nature. Parallel to this perception, the definition of nature is considered in different means as nature itself contains values from non-human (and non-environmental) variables.

After defining and categorizing environment through the scope of their natural, physical, and social standing, this chapter focuses on the conceptual perception of nature with its independency from the human agency.

1.1. Concept of the Environment: Brief Historical Background

Recently, environment has been an extremely critical topic on the world agenda. Since early 1990's environmental degradation; besides international terrorism, global nuclear threats, underdevelopment and related extreme poverty, has frightened the world for the future. The rise of the industrial state, rapid improvements in technology and science has led to inevitable developments, which led to continuous improvement. This continual process created a heavy burden on the environment in the long term and signaled for future environmental problems. At first, those problems were viewed as local but as the effects of degradation significantly grew, the threat became transnational. For coping with those problems, there is an urgent need to understand the vital dependence between the environment and human beings.

To be a man is to be limited and mortal. To be on earth is to live within a finite and restricted environment. Life is sustained by a thin belt of atmosphere above skin of earth crust. The life support system based on air, earth, and water is delicate, subtly intertwined, and remarkably intricate (Flok,1971:1).

Although, the survival of human beings based on air, water and soil, major renewable natural resources such as forests, fishes and range grasses are over used or sometimes may be abused by humans own activities. From 1850 “human and their livestock accounted for, but %5 of total terrestrial animal biomass (an essentially finite amount); a century later this value had reached about %10 currently it is just over %25; within ten years such displacement by humans of the terrestrial wild will have risen to % 30 or more” (Westing *et al*, 2001). As it is clearly mentioned in the above statistical datas, environmental degradation began 40 or 50 years ago and has continued till today.

Although, environmental degradation gained speed with the capitalist assumptions such as; mass production and mass consumption cycle historically, it relies on the realistic world values like war. This type of degradation called collateral degradation, which means unintentional degradation caused by armed conflict. It began with the preparation for an action and associated with supplying armed forces such as weapons and other needs. Environmental degradation can also be resulted from the use of tanks, vehicles, or with the construction of base camps. For example, from the historical essays, The Second Indochina War of 1961- 1975 gave so many damages to the forests by the self-propogating wild fire and natural biodiversity were effect(Westing *et al*, 2001).

Employment of biological, chemical and nuclear weapons also gave so many damages to the environment. In some cases, rivers that flow through more than one state provide an opportunity for the belligerent country to pollute it. Armed Conflict not only lead to environmental problems but also cause resource scarcity. It opened the way to new conflicts for example; there has been a considerable dispute between the waters of the Jordan and Litani rivers, which have crucial importance in the Middle East (Westing *et al*, 2001).

People have lived without being aware of the importance of the natural resources for so many years, what is more they have desired to dominate the nature for their own benefits and in a period of time the nature could not replenish it self where the pollution is above a certain level. It is so clear that human beings are also part of the nature and they have not the right to abuse intragenerational rights. In this respect the meaning of the environment and its components are very important for controlling the pollution.

1.2. Meaning of the Environment

It has not even been a quarter century since the concept of environment came into every day life. Environmental topics use variables from different disciplines including politics, sociology, biology and economics (Parlak, 2004). Ideas arising from these diverse disciplines not only dominate the environmental agenda but also allow scientists and policy-makers to extend their researches on the cross-disciplinary environmental issues. The basic meaning of environment explained in this thesis, with the addition of physical, chemical, biological, and cultural factors, which have a direct or indirect impact on human activity and living things on a specific time. Environment may also be considered as the platform in which organisms exist and reproduce. It includes both natural and physical variables as well as human-made surroundings through which organisms interact with each other. In this respect, main elements of the environment are listed as; “All the living things including human beings. Non-living things. All physical, chemical, biological, social, cultural factors, which effect or will effect the action of the living things” (Glossary of Environment Terms, 1986).

Environment is the entirety of mutual interaction of the living and non-living things. Humans, plants, animals, and microorganisms form the living (biotic) elements of the environment while climate, air, water and the earth form the non-living (a biotic) elements of the environment. Non-living elements effect living organisms and strengthen their action but living elements determine the location and the structure of the non-living things. When thought in terms of its physical values, the environment (physical environment) is the environment where humans live, perceive their existence and quality. Physical environment can exist within both urban and rural settlements. It can show different natural characteristics; such as mountains, deserts, forests and water resources. Depending on its structure, the physical environment may or may not act as a common property resource. It can cover the livelihood of a group of people or even a nation. According to Keleş; the physical environment, because of its formation, is divided into two categories; natural and artificial. The natural environment is the environment for which humans have not performed any constructive tasks was formed by natural means, not by human intervention. According to this explanation, human beings are considered as the part of natural the environment. The compound of natural environment is gathered under two groups; living and non-living. Humans, plants and animals as the member of this synergic group constitute the living elements of the natural environment (Keleş and Hamamcı, 2005).

Along with the distinctive definition of environment and its participants, Conelly and Smith (2002), drew attention to the fact that scientists have discussed the terms nature and environment for a long time as both terms displayed distinct perceptions. For instance, the term environment cannot stand on its own.

It should be used in combination with a given object, region or condition as it represents a collective understanding of the nature and its participants. In comparison, the nature is independent of the human agency. Nature serves not only to natural objects as they appear to us but also to principles and to organizations. There is indeed a great sense of nuance in understanding the differences between the term environment and nature as there exists a massive confusion between the two terms (Keleş and Hamamcı,2005).

For John Stuart Mill, nature implies all the power that exists in the world and everything which takes place because of this power. Additionally, the meaning of nature implies the place in which the power is felt but without the human existence in it. For example, according to Colling Wood, the term natural constitutes a system of the nature. It refers to natural objects as they appear to us and to underlying principles and organization. John Passmore is another scientist who distinguishes the term nature and environment.

For him, nature is not the same as the environment as environment implies a composition of nature and its surrounding variables, no matter they are plants or animals. In respect to this definition, the natural environment includes both natural and physical variables, which are then coupled with human-made surroundings (Connelly and Smith, 2002). In-depth definitions of nature and environment may be reviewed as the combination of different elements of all external variables and such influences result in differing consequences for life, development and ultimately the survival of organisms. According to John Urry, environment is a real entity, which indeed has observable outcomes. This is the environmental realism, which turned the notion of nature into scientifically researchable topic especially within the scope of philosophy and anthropology. As Urry, stated environment does not simply exist; it is actually invented (Connelly and Smith, 2002).

In order to tackle such misunderstandings and literary confusion of the topic, a broader definition of environment is adopted in the chapter which perceived the environment as the whole of the natural world; from ecosystem to biosphere within which human beings, plants and animals exist, reproduce and die. This definition is widely explained in the following paragraphs on the theoretical base of two significant environmental theories; ecocentrism and anthropocentrism.

The artificial environment has a basic characteristic as it is made up, formed, and constructed by humans who act as the particles of a certain society. This type of environment can be formed within rural or urban settlements. It reflects the knowledge, culture, desires, techniques, and the failures of societies in maintaining environmental quality. Artificial environment is shaped in line with the needs of the community and the socio-economic system. Humans find variables from the artificial environment in their natural norms by utilizing underground and on-ground sources according to their technical, social knowledge and cultural accumulation (Keleş and Hamamcı, 2005). The outer world in this sense includes both nature and human society. The relationship between humans and nature is clearly seen in the artificial environment. Also, historical environmental conditions represent some aspects of the artificial environment as the transformation of societal environmental conditions display some important facts about development patterns of civilization. The artificial environment is therefore considered as a key indicator in assessing how nations progress to maintain environmental qualities (Keleş and Hamamcı, 2005).

Scientists view the world from a separate set of viewpoints. Geographers see the environment as an human existence which is formed by an influencing human society. Scientists take as a whole the social, physical sciences, and focus directly on human impacts of the environment. Such an attempt has opened a new way.

Environmental sciences form a unique application of economic-based solutions and policy formulations to fight against exploitation and the trend of preservationism goes from an anthropocentric pole to an ecocentric one (Eckersley, 1992).

1.3. Driving Factors behind the Environmental Pollution

Ecological values have started to decrease very rapidly in the current times by unsustainable use of resources. The structural analysis of environmental degradation underlines the relationship between human driven pollution and environmental degradation. As Christopoulou emphasizes on;

During the 1990's, 94 million hectares of forested land were lost, an area equal to three times Italy or Egypt, resulting in the parallel loss of the ecological services that forests provide habitat for species, prevention of soil erosion, control of water runoff, among others (Christopoulou, 2003:35).

This section tries to explore the major causes and underlying mechanisms through which the degradation process takes place. Basic definitions and causal relationships are presented to give a better idea on how pollution is triggered, developed, and released.

From a societal point of view, environmental degradation occurs in clusters. These clusters gather, grow and produce massive amounts of pollution; consequently levying a heavy burden on the environment. However, from a scientific point of view, environmental degradation occurs more frequently.

Pollution narrowly described as “harmful effects on human health or amenities and spillovers from one industry to another” (Marin, 1997: 571). Since 1950’s pollution has been seen as an on going problem, which arises from wide range of economic activities. (Marin, 1997). In this chapter, historical causes and perceptions on polluting factors are briefly described and the relationship between rapid industrialization and economic growth is analyzed. In addition to the historical pattern of societal development is also observed to find out whether any social and consumer-based preferences affect the degradation levels. Some examples are also given to broaden the argumental base and to widen the environmental analysis on a greater sphere. Finally, the types of main polluting factors with specific focus on loss of bio-diversity and climatic change are described, as these issues are the notoriously well-known topics of the current environmental agenda.

By the beginning of 19th century, environmental degradation was initially recognized by several scientists. Scientists Marsh, Pinchot and Thoreau considered the problem and asserted that the industrial revolution acted as a pioneer in the degradation process.

Rapid technological developments, and series of production and consumption cycles, pushed humans to benefit more from the natural resources, which caused many environmental problems by the end of the century (Özdilek, 2004:75). Environmental pollution is one of the most fundamental ecological problems in the world. It is the most important thing, which threatens the health of all living organisms.

This crucial threat gives rise to material damage on non-living things too. In other words, environmental pollution is the damage caused by human, which destroys the natural balance of ecosystems. Human beings since its existence not only benefited from nature but also tried to dominate it. However, this domination destroyed the existing balance between nature and human society. By this way, societies started to exploit the nature due to their leading advantages. In turn, the way that human beings continued without knowing the given damage to the nature, appeared as the dangerous dimensions of the pollution today (Özdilek, 2004).

Pollution means the fouling of the environment to the extent that it becomes hazardous or potentially hazardous to human, plant or animal life; the introduction into the environment of waste materials that cannot be degraded or dispersed (Glossary of Environmental Terms, 1986:73).

Environmental problems have developed in a historical pattern. Economical, social, and political factors affected this process and speeded the concept. They occurred in a time process. What we understood from the problem is; pollution, destruction, and the change in the qualities of the members which form the environment. The damage, which is caused by the human in nature, is called as anthropogenic environmental pollution (Özdilek, 2004: 75).

Humans, with the biological way of accumulation can pay the charges of environmental pollution by their lives. The most significant examples are; On December 1952, in London almost 4000 people lost their lives due to excessive air pollution mainly caused by CO₂ release into the atmosphere and many OECD countries reported extremely increased death tolls directly related to inappropriate consumption of toxic chemicals (Keleş and Hamamcı, 2005).

Fast growing industrialism results in environmental degradation because it occurs during the mass production process. This effect strengthens with rapid increase in population and leads to even worse outcomes. In addition, urbanization is seen as the main reason for which environmental condition worsen. It creates serious future anxiousness for the environmental degradation. This worry constructs the basis for societies to look seriously on environmental problems. The main question focuses on whether it has been late or not.

Environmental pollution has arisen out of the fast technological development of the last 40-50 years. These developments forced people to make excessive use of natural resources. This consumption pattern increased significantly with the rapid population growth. The consequence was unrecoverable of air, water, and soil pollution. The intensification of hazardous agents within air has negative effects on the human's natural and artificial environment. Gases such as carbon monoxide and sulfur monoxide, which are not always present in air, are usual indicators of air pollution (Çepel, 2003).

Depending on the rate of diffusion, air pollution could be local, national, continental, or even global. It can also be separated in two different categories such as constant¹ and movable² pollutant resources or be classified into two categories as; primary³ and secondary⁴ pollutants.

¹ Pollution that is resulting from fuel burning in factories and houses is an example of constant pollutant resource. Pollution could be at different levels depending upon the amount of fuel and gas used (Keleş and Hamamcı, 2005).

² Motor vehicles constitute an example of movable resources. The engine configurations, fuel quality, and specifications are the factors, which directly affect the level of pollution (Keleş and Hamamcı, 2005).

³ Primary air pollutants are pollutants which penetrate directly into the atmosphere called antropogenic air pollution (Çepel, 2003).

⁴ Secondary air pollutants comprise of chemical agents that penetrate into the atmosphere because of photochemical and other types of reactions(Çepel, 2003).

The most remarkable example of this fact is the studies proving that air pollution causes heavier metals to accumulate in regions, which are thousands of kilometers away from the nearest human settlement such as the North Pole (Çepel, 2003).

The increase in human population during the last century also considered as one of the main causes of air pollution. The assumption is that rapid population growth leads to increase in demand for utility services. Heating, electricity and transportation in main industrial and metropolitan areas in this respect, imply excessive resource extraction from the environment (Çepel, 2003). This is the most striking example of regional and transnational air pollution as it is very well known that the speed of emigration from towns to cities and the increased population in the cities generated pollution which can not be compared to that of the past (Öktem, 2003).

Apart from the air the world's water resources are very important natural resources. It receives pollutants from many different sources. Water pollution is any substance that damages the quality of water. Toxic chemicals from agriculture, industry, and landfills are well known causes of water pollution. Sewage and fertilizers contain substances that serve as nutrients in the ecosystem. However, natural cycles can only use a small amount of these nutrients. Large amount of nutrients are pollutants. Heavy metals such as lead, copper, silver, and mercury are common water pollutants (Öktem, 2003).

When living things consume compounds that contain these metals, aquatic resources become toxicant and poison the environment leading to species. Water pollutants are dangerous even in such low concentrations. Pollutants in low concentration in the water may be found in greater concentration in the organisms that live in the water. Acid rain for example has destroyed aquatic life in lakes, ponds, and seas. Plastic wastes (polypropylenes) kill thousands of ocean species every year. Hazardous wastes endanger both fresh water and marine ecosystems. Other water pollutants include sewage, farm and lawn chemicals, and oil. Pollutants from toilets, sinks, showers, washing machines and dishwashers form sewage including human wastes, scrap food and used water too. Oil is also important source of water pollutant as it leaks and spills during the drilling or shipping process causing is recoverable pollution to the oceans and the seas (Öktem, 2003).

Soil is also very important for human survival. It is the basic substance for plants and animals. It is a complete ecosystem by itself and it is a non-renewable resource. From a biological point of view, it is the most important natural fact. In this respect, soil pollution is another problem that societies face today. It has a variety of derivatives; for example; acid deposits, excessive use of fertilizers, dumping of materials, pesticides to the storage disposal of domestic and industrial waste and nuclear contamination.

Contamination of radioactive residuals is another driving factor behind soil pollution. Throughout the world, all soils contain radioactive substances. Radionuclide in the soil can lead to the radiation. This factor became a rigidly defined concern by the end of 1950's. Scientists realized this actual affect in qualitative terms during the weapon trials of the 1940's and 1950's. Since then, the Euratom Treaty of the EU required member states to facilitate necessary control and enforcement mechanisms in their own regions to carry out continuous monitoring of radiation levels in the air, water and soil. This was set as a common compliance criterion for the European Community Basic Safe Standards (Çepel, 2003).

1.4. Role of the Environmentalism and the Social Movements

Environmental social movements are very important to show the awareness of society about the hot topics of the world agenda. Sometimes they have also a crucial role to draw the attention of the politicians or stop the harmful activities of the companies.

Social movements nurture heroes and clowns, fanatics and fools. They function to move people beyond their mundane selves to act of bravery, savagery, and selfless charity. Animated by the injustices, sufferings, and anxieties they see around them, men and women in social movements reach beyond the customary resources of the social order to launch their own crusade against the evils of society. In so doing they reach beyond themselves and become new men and women (Cohen and Rai: 2000:3).

Social participation to fight against environmental degradation reflects seen as a social and political puzzle. The analysis of social movements in the environmental issues aim to discover the progress wise applications and developments in recent environmental history. Environmentalism make a balance between economic, social and political values. Therefore organised movements are expected to motivate by the economic, social and political variables. Generally, the new social movements are umbrella term also cover the environmental issues too. They desire to alter the earlier agendas for social change and political engagement, emerged in 1970s “social movements is the one expression that can hold these diverse phenomena together”(Rootes,1999: 1).

Rai and Cohen , using the model developed by Aberle and Wilson mentioned the four main kinds of social movements. Transformative⁵, reformative⁶, redemptive⁷ and finally alternative⁸ movements. Their total aim is to draw the attention of masses for the desired values. This four-fold typology is inadequate in reducing the diverse elements in social movements which developed in time.

⁵ “Transformative social movements seek to total change of social structure are often related to the political left and fundamentalist religious movement” (Cohen and Rai, 2000).

⁶ “ Reformative social movements, dwell on partial change. It is essentially described as a contributor to offset current injustices and inequalities. These movements focus on one vital issue; take position of women or the possession of nuclear arms”(Cohen and Rai, 2000).

⁷ “Redemptive social movements which stress upon the individual whose problems are detached from their social context . Their target is personality change and personal betterment” (Cohen and Rai, 2000).

⁸“ Alternative movements which reject materialism and seek to develop the unconventional life-styles. The adherents to such movements search to develop viable, sustainable alternative lives. The main issue of such movements are conserving of energy and scarce resources and more in touch with spritual values” (Cohen and Rai, 2000).

If we consider that the social movements evolve and mutate, even though we have to accept a radical break starting in 1970s, between the old and new social movements. This radical break happens when the new themes are expressed by New Left such as participatory democracy, community, collective consumption, restoration of nature carried forward into the modern ecology, feminist, peace and urban protest movements. Since 1970s a number of important social movements have rapidly moved away from the national, local, scale of opposition and confrontation. These social movements have been described as global or transnational (Cohen and Rai, 2000: 4-7).

For example, the *Silent Spring* by Carlson 1962 underlines the sensitiveness of earth. The publication of *Living on a Lifeboat* (Hardin, 1974) which also emphasises on the environmentalism, shows the limited capacity of world and rapidly diminishing natural resources (Cairns, 2005). These publications also serve the mobilization of people, societies for environmental issues in the global and transnational arena.

According to Jackie Smith's, for accepting a social movement as global or transnational, it should possess conscious efforts to build transnational corporation around shared goals and should include social change. Moreover some other factors can be added to Smith's ideas. Policies being made by political units within the nation state are not sufficient to response global problems (Cohen and Rai, 2000 : 8).

In order to express the inadequacy of the nation-state, the emphasis is made on the non-state actors such as supranational organizations like EU, international organizations and consumer groups (Baylis and Smith, 2000).

As Matthias Finger mentioned, the conventional idea that NGO participation is a political response to the lack of previous individual participation. It is engaged with the idea that states are unable to provide for their citizens to create a global civil society but many see NGO responses as a positive step to the ineffectiveness of states and they view social movements as forces to politicize activity to help national political systems adapt, evolve and learn (Desombre, 2002: 74). Although NGOs are important actors in social movements, in the environmental issues, the existing NGOs are imperfect effects to the global environmental movement. As Young remarks “they are as young organisations in a new institutional environment, adhocracies” (Rootes, 1999 : 7). Also by development of communication technologies and travel opportunities social movements could be able to organized on a global scale. The rise of the activity of transnational corporations can be considered as another factor that led the political activity to adopt a larger terrain in order to oppose and contest their plans against transnational corporations.

Global social movements appeared not only in the field of labour, peace, human rights and women's movements but also in another vital area; environment. Global warming, chemical wastes, nuclear armament caused environmental movements to make transnational coordination (Cohen and Rai, 2000: 8).

Environmental NGOs specifically have increased in number and have begun to focus more directly on international elements of the environment. The first domestic environmental NGOs were created at the end of the 19th century in the USA and Britain. Although these organizations began communicating across state borders early in their existence it was not really until the second half of the twentieth century that environmental issues were perceived as international scope...(Desombre, 2002:73).

The more global environmental problems appeared, the more inadequacy of the state increased. As a result, the adequacy and authority of the state, the reality and utility of sovereignty as a fundamental international norm are weakened.

..Transnational environmental problems pose real problems for established notions about the nature and limits of state sovereignty. Moreover international environmental problems are rarely caused by deliberate acts of national policy, but are rather unintended side-effects of broader socio-economic processes.

...While the rise of environmental problems has brought state power and sovereignty into question, the responses to these problems may often extend and strengthen aspects of state authority and involvement in society. (Greene, 2001: 320).

Notwithstanding state's functions were called into the question this does not mean that NGOs are replacing the state but they are modifying the character of sovereignty (Steans and Pettiford, 2004: 214).

This is not to suggest that NGOs are superseding states, even it might be argued that they are increasingly performing functions traditionally associated with the state. They may create inducements and penalties to reward and punish deviant or positive social practice, but they can not command or compel firms to adopt certain practices. That remains the role of the state. Nevertheless, investigating the role of the environmental movement in the global economy contributes to a less state centered understanding of the importance of NGOs in global affairs (Newell, 2000: 118).

Withdrawal of the state from practising certain regulatory functions with regard to multi-national enterprises, particularly in relation to the environment causes NGOs adopt non traditional means, to impose accountability upon TNCs, by making alliances with consumers, institutional investors and companies themselves (Newell, 2000:117)

It is important to examine how environmentalist organizations work to achieve their goals within global environmental policy. It can be said that they fulfill functions either within the state process or outside of it. Recent NGO activity by environmental organizations challenge the traditional view of how non-state actors influence policy. The traditional view of how non-state actors influence environmental politics begins with raising awareness of an environmental problems and trying to do something to adress them. The organizations adopting the traditional view, work within the legislative process inside states, either by working to elect candidates who are likely to support environmental causes or lobbying the legislature to pass environmental laws. They can also work to put pressure on a state to adopt policies domestically that will adress international environmental problems and they can put pressure on state actors to take certain positions during international environmental negotiations (DeSombre, 2002 :76). They can also find opportunity to speak in the meetings when recognized by the chair and to interact with delegates in the hallways and coffe breaks.

In some contexts environmental activists have taken this approach one step further, by essentially representing states in international fora. One example of this is in the International Whaling Commission, where non-governmental organizations have brought a number of states into the agreement by taking over the tasks required by a state in an international organization (DeSombre, 2002: 76).

Non-governmental organizations may act in a way not participating in but subverting the state system. The organization Greenpeace which was established in the UK in 1977 taking direct action to shock the public by heroic audacity of its activities is the best example employing this tactic (Connelly and Smith, 2002: 97). Friends Of the Earth (FOE) which was established in UK in 1971 is another popular organization like Greenpeace. FOE has not simply lobbied government but has taken direct action against industry and over the past three decades the level of commitment and technical expertise of FOE has gained the respect not only on the general public but also on the certain sections of the political establishments. Greenpeace has gained over almost two decades a certain success and has become an international multi-million-dollar organization with a bureaucracy to match (Connelly and Smith, 2002 :96-98). There are other ways that non-state actors can work to change individual behaviour without working in a state regulatory structure.

Organizations such as Conservation International (CI) and World Wide Fund For Nature (WWF) can be considered as good examples of this principle. CI which was founded in 1987 is a nonprofit organization, that seeks to protect Earth's biodiversity, wilderness areas, as well as important marine regions, around the globe. One of the CI's action was to buy tracts of land that they preserve rather than wait for state or international agreements to provide protection. WWF, which was officially founded on 11 September 1961 is one of the world's largest and the most experienced organizations. In addition to funding and managing countless conservation projects throughout the world, WWF continues to lobby governments and policy-makers, conduct research, influence education systems, and work with business and industry to address the global threats to the planet by seeking long-term solutions (WWF, 2006).

For example, WWF work with local people in environmentally sensitive areas to create a situation where they can protect their own local environment, whether required to by law or not. It is assumed that NGOs have at least some effect on activity relating to the global environment but how effective are they in achieving their goals is still being questioned. They play a beneficial function in particular environmental issue areas but certainly there are conditions under which they are less likely to influence action on issues with which they are concerned (DeSombre, 2002: 79).

As mentioned before the participations and roles of NGOs in international conferences and agreements have been steadily increasing but how much they are able to effect the decision making and implementation progress, is still in question.

In conclusion, environmental problems can occur in the air, water and the soil. They have so many effects which can spread all over the world. Although the states are regarded as ineffective and limited in global environmental issues, even non-governmental organizations increasingly have changed the political agenda (Newell, 2000: 133).

NGOs do not necessarily replace states but become another way through which powerful states exert pressure. This view is maybe pessimistic of the ability of environmental organizations to have an influence on international environmental politics but it suggests that while organizations challenge the states in some aspects states also effect these movements. It is essential to remember that the role the states play, acting in concern with NGOs is as important as the role that NGOs play acting within states (DeSombre, 2002 : 81).

It has been pointed out that environmental social movements have at best met with success but they can indeed be more effective. Despite growing numbers of members in environmental organizations and despite the increasing success of many of these organizations, the natural environment still continues to sustain a significant damage. There is an ongoing debate about the effect of environmental social movements, whether these movements have been successful in particularly developed countries such as Western Europe, United States and Canada. Although there is no certain consensus, it is accepted that these movements have been successful in some fronts such as changing attitudes of citizens on such issues as concern for natural resources and the loss of ecosystems used for inexpensive recreation. They can be considered in failure at other things such as changing citizen behaviours in terms of lifestyle modification or devoting time to the movement (Burns and LeMoyne, 2001: 26).

Environmental social movements would give importance to the discussion of green issues in greater detail; organizations drawing on the cultural symbols of the target populations are more successful than those emphasizing abstract ideologies. In general, movements in which people oppose one another about details, but take the goals themselves (e.g. the planet should be a liveable place) are more successful (Burns and LeMoyne, 2001: 34).

Experiences tell us that all of the society's problems will not be solved simultaneously and given this pragmatic reality entertaining an utopic vision is ineffective and even destructive. Many social movements such as The Women's Movement, have made large gains through the polity; environmental social movements should learn a lot from them and implement successful strategies (Burns and LeMoyne, 2001: 35).

Briefly following expressions constitute the basis of this chapter are developed under the light of this explanation. "Environmental governance requires governments to transform themselves by changing both the way they make policy decisions and the instruments they use to implement those policies". (Carter, 2002: 226). This definition requires individual level of organisation –civil society-, NGO's admission and the changes in government. The meaning of environment is important to understand what should be protected, from whom and by stressing on the types of pollution it can clearly seen the limits of damages which have given to the nature for a long time. Pollution's limits are attractive for both NGO's and governments. Environmental social movements that have began as a response to the environmental degradation need individual level of organisation to demonstrate governments the importance of the issue.

2. THE ENVIRONMENT AND POLITICS

In the 20th century, ethical and political debates about the environment were reflected in wider social and political movements. Issues on environmental politics have developed rapidly and gained more importance among states. In this chapter, the green thought and its influence on politics and some of the regulations made about environment is considered.

2.1 Perception of Environmental Politics

Before starting to analyze environmental politics, it is necessary to stress on one main distinction in the perspective of environmentalism: Shallow Environmentalism and Deep Environmentalism. Shallow Environmentalism is a term describing the view that environmental problems can be solved within the current systems of social, political, and economic organization. In contrast, Deep Environmentalism generally known as Deep Ecology, Ecologism or a Deep Green Perspective accepts that the ecological problem is inherent in current patterns of production and consumption and main solution to save the future of humanity is to change social, political and economic structures radically (Steans and Pettiford, 2004: 219).

One of the main green perspectives namely Green Radicalism can be divided into two categories: Green Romanticism and Green Rationalism. The key difference between these two categories is rooted in different reactions to the Enlightenment. Green romanticism, just like the romantics of the 18th and 19th centuries rejects core Enlightenment principles. They seek to change and save the world by changing the way individuals approach the world.

In contrast, Green Rationalism embraces the key aspects of Enlightenment. They agree with the idea of romantics that modern science and technology can cause the destruction of nature, along with profound human costs. However, Enlightenment meant equality, rights, and open dialogue. Green Rationalists build their ideas upon this more attractive side of modernity (Dryzek, 1997: 153-154).

2.1.1. Green Romanticism

In order to understand Green Thought better, Green Romanticism and Rationalism should be analyzed in a more detailed way. As Dryzek notes (1997: 155), Green Romantics do not concern themselves with policies and institutions. Instead, they try to develop different kinds of subjectivity or ways that individuals can experience the world. For them politics is an arena in which different kinds of experiences can be developed. Green romantics believe that the route to change the world lies through individuals.

Deep Ecology and Cultural Ecofeminism are main branches of Green Romanticism. Deep ecology movement, which was born in Scandinavia, endorses biosphere egalitarianism, the view that all living things are alike in having value in their own right, independent of their usefulness to human purposes. Deep ecologists value species, populations, and ecosystems, not just individual creatures. Deep ecologists are quite clear about wilderness. Their aim is to preserve and protect it. They have less to say about other environmental issues such as air pollution and water pollution in urban areas (Palmer *et al*, 2002).

Ecofeminism began in France in 1972 with the formation of Ecologie-Féminisme spread all over the USA in the 1980s. Cultural ecofeminists seek radical changes in ecological consciousness. According to ecofeminists, anthropocentrism (human domination of nature) is not the root of all environmental problems whereas androcentrism (male domination of everything) is the root of problems (Dryzek, 1997: 158). In addition, ecofeminists argue that there are connections between the domination and oppression of women and nature. Ecofeminist analyses of the twin dominations of women and nature include considerations of the domination of people of color, children, and the underclass (Connelly and Smith, 2002: 62). Ecofeminism differs from deep ecology in its sympathy with the animal liberation movement.

Another point of difference is about population control. While Deep Ecologists see a reduction in human population as essential, ecofeminists believe that kind of reduction is probably to be accomplished by repression and control of women's fertility by the male power. Although they are different at these points, they think alike in the cultivation of radically different human sensibilities, involving a non-instrumental and non-dominating relationship to nature.

When it comes to the question whether Green Romanticism can save the world, we can say that Green Romantics certainly believe the world needs to be saved and try helping to save it. One of the main problems in practice is convincing larger number of people to change the way they experience the world.

In addition, to convince people to educate everyone how to think and to act ecologically defensible fashion is necessary. However, the good intensions and sensibilities of the Green Romantics are not sufficient as secure guides to action.

For instance, it was believed that the best way to protect ecosystems in the forests of the American West's was to suppress fires but then ecologists realized that these ecosystems need periodic burning for their renewal. The main insufficiency of Green Romantics is that they have no theory of transition from disequilibrium to harmony with nature. They lack some kind of political problem and action at the collective level (Dryzek, 1997: 169-171).

2.1.2 Green Rationalism

In contrast to Green Romanticism, Green Rationalism can be defined in terms of its selective and ecologically guided radicalization of Enlightenment values. Rationalists, contrary to Green Romantics, support joining individuals in to markets, bureaucracies, cooperatives, and democracies. In that sense, Green Rationalists give importance to the social dimensions of ecological issues that Romantics ignore. The main parts of Green Rationalism are European Greens, Social Ecology, Environmental Justice, Left Greens and Social Ecofeminism. The Green movement as an electoral force in Europe is not too old. In 1960s, the first ecological and alternative political groups emerged. Most European Green parties were created after a decade or more lately. The very first ecology party in Europe emerged in Britain in 1973, while in Belgium. It was formed in 1980. The German Green Party (Die Grünen) was not the world's first ecological party but it has been regarded as the mother of all Green parties, for reasons related to its size and success as a movement and a party (Cossola et al, 2004).

European Green Politics, in the first half of the 20th century was located on the fascist right rather than the progressive left. The German Greens was than divided into two main factions: The Realos and The Fundis.

While the Realos wanted to change the world through parliamentary politics, the Fundis believe that Greens were a social movement rather than a political party, so their main task was to confront the political system. In that sense, Realos were Rationalists and the Fundis were romantics (Dryzek, 1997: 174).

In the 21 century, European Green Party represents European Greens. The program of the European Greens state on typical green topics such as nuclear energy, consumer safety and women's liberation. The European Green Party includes 33 Green Parties in 30 European countries (Cossola et al, 2004).

Social ecology is associated with eco-anarchist Murray Bookchin. Social ecology emphasizes the social dimensions missing in the Green Romanticism. According to Bookchin, the root of all-evil is hierarchy. Social ecology carries deeply about injustice within human society and it concerns with the analysis of the institutions that perpetuate injustice, especially hierarchy and competition in modern state structures and capitalism. The anarchist solution of Bookchin, self-sufficient existing in harmony with their neighbors may be utopian but it rests in political economic analysis and proposes a political economic strategy in contrast to romanticism (Dryzek, 1997: 176).

One of the other branches of Green Rationalism is the environmental justice movement in the United States, which can be dated back to 1978. This movement concerns with the effects of environmental risks generated by industrial society on the poor and the ethnic minorities.

The distinctive character of the movement is the network in which the local groups relate to each other without any leadership or bureaucracy. The movement uses tactics such as demonstrations, blockades, sit-ins and boycotts (Dryzek, 1997). The environmental justice has adopted the egalitarian ideas of modernity but it also has a post-modern politics of identity character in which groups with very different social characteristic come together. The weak ecological dimension of the justice movement is that there is little appreciation of the role played by complex ecosystems in sustaining life on earth (Dryzek, 1997: 178-179).

In the early years of emerge of environmental movements Marxist denounced environmentalism as bourgeois and concerned with life's pleasures. With the failure of capitalism's own dynamics to result in socialist revolution as Marxists expected, they now look to ecological crisis as an indicator of a general crisis of capitalism. Those who support the idea are called Eco-Marxist. Eco-Marxists see ecological issues as result of the contradictions of capitalism.

They believe that the real explanation for ecological crisis revolves around material economic factors and they criticize Green Thinking as a condemnation of modernity (Dryzek, 1997: 182). The green rationalism conceives of humans cooperating interdependent of nature. In addition, it uses biological and organic metaphors, though they tend to appeal to reason and the potential rationality of social structures and institutions rather than passion and intuition (Justin, 2005)⁹.

Green rationalism is a crucial social movement, which tries to change institutions, practices, and policies through the discourse and extends beyond the movement. However, its main importance is that it has permeated political-economical life more generally. Green rationalism has less success in achieving broad cultural acceptance of its core values relating to the grass roots of democracy and structural change (Dryzek, 1997: 188-190).

2.1.3. Environmental Degradation and The Global Environmental Politics

Up to now, it is tried to explain the reflection of environmental problems on thinking, henceforth it is tried to stress upon the raise of environmental threats and the historical background of implementations.

⁹ Taken from Johson Justin's notes from the discourses at Stalof College on 13 September 2005.

In the end of the 20th century, it is clear that human activity changed the environment. Environmental degradation is now taken as evidence of a globalized world linked to economic practices of globalization, industrialization, extensive and excessive resource using, energy inefficient life styles within and across the state borders. Since the 1950s world industrial production has risen, energy production has increased by a factor of 4.5 from 1950 to 1985, world oil production increased by a factor of almost six from 1950 to 1992 (Elliott, 1998: 1-2).

Fertilizing and using world water have been increased too. Atmospheric concentrations of carbon dioxide emissions have been increased exponentially since the Industrial Revolution. One third of the world's land surface is now threatened by desertification. The pollution of rivers diminishes people's access to drinking water and kills fish on which local people rely for food (Elliott, 1998: 1-2). These kind of contemporary environmental insecurities invoke the imperatives of global governance in the face of a state in the limits of a crisis of capacity and legitimacy.

The insinuation of such concerns on to the agenda of world politics has arisen variously as a response to environmental accidents and disasters, to increases in scientific knowledge, to activism and lobbying by nongovernmental organizations and grass roots movements, and to heightened public consciousness (Elliott, 2002: 109).

There are two reasons for such kind of a concern. First, scientific evidence proposes that ecological damage is occurring at a rate faster than it has ever done and the reason of it is the human activity.

Second environmental changes have potential for severe and irreversible impacts on the ecosystem and social and economic development of people and states. International political responses to the globalized environmental challenge are informed by neo-liberal values. By the end of the Cold War, environmental concerns were evident on the international agenda as common and global problems (Elliott, 2002: 109-110).

2.2 Ethics of Environmental Politics

The nature has been the focus of philosophy in the nineteenth and the twentieth century, but contemporary environmental ethics only emerged as an academic discipline in the 1970s .Green politics which emerged in connection with environmental ethics rests on two fundamental insights: a recognition of the finite nature of the planet's physical resources, that means limits to growth and an attention to the ethical dimension of human's relations with the non-human world (Connely and Smith, 2002: 2).

The significance of limits to growth can be understood by reflecting on two short variables : The first one is the Hardin's theory of The Tragedy of Commons;

Hardin proposed a particularly influential model to explain why communities may over- exploit shared environmental resources even where they know that they are doing so and are aware that it is against their long-term interests. This is known as the tragedy of the commons...

It illuminates away in which environmental problems may be generated and indicates some potential responses. It also helps to introduce some of the particular challenges of international environmental problems...

The notion shows how it is possible that rational individual actions can lead to irrational collective practises resulting in catastrophic over-exploitation of common resources (Greene: 2001: 321).

In the 1970's researchers proved that environmental factors would soon place restrictions on growth by using computer modelling techniques. According to them exponential economic growth and population growth have produced a set of interrelated crises at the world was rapidly running out of resources to feed people or provide raw material for industry (Steans and Pettiford, 2004: 209).

In 1972 the report, *The Limits To Growth*, published by the Club of Rome, a group of prominent scientists, educators, economists, humanists, industrialists national and international civil servants, brought out these conclusions:

- 1 - If the present growth trends in world population, industrialization, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next hundred years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity.
- 2- It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future. The state of equilibrium could be designed so that the basic needs of each person on earth are satisfied and each person has an equal opportunity to realize his individual potential.
- 3- If the world's people decide to strive for the second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances success (Connely and Smith, 2002: 50-51).

As a result of this report it is understood that any deliberate attempt to reach a rational and enduring state of equilibrium, rather than by chance or catastrophe, should be founded on a basic change of values and goals at individual, national and global levels.

The call for a basic change of values related to the environment (a call of instrumental or intrinsic values) need for the development of environmental ethics as a new sub-discipline of philosophy (Palmer *et al*, 2002).

The assumptions of the tragedy of commons and limits to growth are complimented by the second fundamental insight of environmental thought: The ethical dimension. By raising questions about duties to plants and inanimate objects, environmental ethics presents a challenge to traditional ethics.

If environmental goods are considered as resources for human use, crucial ethical, and moral issues arise. As a result, questions of social justice come to the fore. For instance, responses to the present uneven distribution of environmental resources and possibilities for redistribution of ecological wealth necessitate to think of future generations. We should think that overuse and over-exploitation of resources can lead to irreversible damage. So we have to consider questions of intra and intergenerational justice remembering the capacity of ecological systems (Connely and Smith, 2002: 4-17).

Before trying to make a definition of intergenerational justice we should first decide whether to use the concept of justice in a broad or narrow sense. Because, the questions about intergenerational justice are generally the issues of justice in the narrow sense. The concept of justice can not be understood within the context of relations between human beings. The relations between the humans and non-human beings are also important. With this point of view justice or injustice can be conceived by observing the relations among creatures who are regarded as moral equals.

The understanding of the notion of justice in that manner falls within the scope of justice in a broader sense. If we accept the conception of justice in a narrow sense, which focuses on conflicts of interest, we can say that questions about intergenerational justice mean questions about intergenerational distributive justice.

When approaching the question of the demands of intergenerational justice, the starting point is fundamental equality of the human beings (Barry, 1999: 94-96).

As Barry denotes, there are four principles of the premise of fundamental equality: equal rights, responsibility, vital interests and mutual advantage. The principle of equal rights applies to the contemporaries. However the present generation may be able to affect the future generations and can let them own the same equal rights. Vital interests are requirements for human beings to be able to live healthy lives, raise families, work at full capacity and take a part in social and political life. The mutual advantage will be compatible with justice to make the change, when the implementation of the principles above are realised (Barry, 1999: 97-99).

Environmental ethicists, often draw their theoretical resources from traditional ethical systems and theories. Two basic moral and theoretical concepts are important in that sense: (1) intrinsically valuable, good or bad (2) an action right or wrong. Consequentialist ethical theories consider intrinsic value/disvalue or goodness/badness to be more fundamental moral notions than rightness/ wrongness and accept that whether an action is right or wrong must be determined according to its consequences (Palmer *et al*, 2002).

For example, utilitarianism which is a paradigm case of consequentialism, judge actions by their consequences not their intrinsic rightness. According to utilitarianism, desirable consequences include pleasure, happiness, well-being or satisfaction of preferences. The moral goal of this understanding is maximisation of welfare in a society as Jeremy Bentham phrased “the greatest happiness of greatest number”. (Connely and Smith, 2002: 19).

This thought have argued that all beings (including non-human ones) affected by an action that should be taken into consideration in assessing the action. For the utilitarian, non-sentient objects – beings who are capable of experiencing pleasure or pain- in the environment such as plant species, rivers, mountains and landscapes, which are objects of moral concern for environmentalists, are of no intrinsic but at most instrumental value to the satisfaction of sentient beings.

Furthermore, because right actions, for the utilitarian, are those that maximize the overall balance of interest satisfaction over frustration, practices such as whale-hunting and the killing of an elephant for ivory, which cause suffering to nonhuman animals, might turn out to be right after all: such practices might produce considerable amounts of interest-satisfaction for human beings, which, on the utilitarian calculation, outweigh the nonhuman interest-frustration involved.(Palmer et al, 2002).

As a consequence of the considerations argued above, it is not obvious to what extent a utilitarian ethic can also be an environmental ethic. While utilitarianism has a place in moral reasoning, it is not assumed to be a fully satisfactory answer to environmental concerns.

And also, it can not adapt itself to moral insights such as the value of life, the value of ecological systems and the existence of the species (Connely and Smith, 2002: 22).

Deontological theories, in contrast provide that whether an action is right or wrong for the most part of whether its consequences are good or bad. From this perspective, there are many distinct moral rules or duties such as, not to kill or harm innocent, to respect the right of others . and an action is right or wrong in itself regardless of its consequences. For instance, animal rights advocates argue that animals with inherent value, have the moral right to respectful treatment, and this generates a moral duty on our part not to treat them. From this point of view, practices such as sport or commercial hunting or experimentation on animals, violate the moral right of them. These kind of practices, are intrinsically wrong regardless of whether their consequences. Paul Taylor's view, which is called biocentrism, is a deontological example. He argues that individual living thing in nature whether it is an animal, or a plant, or a micro-organism having a well-being of its own which can be enhanced or damaged. Besides, Taylor maintains that the intrinsic value of wild living things generates a prima facie moral duty on our part to preserve or promote their goods as ends in themselves. Robin Attfield, argues for a hierarchical view that while all beings having a good of their own have intrinsic value, some of them e.g., persons have intrinsic value to a greater extent (Palmer *et al*, 2002).

And also the takes into account many conflicting goods of different living things (Palmer *et al*, 2002).

Given this background, it should not be forgotten that animal rights and biocentrism are individualistic in their moral concerns. These are not sentient or subjects of life but protection of these entities should be a major concern for environmentalist and the goals of animal liberationists can sometimes conflict with the goals of environmentalists. For instance, the preservation of an ecosystem may require killing of feral animals or some another populations. So there are debates whether the ethics of animal rights is a branch of environmental ethics or not. As an alternative to consequentialism and deontology that considers concepts such as goodness and rightness, virtue ethics, proposes to understand morality and assess the ethical quality of actions in terms of concepts such as honesty, kindness and justice. Virtue ethics' theoretical focus is what the moral reasons are for acting one way or another.

One central issue for virtue ethics is how to live a flourishing human life, is a central concern of the moral agent himself or herself. Because its central focus is human flourishing, virtue ethics may seem unable to support a moral concern for the nonhuman environment. But just as Aristotle argued that:

... a flourishing human life requires friendships and one can have genuine friendships only if one genuinely values, loves, respects, and cares for one's friends for their own sake, not merely for the benefits that they may bring to oneself, some have argued that a flourishing human life requires the moral capacities to value, love, respect, and care for the nonhuman natural world as an end in itself. (Palmer *et al*, 2002).

It is tried to give a theoretical perspective about the notion of justice and ethics. Henceforth it is addressed to the effect of present generations decisions and activities on their successors.

Intergenerational justice is one of the aspects of environmental ethics but it stands at a crucial point in many environmental policy issues. Intergenerational justice based on what we should leave to our successors in respect of resources, pollution, environmental damage, biodiversity, wildernesses and so on. At this point, the question of whether we are obliged to make future generations better than we are. It is generally accepted that there is a strong obligation to avoid harm to others and to improve welfare of them. We should not forget that the present generation can help or harm future generations and in that sense future generations are powerless and vulnerable (Connely and Smith, 2002: 34).

In the following paragraphs, the notion of global distributive justice will be handled from the perspective of center-periphery (North-South). Human beings exploit their environment in many ways. For example; some patterns of resource use damages the environment, some patterns of living are not sustainable given scarce resources and modes of consumption that over-exploit the resources available.

Other environmental distructions are, for example, carbon dioxide emissions, distructions of forests for fuel or shelter leading to erosion as a result of poverty.

At this level, distributive and environmental issues are interconnected. Some kind of environmental degradation such as climate change, ozone depletion can not be solved at local level and requires global cooperation. The main dilemma is that the North is unwilling to change the lifestyle that creates problems while South wants to adopt environmentally damaging aspects of that lifestyle.

To solve these global environmental problems international environmental regimes must be generated and agreements will not be secured unless the settlement is seen fair by the actors. This brings the concept of global distributive justice; the relationship between environmental policies, ethics and global distributive justice becomes clear (Connely and Smith, 2002: 30-31). At this point, once again, the conflict between North and South becomes evident. According to the South much of the global environmental problems are creation of North, thus North should provide compensation and alternative, environmentally-sensitive technologies to solve these problems. The South can be economically weak but it can have veto power in global environmental policy.

However, practically South may not have the bargaining or veto power to force the issue. This necessitates a proper consideration of global distributive justice and set of principles that can be subscribed by all, including the weakest of the world's nations. For instance when we take the issue of natural resources we can talk about their uneven distribution around the world.

While some countries have good supplies of fertile land and water, others do not. This situation raises uneven and unequal distribution of resources. Ownership, responsibility and control emerge as issues of debate (Connely and Smith, 2002: 31-32).

Rawl's A Theory of Justice challenges us to think through the principles of justice:

He assumes that peoples moral judgements are more likely to be unprejudiced if the peculiarities of their own situation and interests are unknown at the point of discussing general principles of justice; if we do not know who or what we are, we can not be us the conclusion in our own favour.

The general conception of justice that Rawls claims we would accept is that all social primary goods - liberty and opportunity, income and wealth, and the bases of self-respect- are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured (Connely and Smith, 2002:32).

If we use the theory of Rawl's in the evolution of the distribution of wealth and income – North and South- we can say that for resolution of global problems on a global basis, all parties should have the same rights to affect decision-making process and we should not forget the recognition of the world as a resource common to all its inhabitants not just the rich ones.

In conclusion, global environmental policy won't be succeeded unless questions of global distributive justice are settled first. We can never secure justice for future generations unless we act justly towards all members of our own generation.

In this sense, intergenerational justice presupposes intragenerational justice. In addition, especially, when thinking questions of resource depletion, we should carefully distinguish needs from wants. Our priority should be to meet the needs of present.

As mentioned in Brundtland Report by the definition of sustainable development, we should try to satisfy our needs in the present in ways which neither danger the ability of our successors to satisfy their needs nor impact on the integrity of the natural environment. The concept of sustainable development which is central to the environmental agenda raises a range of questions about theoretical, practical and ethical issues. These questions necessitate to consider human well-being intra and intergenerational justice, obligations and principles of human-beings towards environment (Connely and Smith, 2002: 39-40).

2.3. Role of the International Communication Technology in the Environmental Policy

In this part, the overall aim is to clarify how information and communication technologies (ICT) affect the environmental politics and how the information revolution can be utilized to advance the goal of ensuring environmental sustainability.

The information and communication technologies have been changing constantly. And as we can witness that these revolutionary changes affect every aspect of modern life. Hence the literature on ICT and the Environment stress upon the applications of the technology in environmental monitoring and within environmental projects. These environmental projects can be considered as the Millennium Development Goals (MDG) set by United Nations.

The remarkable one MDG Seven¹⁰: Ensure Environmental Sustainability. In this section, it is important to dwell on how the information revolution can be related to the specific targets for MDG Seven. It is clear that ICT have a crucial role in reaching the MDG but only in the right conditions. Policies should create the right incentives and institutions have to be strong enough to implement those policies. If these conditions are fulfilled, then ICT can do the job properly (UNEP,2005).

First condition is population pressure, many of the MDG can be affected by the availability of family planning services. Efforts to reduce poverty and hunger also be complicated by the rapid population growth but still population and demographic growth are not mentioned explicitly in the MDG.

¹⁰ MDG Seven concerns with environmental sustainability with natural resources being vital for maintaining an adequate food supply capacity and rural livelihoods. Likewise, the organisation is a crucial partner in the effort to create a fair and rules based multilateral trading system, which is covered by MDG Eight (Informational Papers, 2003).

The more population, the harder is to provide primary education for all or to provide health services to prevent child mortality. Also it can be seen that the rapid population growth complicates the efforts to protect the environment. For this reason, some population programs have been given importance among development programs in the application of ICT. Different kinds of applications can be articulated: applications ranges from the use of communications media in affecting knowledge, attitude and practice of family planning techniques (Weinert,2003).

Second one is efficiency of resource use, it has been documented that the rich countries produce 11 to 25 tons of waste per person per year. Apparently this is much more than it is produced in poor countries. Rich countries not only produce more waste per person per year, but also CO₂ emissions per capita. This is more than 12 times higher in high income than in low income countries. People with more income and wealth in general use more goods and energy, and as a result they create more pollution (Weinert,2003).

Dany Quah's term the weightless economy, recognizes that a knowledge based economy generates products that are in the forms of services, information and content. Industrial economies produce resource intensive products while the knowledge economy produces weightless services (Quah,1999). Energy consumption is closely related to CO₂ production. For example in the US economy, while the GDP increased by 74 percent from 1973 to 2000, the energy consumption stayed relatively constant.

This was a result of improvements of energy efficiency of existing processes. For example motor vehicles were designed to provide more miles per gallon of gasoline, commercial transport was made more efficient by scheduling, computers improved their designs and maintained a great energy efficiency in manufacturing etc. Many of these efficiencies were the results of ICT(Weinert,2003).

Third one is the sustainable development in national policies, national developmental and environmental policies depend on expert analysis of information which is supported by ICT applications. ICT is a fundamental tool for policy analysis and decision support. For instance electronic media have been responsible for public education about environment and sustainable development and also it has allowed civil society to organize and learn about environmental problems in the developed countries. MGD aim to integrate sustainable development principles into programs and ICT play a crucial role in this process. Many of the conservation programs are guided by information and analyses depending on ICT(Weinert,2003).

It can also contribute to the efficient and effectiveness of such programs. ICT are used by business, organizations and government agencies as well as in environmental activities to increase efficiency and effectiveness (Weinert,2003).

Fourth one is the loss of biological diversity and deforestation, to sustain forests and biological diversity high yield agriculture and silvaculture in the production of food and forest product on good land is a crucial element. ICT will be effective in the plans and management strategies for landscape strategies (Weinert,2003).

ICT is a fundamental element to improve the efficiency of farming input, output markets and the operations of agricultural processing industries. Price instability is another important element in the loss of critical habitats and ecosystems. ICT can provide technological options for displaying the environmental results of price fluctuations (Weinert,2003).

In developing countries the poverty of rural populations put pressures on forests and bio diversity. For instance these poor people cut wood for fuel, hunt for survival. Therefore ICT based economic development provides other economic opportunities to the poor people of rural areas and can reduce the pressures on forests and biodiversity. For example when the sharp decline in fisheries on a worldwide scale has become evident, aquatic biodiversity has been the subject of attention. The main reason for the decline has been over-fishing. ICT has contributed to the problem by predicting fish location, improving marketing of the catch, marine communications, weather prediction, boat design and manufacturing.

So ICT play a role in the restoration of fisheries by helping to understand the factors controlling fish populations. Aquatic biodiversity has also been affected by the pollution of lakes, rivers and coastal zones. ICT can be effective in planning and monitoring land and water use (Weinert,2003).

The most considerable effects of ICT involve reducing the costs of transactions over long distances, the ability to obtain and manage environmental data on scales, the ability to communicate between public, civil society, and the ability to control the processes electronically. These characteristics can be used to change society and they offer opportunities to improve the environmental sustainability. Advances in ICT made it possible for the first time to detect environmental problems at a very large of a very small scale. They permit monitoring of environmental quality from the sources and the projection of the development of environmental problems (Weinert,2003).

Finally, as governance considered as “a system requires governments to transform themselves by changing both the way they make policy decisions and the instruments they use to implement those policies. It also involves improving coordination of environmental concerns across government and ensuring that environmental considerations are incorporated into routine decision making in each sector” (Carter, 2002:226).

ICT has a crucial role for the efficient work of governance system. For example, it permits to monitor environmental quality and applies ICT to the agricultural system rather than the conventional narrow systems.

3. GLOBAL ENVIRONMENTAL GOVERNANCE

Global environmental governance has recently become very topical to cope with global environmental change and to eliminate its probable and unprecedented effects. This chapter therefore sets out the definition of Neil Carter. There are various definitions on environmental governance. However the following definition of Carter will constitute the basis of analysis in this chapter “environmental governance requires from the governments to transform themselves by changing both the way they make policy decisions and the instruments they use to implement those policies. It also involves to improve coordination of environmental concerns across governments and ensures that environmental considerations are incorporated into routine decision making in each sector” (Carter, 2002: 226). In the light of this definition, this chapter aims to disclose how globalization, with composing a non-governmental political atmosphere, can manage to generate the subjects; such as environment, security and peace which require solidarity and collective structuring. In this approach the chapter sets out the definition of global governance, the requirements for good governance in a local dimension, the interrelation between good governance and economic development and finally conventional policy tools which are also very important in the environmental governance.

3.1. Conceptual Approach to the Global Environmental Governance

Regime theory has become influential in the areas of international relations particularly in the international environmental politics. The idea of governance without government contains combination of different organisations and institutions which provide the governance to address specific problems. Legal regimes have been important for managing activities in the oceans, atmosphere where no state can deal alone. In the past, major environmental challenges are posed relating to the role of states. The notion of tragedy of the commons provide a model of how common resources can be managed .

There have been many types of responses to over exploitation. For example, traditionally the idea is to exploit and move on, this approach was taken by the agricultural communities in the forests, in the regions of Africa. Another approach is privatisation, this plays a significant role in improving resource management of the global commons. For example, International Law of the Sea transferred effective ownership of the world's ocean resources to coastal states to manage their Exclusive Economic Zones. For this approach to be effective, the owners should have clear interests in the long term conservation and management of resources under their control (Greene,2001).

This is also difficult to apply. But today effective methods are used globally and domestically such as environmental conservation and sustainable management of the commons is a current approach, it means the establishment of systems of governance to prevent damaging practices. It relies on the idea of shared resources rather than patterns of ownership. Effective collective management systems must be developed and maintained (Greene,2001). Such systems involve institutions, principles, norms and rules. In another word, global governance refers to many different phenomena such as the minimal state, corporate governance, new public management, good governance, socio-cybernetic system and self organizing networks. Governance, is also identified by the use of non regulatory policy instruments. The efficient work of non state actors with state actor (Jordan et al, 2003).

For this reason, in the post 1990s a number of conventions, protocols and treaties have been codified in international field. The importance of improving a functional method of management was noticed and it can not be improved with only states deliberations. It includes regional institutions such as EU or international institutions such as World Bank and OECD and IPCC foundations which cover advanced technological institutions exist in this structure (Jordan et al, 2003).

3.2 The Period of Industrialisation And The Environment In The Global Arena

The following quote from Engel's in 1844 somehow reflects the environmental impact of industrialization from traditional view.

The centralization of population in great cities exercises of itself an unfavorable influence. All putrefying vegetable and animal substances give off gases decidedly injurious to health, and if these gases have no free ways of escape, they inevitable poison the atmosphere. [The poor] are obliged to throw all offal and garbage, all dirty water, often all disgusting drainage and excrement into the streets, being without other means of disposing them; they are thus compelled to infect the region of their own dwellings (Litvin,1998:1).

This quotation also reminds another consideration about the link between the level of development and the level of environmental protection. Commonly held view is that when the basic needs for food and shelter are met, people can then start thinking of environmental protection (Litvin,1998:1).

As Stern (2003) explains, Environmental Kuznet's Curve states that, every developing country damage the environment and later on, after being completed development process they are heading towards the tendency of environmental protection. It is basic to maintain the efforts of natural environment protection with using environment-friendly advanced technology products in industry and to prevent the industry's waste harms which damages natural environment. This principle must be the basic policy for industry waste harmful effect prevention.

During the development process, some programs were elaborated which have implemented about countries environmental protection, waste minimisation, recycling and recovering (Stern, 2003).

In most developing countries pollution seems to be getting worse. Most big cities in Latin America are suffering rising levels of air pollution. Population in poor countries are growing so fast and water supply increase gradually with the number of extra people. Worldwide, about a billion people still have no access to clean water. Throughout Latin America, Asia and Africa, forests are disappearing, causing not just long-term concern about climate change but also immediate economic damage (Litvin,1998). Carbon emission amount of undeveloped countries, such as China and India which have wide coal deposits, is approximately equal to the amount of US in 50 years. For these countries some regulatory and guiding sanctions must be executed (Chichilnisky, 1994).

The growth in environmental problems in developing countries bear also tremendous internal conflicts. In recent years many environmental lobby groups have grown in Latin America and Asia, some of these are from rich-world groups such as Greenpeace, but many of the new groups are home-grown, drawing support from people increasingly worried about the effect of pollution. From Brazil to China, governments are passing new environmental regulations, modelled on green standards in Europe and North America (Litvin,1998).

There are many environmental lessons to be learnt from the rich countries for example; in most of the OECD countries, emissions carbon monoxide and sulphur dioxide have been falling gradually since 1980. In most rich countries, spending on pollution control amounts is approximately around 1-2% of GDP. Governments and regulators have often forced new environmentally friend technologies on firms. Air and water standards are still problematic, and have greater cost. Fulfilling the EU regulations, Europe water utility needs to invest 140 million ecus by 2005 however this expenditure is not justified not only in the EU countries but also in the rich ones. As a result, developing countries should not aim this (Litvin,1998).

3.3. Conventional Policy Tools on the Environment

The industrialisation and rapid population growth have increased the intensity of environmental degradation. The ways to cope with those problems can roughly divided into two. Some rules are at international level, some of them are at domestic levels. Economists and environmentalists support the policies for protecting the common resources not only for today's generation needs but also for future generations.

3.3.1 Domestic Policy Tools

Domestic tools which are used can sum up, under two main headings;

- 1- Legislative tools
- 2- Economic and financial tools (Yıkılmaz, 2002).

Legislative tool is the basic one, the objective is eradicating environmental threats by orders and prohibitions. Today, it is an effective tool which has influence on environmental policies, sets forth binding legal arrangement and doesn't leave any other opportunity to the polluters. It is based on command and control approach because of finding solutions in a restrictive and punitive framework system. By orders and prohibitions some harmful activities can be prevented and prohibited. For instance, gases which damage ozone layer was entirely prohibited. Even though a lot of countries refer to this tool, this kind of prohibitions are internal and when the problems gain international dimension some difficulties can be appeared(Yıkılmaz,2002). For example, acid rain, sea pollution and diffusion of radioactive material need international cooperation for solution. In the legislative tools, instruments can also based on either regulation or stimulation. Instruments based on regulation forbid undesired practices, behaviours and penalize transgressors (command and control measures).

Instruments that are based on stimulation reward desired practices, behaviour and discourage the undesired (Yıkılmaz,2002).

The other solution for environmental problems is executing economic and financial tools. These tools can be materialized by setting up an effective tax system. Feasible alternative is suggested to the polluters, which can take up loan. This solution requires to obtain information from the government who should regulate the fine. This condition is quite high-cost . Economic and financial tools direct the economy and ensure producer and consumer to take into consideration the benefit and cost balance during taking a decision and during their production and consumption preference. These tools don't include any binding sanctions. It is the basic reason to name these tools as economic and financial. They provide a benefit when producer and consumer observe the tools and load damage when they behave against the tools. Economic tools encourage the consumer to display a volunteer behaviour and they are not coercive like legitimate tools (Yıkılmaz,2000).

For example; user fee is another suggested method for environmental struggle. The fee, which is being getting from global common values usage, must be effective on protective and economic aspect. UN Global Administration has some useful suggestions about user payments. Some of them are; adjusting high fees to plane tickets of the airway lines which too many passenger demand, controlling ocean pollution at ocean access and taking exceptional fees for the wastes which are thrown away to the

seas and oceans. As it has mentioned above, economic and financial tools are generally based on polluter pays principle which intends to take the cost of the environmental damages from the polluters (Yıkılmaz,2000).

Another tool for decreasing environmental degradation is ecological modernisation. It stresses on the role of the market and the technology to the environment. Governments should use market based instruments such as eco taxes and tradeable permits, by this way the cost of the pollution can be externalised and added to the good's price . Ecological modernisation rests on the claim that economic growth can take new environmentally friendly forms (Carter, 2002).

In 1993, the Copenhagen European Council invited the Commission to prepare a document on the policy and positive views of the environmental protection showed that ecological modernization had entered in the policy arena. There is a clear recognition within the White Paper of the role of environmental projects and concerns in promoting enhanced growth and competitiveness. Ecological modernisation was mediated through the work of Jacques Delor's cabinet during 1992(Weale et al, 2000).

According to Commission's report *Towards a new Development Model* existing policy instruments have to be reorientated to encourage the more efficient use of resources and priority should be given to environmentally innovation by means of subsidies for technical improvement and by funds for research and development (Weale et al, 2000).

At domestic level, for success of good governance on environment requires state government representation, participation and supervision, an effective civil society, rule of law and decentralization. It involves responsibility to openness and account in government, quality and morality, rules and limitations and alternative service performing methods which is compatible with competitive and market economy. Eventually it connotes accord in political and economic order in world digital revolution and basic technology progress. Good governance conception includes dialogue and accord. Political participation and representation give them this right of the government. In a close dialogue with the representatives, people should attend to public decisions and should control representative's power and competence (Aktan, 2002).

3.3.2. International Policy Tools: Mega Conferances on the Environmental Governance

In the past half century, there were international strategies to manage the common resources which were designed and implemented through the interstate negotiations. Transnational problem could not be resolved by the single state therefore the international associations came together to set rules and standards to produce outcomes which states could not achieve slolely. An international regime provides mutually interdependent set of norms, rules, principles, values and policy making procedures. There are two important principles to manage the international environment for creating regimes. First one is, the idea that goals are better be sustained in order to make cooperation. Second one is, the coordination of intergovernmental activities which is faciliated through the obligatory normative institutions (Joyner, 1998).

The construction of the international environmental regime has been important for decades through the international conference diplomacy began with Stockholm Conferance, which was held in 5-16 June 1972. It was the most important one by addressing the world wide recognition of the issues that affects the planet's health. Agreed principles significantly strengthened the framework for future environmental cooperation, it did not accepted universally because of the Soviet bloc protests. But in a period of time, it had become a basis for environmental diplomacy.

Stockholm Conference led to the establishment of global and regional environmental monitoring networks. Finally, the most significant outcome of the Conference is the creation of UN Environment Programme. This programme coordinate the environment related activities of other UN agencies. It plays a key role in arising political awarness. The Conference also makes broader political and institutional changes, for example; many governments created Ministries for the Environment and national agencies for environmental monitoring (Green, 2001).

Twenty years after the Stockholm, UNCED held a conference in 1992, in Rio de Jenario. UNCED put forth three main steps to promote international environmental legal rules. The first step was 1992 Convention on Biological Diversity. Second step was UN Framework Convention on Climate Change and third step was The Agenda 21 which was 800 paged document, outlined of a common international approach for major environmental concerns. Rio de Janeiro Conference is an appropriate illustration can be given in order to explain the uncertain capability of NGOs to influence the political agenda. International institutions set up to deliver international action in Rio de Janeiro conference resulted with disappointment The 1992 Rio Conference turned out to be one of the biggest summit meetings ever held. About 45.000 people attended, including government delegations, over 10.000 press and media people and representatives of 1.500 non governmental organizations(Newell, 2000: 119).

Non governmental organizations had their own parallel conference in Rio, but were also entitled to attend the intergovernmental meetings (Newell, 2000: 119). The Rio Declaration, Agenda 21 and the Declaration of Forests Principles were all agreed, and the conventions on climate change and biodiversity were signed by 154 governments. Rio conference was widely regarded as an overall success, however its real impact could be judged according to how the Earth Summit agreements were developed and implemented. The conventions of climate change and biodiversity are framework conventions which have basic aims, principles, norms, institutions and procedures for co-ordinated international actions (Newell, 2000: 119). However initial obligations on parties in the conventions were weak and in order to achieve agreement in time for either of these conventions to be signed at Rio, it had proved necessary for many contentious or complex issues to be side-stepped or fudged. Indeed the Biodiversity Convention, even the aims and priorities of the agreement remained unclear (Greene, 2001). This conference demonstrated a lack of progress in implementing the goals of UNCED. "Existing mechanisms for environmental governance are often thought to be little more than an 'institutional bandage applied to a structural haemorrhage'. Often international agreements are vaguely worded, slow to negotiate and difficult to enforce" (Newell, 2000 : 119).

In 1987 the World Commission on Environment and Development, which was established by UN (Brundtland Commission) proposed long-term environmental strategies for achieving sustainable development to the year 2000 and beyond (Elliott, 2002: 109-110). Brundtland Report mainly argues for priority to be given to achieve sustainable development, which is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The concept of sustainable development focused on finding strategies to promote economic and social development in ways that avoided environmental degradation, over-exploitation, or pollution (Greene, 2001: 318).

In the late 1980s, a sense of urgency characterized the political rhetoric:

In 1989 the G7 called for decisive action to understand and protect the Earth's ecological balance – A call, incidentally, they could hardly themselves be accused of heeding – and the general assembly declared the deterioration of the environment to be one of the main global problems facing the world today...

The willingness of governments to turn their post-Cold War attention to the problems of environmental degradation seemed confirmed by United Nations Conference in Environment and Development (UNCED), established by general assembly resolution in December 1989 and convened in Rio de Janeiro in 1992 (Elliott, 2002: 110).

The process, which began in Stockholm, resulted in 1992 when the UNCED held in Rio legitimized the environment as a concern for international economic diplomacy. The Rio Conference became the largest conference ever held, in terms of the number of delegates present, and the largest number of world leaders attended.

The concept of sustainable development was at the center of deliberations of the Rio Conference. Following the Rio Conference, environmental issues moved from the margins to the center of politics at domestic and international levels. It means that the environment became normalized the political discourse (O'Brien and Williams, 2003: 300-303).

The concerns of Green parties and environmental activists are no longer regarded as outlandish and silly but have instead been co-opted to the orthodox political agenda. This enables a form of environmental management to become the standard approach in which politicians, business groups, and social movement activists are accorded the same legitimacy. More fundamental questions regarding the nature of economic growth in a world of finite resources are not addressed in this new approach to the environment. (O'Brien and Williams, 2003: 303).

In current mainstreaming of the environment, there are three main features. The first one is the development of environmental regulation at the domestic level. For instance, states have established ministries for environment. Second, environmental issues have been mainstreamed within international organizations. It is criticized that so-called greening of international institutions has little contribution to the environmental sustainability but this is a controversial point. For instance the World Bank, which ignored the environmental issues, after the UNCED, attempted to develop a green portfolio. The third feature of a mainstreaming of the environment in the global political economy is the behavior of major firms. With the effect of environmental activists and the policies of governmental departments, the firms adopted an approach that emphasizes the sustainability of resources. However not all cooperations have adopted this approach, some of them still oppose the efforts of environmentalists (O'Brien and Williams, 2003: 303-305).

Since UNCED, the multilateral terrain of global environmental politics congested with protocols, declarations, commissions, conventions, committees, ad-hoc working groups, intergovernmental panels and so on. Anyway, this activity has not been able to produce agreements to mitigate and reverse environmental decline or protect people who are affected by the impacts of that decline. International institutions such as UNEP and The Commission of Sustainable Development lack effective sanctions and substantive powers or they defer target dates.

Despite an increase in the number of environmental agreements, conferences, international debates and greater attention to environmental problems, the state of the global environment goes on to deteriorate as UNEP's first Global Environmental Outlook published in 1997 demonstrated. In 1997, the United Nations General Assembly Special Session came together to review the implementation of Agenda 21. However, governments were unable to reach consensus on a political statements and five years after the Rio, the planet's health was generally worse than ever (Elliot, 2002: 112).

To sum up, although many conferences were held and many agreements were made, the issues, which were on the agenda of Stockholm 20 years earlier, were still unresolved at Rio. While the agenda of environmental problems expanded in-between years, it is not obvious that the will to meet these concerns kept pace (Elliot, 1998: 26). The lack of the ability to make effective sanctions can be understood as one of the most influential elements in these conferences failure.

Johannesbourg World Summit in 2002 which involved the creation of voluntary, non negotiated, multistakeholder , multilateral, enterpris. “Partnership entails coalitions drawn from governments, international organisations, non governmentant organisations, private cooperations and civil society, as opposed to politically negotiated agreements and commitments.”(COM (2003)892). It reaffirmed the Rio Principles, Agenda 21 and the programme for further implementation of Agenda 21. Johannesbourg Summit’s objectives are “to eradicate poverty, to achieve sustainable patterns of production and consumption , to protect the natural resources on which the economic and social development of future generations will be based” (COM (2003)892: 2).

Sustainable Development Strategy in the EU was adopted by the European Council in Göteborg in June 2001. The Council also added an environmental dimension to the Lisbon Strategy on Growth, Jobs and Prosperity and European Council agreed to add some additional elements on sustainable development strategy as part of the WSSD.

Achieving the WSSD targets require leadership both internally and externally. Improving coherence is the key challenge to sustainable development not only within the enlarged EU but also at global level. Strengthened international governance for sustainable development is essential requirement for progress in WSSD implementation. Therefore the European Council has stressed the need to reinforce the UN's Environment Programme and to consider the need for its institutional upgrading by creating a UN Environmental Agency. In the short term, UNEP's political authority should be reinforced and its budgetary basis should be improved. The EU should also promote coordination among and implementation of multilateral environmental agreements; as Kyoto Protocol is a key priority for the EU. It should continue to play a substantive role in the UN Commission on Sustainable Development. The WSSD plan of implementation emphasises national responsibilities to enforce effective laws which support the sustainable development. It urges the countries to begin implementation of national strategies for sustainable development by 2005. The EU should support the establishment of poverty reduction strategies as well (COM (2003)892).

This may be achieved through implementing technical assistance. Implementing at local level is crucial in implementing the WSSD commitments. Local Agenda 21 is a key tool increasing awareness on sustainable development.

In conclusion, effective environmental governance needs not only unique application like a shock therapy and also political awareness, accountability. The effective use of international institutions is also very important for decreasing environmental degradation (Chasek, 2000). In order to manipulate the structure of environmental governance, a certain number of changes in the nation state structure are essentially required.

4. GENERAL OUTLOOK TO THE EU GOVERNANCE STRUCTURE

In this chapter, EU's approaches to the environmental issues, the distinctive model of environmental governance within the EU along with the relationship between the global institutions and the EU will be examined in detail underlying internal and external effects of its environmental policy.

4.1. Responses of the EU to the Environmental Degradation

The motivations behind the EU to have an environmental policy that can be summarised under two main titles; internal and external. The environment was a latecomer to the policy agenda of the EC, most of the national governments did not pay any attention to the environment because in those days, the measures such as removing barriers on trade and tariffs were more important than measures which mirror quantitative aspects of daily life like social, sanitary conditions. However, after a period of time, different environmental standards of the members became an important obstacle to the functioning of the market. If one member state used more strict rules than the others, it boycotted the dirty partner's goods.

Such kind of problems bear the need of standardisation urgently. There were also other catastrophic events which drew the attention of the members to this subject. For example; the air pollution in London in 1952 and the death of more than 4000 people (Keleş and Hamamcı,2005).

External events which led the evolution of the EU's environmental policy are mainly related with the summoning of mega conferences under the UN auspices on the environment starting with the UN Conference On Human Environment at Stockholm in 1972 due to the increasing environmental considerations and consciousness all around the world. Today, the EU seems to be more sensitive to apply efficient protection measures although environment was ignored in the Treaties of Paris and Rome.

The evolution of the environmental policy in the EU can be summarised in three main periods; first one is the years between 1957-1972 , second one is the years between 1973 and 1986 and final one is after the 1990's. The establishment of the common market began life with the work of six founding members, the desire was primarily to achieve economic cooperation. Priority was given during the 1960's to the development of common market. Qualitative issues such as the improvement of working conditions, education, were not on the top of the agenda (McCormick,1999).

EEC treaty prohibited restrictions on trade with one exception, member states could use restrictions based on the ground of the protection of the health and life of humans, animals or plants, the competence was distributed to the member states (McCormick, 1999). In Council of Ministers acted unanimously on proposal from the European Commission to “issue directives for the approximation of such provisions laid down by laws, regulation or administrative actions for the member states to affect the establishment of functioning of the common market” (McCormick, 1999:89). This proposal basically indicated that the differences between the members on the environmental standards created a barrier to free trade and should be addressed by harmonization.

The Community’s objective was to improve living conditions parallel with the proper operation of the common market. Specific initiatives were taken during those years such as establishing standards to protect workers and public from the radiation, or directives on vehicle emissions. Environmental measures which were taken in those years related to the desire to build a common market targeted to decrease the unequal conditions between the member states that in turn, could effect the efficiency of the market.

Second period gave more institutionalised and internationalised face to the environmental policy. This period covers the years between 1972-1987. In 1970's the consequences of political, social, economic changes in industrialized states, pushed them to take environmental issues on their agendas. For instance Club of Rome published *The Limits of Growth* in 1972 which underlined the roots of the environmental crises. New interest in the environment was further provided by the 1972 UN Conference on Human Environment, held in Stockholm. This conference led to reinforce domestic laws in EEC member states (McCormick,1999).

At Paris Summit in 1972 the head of governments of the six founding EEC member states and the adherent states such as Britain, Denmark, Ireland agreed on, that economic expansion was not an end in itself and Community activities should be expanded to the environmental issues. The conclusion of the Summit drew the attention of the member states to the Article 2 of the Treaty of Rome which made emphasizes on the improvement of the quality of life, standards of living and protection of the environment (McCormick,1999).

The Creation of small Environment and Consumer Protection Service (ECPS) within the DGIII, the establishment of a committee on environment in the European Parliament and Environmental Action Programmes in 1973 gave more structured EEC approach to the environment(Keleş and Ertan, 2002).

Moreover since 1973 six EAPs have been adopted so far. Briefly, the first four provided the overall context for the EC's environmental policy while the fifth and sixth ones presented thematic problems on which the EU should focus on and the measures to cope with them (Keleş and Ertan, 2002).

There were also some events in 1983 which quickened the institutionalisation of the environmental policy within the EU.

First one was the adoption of the third EAP. It introduced new concepts such as the adoption of the environmental policy into other sectors and for the first time by the third EAP, the priorities of the environmental policy were listed. It included use of environmental impact assessments, reduction of pollution at source for preventing air, water, marine, soil pollution, and transboundary pollution control (McCormick,1999).

Second one was the dramatic accident of Italy. In drums of hazardous waste contained dioxin which originated from Northern Italy Seveso surfaced to northern France and the European Parliament set up an inquiry committee for this accident. The Committee accused Commission from living up its responsibilities in overseeing the implementation of the Community Law.

This event not only drew the public attention to the seriousness of the issue but also it stimulated the Commission thereby DGXI was expanded and became more active in pursuing the implementation of the EU law (McCormick,1999).

The third one was the conclusion of the European Council Meeting in Stuttgart in 1983. Germany had the presidency in the meantime. The aim was to raise concern about air pollution on German forests. While the West Germany initiatives, the Council adopted a declaration which clarified the urgent need of reinforcing actions at national, community and international level for combating with the pollution but the desires for change became outstanding at the March 1985 European Council in Brussels during the Italian Presidency. The Council adopted a declaration and recognized the need that environmental policy could encourage the economic development and the job creation (McCormick,1999).

The year 1987 had deep effects on the evolution of the EU's environmental policy, for drawing more public attention to the European dimensions of environmental protection and this year was declared as the *European Year of Environment* (McCormick,1999).

The Single European Act by inserting environment into the treaty establishing the European Economic Community for the first time provided a constitutional base for the environmental policy and clearly defined the objectives of that policy (Blacksell, 1994). With the Single European Act market correcting policies such as environmental policy and consumer policy became inseparable part of the Community legislation.

Another major change was made in the voting systems within the EEC. Qualified majority voting system increased the veto power of those qualified members. Before 1987 the arrangements were based on the unanimity voting system, by this way one member state could block the legislation process on which all the member states have consensus. With the qualified majority voting system the possibility of a member state to block the legislation has not remain anymore (Sbragia, 2000).

In the late 1980s the change was summarised by the proclamation at the Dublin Summit of the EU. This summit stated the community as one of the leading collaborations of the world. It had a special responsibility to protect and enhance the natural environment not just of the community itself but of the world which it is a part (McCormick, 1999).

Another important progress in this period was, strengthening the Commission's capability to finance the environment management policies. The first community environment fund has been established by regulation 1872 /84 in 1984 and provided support for the projects which aimed at developing new technologies and protecting the environment.(McCormick, 1999).

After 1990s environmental policy was in the process of consolidation. By the Maastricht Treaty in 1993 the power of the European Parliament increased. Subsidiarity principle¹¹ was fortified and thereby EU has had an active role regionally and globally. By the Amsterdam Treaty in 1997 sustainable development concept added to the environmental concerns (Keleş and Ertan, 2002).

Finally, although the environment was not mentioned in the Treaty of Rome and officially incorporated with the adoption of the Single European Act, the EU assumes a global environmental leadership role whereas the external impact of the other policy areas which were explicitly included in the founding treaties such as social policy, energy policy have seen relatively little in the global arena.

¹¹ Subsidiarity is the principle that decisions should be taken lowest level consistent with effective action within a political system. It has also been widely invoked in recent years as a means of limiting the EU's competence. The Maastricht Treaty introduced a subsidiarity clause in to the Treaty of Rome. It finds a parallel in the US constitution which reserves states power not specifically allocated to the federal government(Bainbridge, 2002).

Today, the real danger to the progress achieved in the 1970's and 1980's might be serious environmental problems of the new member states as well as unsustainable patterns in the EU (Blacksell, 1998).

4.2. The Effects of the Global Environmental Institutions to the EU's Environmental Governance Structure

In the 1980s and 1990s, many global environmental assessments focused on the globe, without paying attention to issues at the regional or local scale. These assessments serve as conduits for communicating scientific knowledge to policy officials and members of the public.

Integrated assessment (IA) defined as;

an interdisciplinary process of combining, interpreting, and communicating knowledge from diverse scientific disciplines in such a way that the whole cause-effect chain of a problem can be evaluated from a synoptic perspective," so as to provide useful information to decision makers.

... A key feature of these assessments has been their emphasis on the universality of such risks-risks that seemed to threaten everyone and that appeared to be most appropriately conceptualized, analyzed and managed on scales no smaller than the planet itself (Miller and Erickson: 1991, 4-6).

The cause-effect chains that IA start with socioeconomic drivers leading to economic activity and other practices, leading to stresses on the environment, leading to environmental changes, leading to physical impacts on societies and ecosystems, leading to socioeconomic impacts, eventually returning to cause changes in the socioeconomic drivers (Van der Sluijs, 2002:1).

The main problem about the global environmental assessments is the regional approaches of the assessments and also the perception of actors about the notion of risk.

A number of popular international assessments such as Panel on Climate Change (IPCC), The Millennium Ecosystem Assessment, The Global International Waters Assessment (GIWA) and the Arctic Climate Impact Assessment (ACIA) incorporated regional components in their work. For example while IPCC sub-divided the globe into the geographic regions, The Millennium Ecosystem Assessment has developed a bifurcated strategy including both regional and cross-regional studies.

By adopting regional-scale approaches, assessors hope to develop more nuanced and accurate pictures of global environmental change than can be achieved with global modeling and data sets.

... By downscaling knowledge and information, assessors hope that policymakers and the public will more easily understand the importance of global environmental risks to their day-to-day activities and concerns – and thus more willingly support policies designed to prevent global change in the first place (Miller and Erickson: 1991: 3).

As mentioned above, another problem about environmental global assessments is related with the actors' perception about the risk. In the following paragraphs some examples about this difference will be handled. For instance Sheila Jasonoff found that U.S. and European regulators adopted different approaches to the question of which chemicals to regulate (Jasonoff,1999). They use different kinds of research, classified along different lines and used different institutional processes to incorporate scientific knowledge into policy choices.

To illustrate, while the USA regulators classified potential carcinogens as a separate category of hazard, British policy made no distinction between chemicals that cause cancer or other forms of health risk.

USA regulators relied on quantitative risk assessments provided by animal testing, instead British regulator favored epidemiological studies relied on both quantitative and qualitative indicators of risk. Actually these differences, reflect distinctive elements of national political cultures (Miller and Ericson,1991). Research on politics of environmental change reveals similar variations in how participants from different parts of the world define research problems, model environmental phenomena and interpret global environmental changes. The basic conceptual frameworks and causal narratives for understanding environmental change can vary across cultures. For example, The Intergovernmental Panel on Climate Change framed the climate change as a problem of ecological limits. But many observers in the South, viewed climate change as a problem of excess consumption. That kind of different cultural styles of reasoning about environmental risks pose a serious challenge for global environmental assessments. As the U.S and EU disputes over the precautionary principle in different scientific and policy arenas, the credibility of assessment and the authority of global governing agreements degrade. As a result, the possibility of effective environmental policies degrade too (Miller and Erickson: 1991, 4-6).

Environmental issues on global agenda, appeared in 1972 with the Stockholm Conference or the United Nations Conference on the Human Environment was held. In this conference, the environment recognised as a major issue which affects the well-being of peoples and economic development throughout the world. At institutional level the United Nations Environment Programme (UNEP) was established.

It was considered that UNEP's function as "a catalyst, advocate, educator and facilitator to promote the wise use and sustainable development of the global environment" (Wagner and Brinkmann, 2005:8). That's why UNEP call together different groups for example; international organisations, national governments, NGOs, representatives from the private sector and civil society groups (Wagner and Brinkmann, 2005). The United Nations Environment Programme also provided information on the environment in order to give early warning of impending environmental threats. UNEP is funded by mainly via voluntary member-state contributions and also receives payments from UN. Decisions on UNEP's programmatic orientation and the deployment of its funds are taken by its 58-member administrative council (Simonis and Brühl, 2002:105).

Since its establishment UNEP has focused on identifying the main environmental problems facing the planet and tries to put these problems on the global agenda. It has also participated in developing of a series of Multilateral Environmental Agreements (MEAs) such as the 1973 Convention on International Trade in Endangered Species and the 1985 Vienna Convention on the depletion of the ozone layer.

Today, there are approximately 400 such agreements in force. Intergovernmental Panel on Climate Change (IPCC) together with the World Meteorological Organization, and Global Environment Facility (GEF) which was set up with the World Bank are important examples (Wagner and Brinkmann, 2005:8).

UNEP is a leader institution for the global environmental governance process, it is hard to say that its mandates are fully successful in operation. It has been effective in two key areas –“(1) monitoring and assessment and (2) launching environmental agreements”. It is also main policy forum for environment ministries which came all around the world and helped for the construction of their institutional capacity. However, UNEP has some points which lack in managing policy processes in a coherent and coordinated fashion. “It has failed to provide an ability to benchmark performance and identify best practices, and has not established itself as the institutional home for the numerous international environmental conventions” (Ivanova, 2005:7).

There are four factors which limit UNEP’s performance as a point institution for the global environment. First one is the UNEP’s status as a programme rather than a specialized agency within the UN system. Second, UNEP’s governance arrangements, the Governing Council and the Committee of Permanent Representatives constrains its autonomy and leadership. Third one is the financing structure of the UNEP which has led to complete dependence on voluntary funds, resulting with unpredictability and volatility of resources. Finally UNEP’s location –in Nairobi- away from the centers of political activity in some ways hinders its ability to assert itself as the central actor in global environmental governance (Ivanova, 2005:31).

The next major step for global environmental governance was achieved at the 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro. At this meeting, Commission on Sustainable Development (CSD) was set up (Wagner and Brinkmann, 2005:9). The CSD, which was placed under the responsibility of the UN Economic and Social Council (ECOSOC) had the tasks of monitoring the implementation of Agenda 21 at the local, national and international level, formulating political options for following up Rio and contribution to building dialogue and partnership between governments, international community and civil society (Wagner and Brinkmann, 2005:9).

CSD, aimed the reduction of poverty and altered patterns of consumption and production up to the year 2003. There was an initial hope for CSD to be successful but the results were not as expected, because the most important environmental decisions were taken in sector-oriented structures and also only environment and development ministers were represented at CSD conferences, not the financial, economic or foreign affairs (Simonis and Brühl, 2002:108).

In 1997, the parties to UNFCCC, signed the Kyoto Protocol to that agreement. This protocol aimed to reduce the emission of greenhouse gases by 5.2 per cent by 2012 compared with the levels of 1990, with individual targets set for each of the industrialised countries. After, long negotiations, the Kyoto Protocol entered into force on 16 February 2005, without the participation of the USA, China and Australia (Wagner and Brinkmann, 2005:9).

The Kyoto Protocol was the first step taken in the direction of implementation. It was negotiated at the third conference of the parties in 1997, for the first time set legally binding reduction targets for greenhouse gases(carbondioxide, methane, CFC's etc.). Between 2008 and 2012 the industrialized countries were obliged to reduce their emissions by an average of 5.2 %, and the EU by 8 % . These targets were to be reached by increasing energy efficiency as well as by the means of flexible mechanisms.

But these flexible mechanisms resulted with the erosion of targets. These mechanisms are; international emissions trading (ET), joint implementation (JI), the clean development mechanism (CDM), the bubble concept and the inclusion of sinks. While the USA led to the inclusion of flexible mechanisms in the Kyoto Protocol, it was due to European Union that the bubble concept was adopted. It gives to individual countries the right to join forces with others to form a bubble, by that way together meeting the reduction targets set out under the protocol (Simonis and Brühl, 2002:109-112).

The disagreements over Kyoto make progress on global governance over recent years. In the 2002 World Summit on Sustainable Development, held in Johannesburg ended without significant new progress on the environment agenda.

It failed to achieve its aims of setting clear commitments to sustainable development including concrete targets and deadlines. (Wagner and Brinkmann, 2005:9).

The differences between the USA and the EU on how to tackle global environmental problems seems incapable of being overcome. Europe leaders doubt whether the USA takes environmental problems as seriously as they should. In recent years the United States has unwillingness to share its sovereignty with international bodies in any policy area.

American representatives reject these European suspicions and they argue that improved technology will allow the industrialized world to combine robust economic growth with effective action to reduce greenhouse emissions. However, the year 2005, was important especially on climate change. The UK, has given importance to global warming as an international political priority. Reform of the UN's institutions dealing with the environment was a topic discussion at the 2005 World Summit in New York and also parties to the UNFCCC met in Montreal on 28 November- 9 December to discuss how to follow up the Kyoto Protocol from 2012 onwards (Wagner and Brinkmann, 2005:9).

The international institutions of global environmental governance are numerous and fragmented. UNEP is probably the best-known of these institutions and the only one exclusively focusing on environmental problems. There are many other UN bodies such as Food and Agriculture Organization (FAO), the UN Economic, Social and Cultural Organization (UNESCO) and the World Bank also address environmental problems and contribute to the making and implementation of international environmental policy. The UNFCCC, the UN Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD) are examples of smaller bodies concerned with the specific environmental issues (Wagner and Brinkmann, 2005:10).

In addition to such independent and functional organisations, there are also 400 Multilateral Environmental Agreements (MEA), that set out the aims of global governance on specific environmental problems. MEAs incorporate either non-legally binding principles or legally binding actions to be taken on specific issues (Wagner and Brinkmann, 2005:10).

Most MEAs typically work in accordance with the voluntarist tradition of international law and proceed an *ad hoc*, issue-by-issue basis by inducing cooperation and generally avoiding punitive sanctions and courts.

... around twenty of the most recent and most significant treaties dealing with global environmental problems include trade restrictive measures to address transboundary and global ecological problems. The most successful MEA in the world today - 1987 Montreal Protocol – has imposed stringent trade restrictive measures on both parties and non-parties to the agreement. The Protocol not only restricts trade in ozone depleting substances but also restricts trade in *products* (refrigerators, aerosol products, and air conditioners) that contain such substances.

... Numerous other MEAs rely on specific trade restrictions to achieve their environmental goals, although few have been as successful as the Montreal Protocol in terms of gaining support of most states, and in achieving such relatively impressive

outcomes. Some MEAs include trade restrictions as options rather than compulsory measures.

... For example, although there are no specific provisions for trade sanctions in the 1997 Kyoto Protocol, parties trading under carbon trading schemes set up under Kyoto Protocol might wish to exclude trade in carbon credits with non-parties as means of punishing outsiders and defectors, and/or inducing and rewarding cooperation (Eckersley, 2004:25-28).

MEAs can be seen as incentives for the signatories to cope with environmental challenges. In this institutional architecture, this overarching organisation co-ordinate all these agreements. UNEP was not a strong central environmental organisation (Wagner and Brinkmann, 2005:10).

The work of UNEP has been weakened by low status, unclear leadership, insufficient funding and incoherent structure. Unlike UNESCO or UNICEF, UNEP is not a UN specialised agency within the UN system (Wagner and Brinkmann, 2005:10).

For instance, The president of France Chirac, was first to demand the creation of UNEO. Also, the French environment minister has called September 2005 UN reform summit in New York a historical chance for the accomplishment of this challenge. It is argued that if a United Nations Organization is established, environmental issues will gain much greater recognition on global level. France's initiative was supported by Germany and Spain. These three countries also underlined in a joint statement the need for an institutional authority that is capable of bringing environmental issues to the top of international agenda but the USA government particularly, reluctant to extend the powers and budget

of the UN. Non-governmental organizations and environmental pressure groups are very much in favour of a UNEO, hoping that, this kind of organization under the framework of UN can give MEAs a greater significance. However, many developing countries have expressed that they could suffer under UNEO's enforcement powers. It will be a challenge for the supporters of UNEO to find ways of empowering links between environmental obligations and levels of development, that was established at the 1992 UNFCCC(Wagner and Brinkmann, 2005:11).

In the UNFCCC it was mentioned that, countries should contribute to climate protection "in accordance with their common but differentiated responsibilities and respective capabilities" (Wagner and Brinkmann, 2005:11).

When we look to the future of environmental governance we can say that climate change is the main global problem that needs urgent response. For this problem, Kyoto Protocol seems like the solution or at least response of that urgent need.

The American Government is the strongest opponent of the Kyoto Protocol and claims that a different approach is needed. And the USA favours the development of new technologies rather than obligatory caps as solutions. When it comes to European Union, it can be said that The European Union played a leading role in writing the Kyoto Protocol and is very keen on staying at the forefront of environmental governance.

The long term goal of the European Union is to develop a medium and long-term EU strategy to combat climate change and to reach the ultimate objective of keeping global temperature rise below 2 degrees Celsius over preindustrial levels. The Union's communication 'Winning the battle against global climate change', highlighted the increased importance of what was called the 'Innovation challenge'. This 'challenge' demands a more sophisticated and thorough analysis than hitherto of the way in which energy is produced and used as a basis for new environmental legislation. (Wagner and Brinkmann, 2005:12).

This is also reaffirmed by G8. After this reaffirmation, the USA signed a co-operation agreement with five Asian-Pacific countries, with a more market orientated position, based on development of new technologies. The pact is not like Kyoto Protocol, it is non-binding and sets no targets. The reactions to this agreement are different. There are debates about whether this six-nations pact is a complement to the Kyoto strategy or aims at actively reducing emissions. In addition, the initiative has been criticised for focussing too much on developing technologies for future and ignoring the urgency for action today. The European Commission declared that the pact is working on similar bilateral agreements and also underlined that these agreements have to part of a more comprehensive programme and stressed that voluntary agreements will not make a significant impact on reduction of greenhouse gas emissions (Wagner and Brinkmann, 2005:12).

The EU has a major stake in the development of a new global order. In this new global order environmental issues have an important place. One of the European's concern is to take leadership in environment.

The German government published a report in which there were suggestions on the EU's role in a future environmental strategy. Three forms of leadership were developed: Directional leadership, structural leadership, instrumental leadership. Directional leadership involves domestic actions and meeting the Kyoto targets.

Structural leadership includes the use of the general and economic weight of the EU. Instrumental leadership can be understood as playing an active role in building coalitions. Also environmental groups, together with the European Environmental Bureau call for the EU to continue and strengthen its global leadership role in environmental governance. EU has to prove its determination by handling the problems on the domestic level in order to be the leader of the environmental governance. The willingness to put environmental problems was first recognized by the French government and it was mentioned in a report in March 2004 that "controlling the greenhpuse effect will involve broad progress in society as a whole. There is an increased domestic action in EU and that would be the proof of Europe's credibility and reliability as the global leader of environmental governance" (Wagner and Brinkmann, 2005: 13-15).

In conclusion, although the actors's perceptions about environment are very different, organizations or programmes can be carried out and MEAs can be accepted. Especially US and EU environmental policies are diverging.

Viewed across the array of risks, both the US and Europe are precautionary about many risks, but they differ on which risks to worry about and regulate the most. It seems that EU has willingness to make agreements about environment, to establish an environmental governance and to have the role of leadership in this global order.

4.3. Different Models of Governance in the EU

In preparation for the G8 meeting in Gleneagles in July 2005, France, UK, Germany, Sweden, Finland, Denmark, Italy tried to put environmental issues at the top of the agenda but at the end the desires are shadowed by the London bombings of July 7. Gleneagles meeting is corner stone for showing the importance of the environmental challenges for European Countries (Wagner and Brinkmann, 2005).

Apart from the global incentives for environmental issues European Union since 1972 Stockholm Conference, has created a system of environmental governance. EU has a wide range of legislative measures from the pollution control to waste management. EU's environmental policy is extensive and stringent. Decision making on environmental policy is institutionalised both within Europe and at the EU member states level.

System of environmental governance is not only the existence of internationally agreed environmental measures but also institutional formulation for the development and implementation of policy. Institutionalisation involves policy principles, rules, conventions, norms and practices(Weale et al, 2000).

European environmental governance is also in some degree to be said that “ member states have ceded some of their sovereignty in a field of vital policy importance to their citizens” (Weale et al, 2000:1).

In the globalisation process the goal of governance reunifies the tensions between nations, interest groups or regional group’s collective preferences. Under these circumstances governance can be taken as a new political approach, aims at avoiding complexity rather than at contolling the existing tensions in that complexity (Lamy and Laidi, 2001: 9).

There are five different models of governance such as governance as a means of preventing a systemic crisis, governance as the integration of actors excluded from the process of globalisation, governance as a means of interlocking societies, governance as a means of recognizing the collective preferences of each society and governance as a project of sustainable development (Lamy and Laidi, 2002: 7). The models indicated have proven difficult to reconcile, there is neither consensus on objectives nor the means to achieve them.

Also at European level, there is no strong consensus, Europeans do not have a common vision of governance and clear collective desire to assume a political leadership role. Solana paper shows a growing consensus within the union that EU should be the player not payer in the global arena (Lamy and Laidi, 2002: 8).

Given this information, trying to mention the collective preferences of Europe in the following paragraphs, the European model of global governance is tried to be explained.

Europe being essentially as a soft power, has a powerful attraction in the world (Lamy and Laidi, 2002: 9). It may have its own military capability and an autonomous diplomacy in the near future but these instruments of power does not mean that they will be used as a part of a strategy of domination. It seems little possible that Europeans will use hard power except under very exceptional circumstances. Apart from some general agreements on certain principles, Europeans do not have a shared vision of governance, but this does not mean that the end of the acting. For example, in the short period the most realistic course of action is the Confidence Building Measures under the control of UN. Those measures designed to increase confidence, such as the mission of building transparent financial information held by central banks relayed to IMF.

Another example is EBA (Everything but Arms) initiative, it is an initiative which guarantee free and unconditional access to the Community's market for all products coming from the poorest countries with the exception of weapons. Although EU has not clear collective desire to have a leadership role, the search for global governance itself constitutes Europe's primary preference (Bosselman, 2002).

One of the characteristics of EU in the recent years has been the move to create regional bodies (Cameron, 2003: 12). When it comes to the main collective preferences of Europe it can be accepted that Europe's main collective preference is global governance. If we think of governance, in terms of order, we can say that it is a non hegemonic and pluralist collective world order.

Europeans preference for global governance also shaped by the demands of political positioning. Historically, political structures have developed from the inside working against external constraints and this constraint generally has been war. It is obvious that any European action in support of global governance requires European's reinforce their own governance. Europe's limited mobilization on the issue of global governance can be explained by the fact that the harmonization of the European positions on many issues outside the community is still insufficient (Lamy and Laidi, 2002: 10).

In addition to the above arguments the cultural factor must be taken into account. This cultural factor can be explained as European's desire for better standards of living and this objective obliges Europe to search for a development model that is sustainable in three ways: economically, socially and environmentally (Lamy and Laidi, 2001: 11).

As Lamy and Laidi note, the second important collective preference of EU is non hegemonic culture of global relations. This idea consists of the defence of human rights, the respect of cultural diversity and the rejection of unilateralism in favour of consensus.

The third collective preference of EU is the reduction of global inequalities. Europe has a real interest in the problems of development and the fight against poverty. Despite this, Europe's performance in this field is far from spectacular. There has been no intimate European discourse on global inequalities (Lamy and Laidi, 2002: 12-13).

The fourth collective preference is the scope of this study, the environment. In this area the goals of EU are relatively clear but there is a lack of implementation. Anyway the idea of world's environmental organization should be seriously considered. Of course, the creation of that kind of an organization can not guarantee anything, however it could provide a forum for global debate. Of course the structure of such an institution is important. It must ensure the representation of all actors, not just governments (Lamy and Laidi, 2002: 12-13).

The other important collective preferences concern food security, health and social rights. In the field of food security and health WHO and the FAO are influential. When it comes to social rights it is necessary to extend the respect of minimal social classes in all trading activity. In this area like the others the means of expressing preferences exist but their political recognition are insufficient (Lamy and Laidi, 2002: 12-13).

European strategy for global governance can be built around a reactivation of existing international institutions, capable of expressing global collective preferences. Given this information the question of political and institutional harmonisation can not be resolved by establishing super regulatory body. Therefore it seems preferable to start by reinforcing the power of existing institutional organizations such as WHO, ILO, FAO (Lamy and Laidi, 2001: 12).

The EU model has a success in issues like commitment to democracy, the rule of law, human rights and a willingness to share sovereignty in the certain areas. It is crucial to remember that no other regional body has the will to accept such a supranational authority. The EU has an interest in promoting its model as a contribution to good governance. As a pre-requisite to effective cooperation and global governance, it can also be a pre-requisite to tackle many of today's global problems such as poverty, sustainable development and protecting the environment. Maybe its soft power character is much more effective than the swift use of military means (Cameron, 2003: 12).

The EU is an arena where formal sovereignty can be exchanged for real power, national cultures can be nurtured and economic success improved. The EU is better placed to advance national interests than nations could possibly do acting alone: in commerce, immigration, law and order, the environment, defence and many other areas.”(Giddens and Beck, 2005: <http://www.guardian.co.uk/comment/story/0,,1584115,00.html>)

As Giddens and Beck notes, EU is not just an unfinished nation or an incomplete federal state, but instead a new type of cosmopolitan project. The diversity within the European Union, which can be perceived as a disadvantage, can be the solution itself (Giddens and Beck, 2005).

Finally, there are, of course, many debates whether the European model of governance could be a solution for global problems. Being aware of the shortcomings of European model, yet there has not been a project that has tried to solve global problems by peaceful and political means rather than by military. This should be the indicator of the ability of peaceful means to solve some global problems. Environmental problems are one of the global problems which Europe attempts to solve by that way.

5. COMPARISON OF THE ENVIRONMENTAL GOVERNANCE AND RISK MANAGEMENT IN THE EU AND THE USA

In this chapter, the USA as an influential global actor and the EU as an important supranational institution are examined in terms of environmental governance and risk management. The USA, because of its political and economic power, has a crucial importance in the global environmental governance. It uses pioneered domestic environmental programs that were adopted in other industrialised countries. On the other hand, EU as a newcomer environmental actor also plays a crucial role in the governance. Analyses of the risk management is very crucial for understanding different perceptions of the states and organisations of the environment. It shows in what extent they are interested in the issue. The preliminaries of the actors such as economic tendencies or more environmentalist approaches can also be examined by studying risk management.

“Earth is experiencing important and harmful environmental changes” (Harris, 2001:3). In recent decades, there has been a huge connection between human activities and environmental changes. The protection of the environment became important for the United States and the EU in the 1960’s, especially by the effects of Rachel Carson’s

book *Silent Spring*, which led more organised and planned measures (Kramer, 2004).

While the protection of the environment has expanded gradually to all the industrialized countries, the EU profile in 1960's was not so brilliant. For example, Sweden, Austria, Finland, Germany, Netherlands, Denmark and Norway were the pioneer states while Greece, Italy, Spain, Portugal were the environmental laggards. Although the pioneer states enacted new stringent standards to environmental regulations, laggard countries adopted regulations later and their standards are weaker. From 1960's to mid 1980's American regulatory system was more stringent than the European countries or the European Community's. A number of important consumer and environmental protection standards were more strict in the USA compared with the EU.¹² 1980s and 1990's were transitional years. There were fluctuations both in the EU and US. 1990's "American hare became a tortoise" (Vogel, 2002: 3).

5.1. General Outlook to the USA's Environmental Governance And Risk Management

Consumer's protest of genetically modified food and mass reaction to the withdrawal from Kyoto, push the US to handle environmental governance seriously on the agenda.

¹²“ British agencies generally require more definite evidence of carcinogenetic before initiating regulatory action than their American counterparts. More often than not, the US was first country to take significant restrictive action suspected or confirmed human carcinogens” (Vogel, 2002: 4).

The system of governance is examined in detail under the title of environmental governance in the US.

5.1.1. Environmental Governance in the USA

With the outputs of today's world system, governance has become a fashionable term in so many areas, such as environment, social policies and so on. The USA's reunciation of the Kyoto Protocol by Bush administration and the ratification of the same protocol by the EU and Japan, showed USA that global environmental regime can be sustained without her. This gave speed to the evolution of the USA's environmental governance system.

The USA and the EU are two green giants that practice environmental federalism. Regulatory authority in the US is often shared between the two levels of the government; federal and state. Federal government plays a powerful role to set minimum standards and state governments takes the responsibility for policy implementation mostly. Although state government supports a federal states policy making, in some cases they blame the federal government for the regulatory failures.

Federal government was first active in the pollution control issues in the late 1940's and 1950's along with a series of research and funding programmes assisting local governments.

Until the 1960's many issues such as water and air were managed at the individual states level. In the US public concerns about environmental pollution pushed Congress to adopt federal air pollution legislation in 1965 and in 1967. President Richard Nixon established Environmental Protection Agency (EPA). It took powerful regulatory functions from the Congress. Since the end of the 1960's detailed and prescriptive legislative instruments have been used with the federal executive institutions (Kramer, 2004).

Environmental policy in the USA was shaped in the 1970's by the adoption of federal legislation which was related with air, water pollution, industrial permitting, nature protection, and finally soil. EPA had strong enforcement mechanisms interfering to the market. With the growth of EPA, USA government plays a powerful role in the implementation and enforcement. The USA government has never seen the state governments as the primary implementers and enforcers of the federal law (Kramer, 2004).

In the early 1980's with the Reagan administration deregulation was started. EPA's responsibilities were limited and states became more responsible for the regulation of the environment. They tried to adopt economically more efficient policies and they made cost effect analysis. The administration of federal statutes became the key point of the US environmental protection measures.

The divergence between the executive body and the Congress sometimes posed problems for legislative measures and for the new protective measures. Not only the divergence between executive body and the Congress but also lack of presentation is an important issue for the USA. In the USA the delegates were led by the state department or department of commerce, that's why state level environmental offices have never been presented at the international level (Kramer,2004).

The USA, in favour of global institutions and instruments, gives importance to the economic benefits of the free trade rather than environmental protection. Environmental protection in the US is totally opposed to the state interference in the market. The cost benefit analysis and risk management are applied by the EPA not by the Congress. The risk management process, as an important part of the environmental protection is examined in detail in the following part (Kramer,2004).

5.1.2 Risk Management in the USA

Risk and uncertainty are two common concepts of natural sciences. It has an important role in today's understanding of late modernity by underlying the new fashion themes for example; insecurity, alienation and pollution. Moreover as Stirling underlines "risk as a central theme in the environmental social science" (Stirling, 2004:33).

1996 study of National Research Council and report of EPA stress the necessity of the characterization of the risk. The risk's cumulative effect burgeon international regulatory activity around the precautionary principle. The principle takes its formal shape in Vorsorgeprinzip in Germany's environmental policy.

Since then, by lobbying activities campaigning of the international environmental organisations and precaution have moved from the field of marine pollution into the areas such as climate change, biodiversity, genetical modification, chemical regulation, food safety, public health. This approach has become a common element in the risk management. The influential form of the the precautionary principle is found in the 1992 Rio Declaration. It stresses that Whereever there are threats of serious or irreversable damage, lack of scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation . With the precautionary principle new form of risk management is defined. Precautionary approach involves the adoption of more long term integrated and inclusive social process for the governance of risk than typically embodied in conventional risk management (Stirling,2004).

Conventional processes of risk assessment takes place in circumscribed institutional settings, involving a narrow range of specialist perspectives oriented towards discrete, definitive conclusions and engaged in largely one way communication with external sociopolitical discourses. Precautionary process extends the knowledge base for appraisal.

Although precautionary principle is very important for the environmental policy some states, because of the market reasons, try to escape from using it. It's basic aim is to prevent the threats to public health and to form the true usage of natural resources. In modern democracies, scientific experts and their values have been playing a more significant role in the policy making process. Such kind of modern government's duties is to reduce huge risks. They should act without having complete information about potential risks. It means in the regulation process they do not wait for the rational proofs (Vogel, 2003). For example; in the United States like in the contemporary Europe, risk manageable policies are being more used than regarding the approval of new products or processes than existing ones, because of the economic causes which would become more strict and can also be divided or crashed the political stability (Vogel, 2003). Many United States law order activities should be done for preventing risks and adopting standarts without having exact evidence for harm. This system also gives the health and safety responsibilities on the shoulder of the producer firms because they are obliged to obey such kind of precautionary rules.

Thus precautionary approach caused many pollution control situations in United States during the 1970's .

As an example; the 1970 Clean Air Ammendments require the Environmental Protection Agency (EPA) for applying an adequate margin for safety to form limits of hazardous pollutants.

The Clean Water Act in 1972 also turned to adopt precautionary principle to reduce high risks in navigable waters and finally, The Clean Air Act Amendments of 1977 directs EPA to prevent risk instead of waiting for the proof or the evidence of harm (Vogel, 2003).

Precautinary approach as risk management also effects some judicial decisions in the US courts. For example in Reserve Mining Supreme Court has given the right to EPA to regulate an affluent on the basis of potential danger. Congress used the term of endangering with a precautionary or preventive way, so evidence of potential harm and actual harm became under the same umbrella with that term. Regulatory activities are taken before the threat occurs. It is the absolute structure of the precautionary principle if an evidence of a danger is seen, the preventive action begins for reaching more and more definite information. About this for example, the court allows EPA to form strict standarts on toxic water pollutants even there is no rational evidence as they put public health in danger (Vogel, 2003).

Finally, the precautionary principle in the USA was more rigorously applied in 1970's but up to 1990's and until now the EU has filled the gap and become more stringent than the USA, because the USA sees the precautionary principle as "an antidote to industrialization, globalisation and American risk taking". For some scientists, the precautionary principle is the barrier to trade and progress (Christoforou, 2004: 17; Wiener, 2003: 215).

5.2. General Outlook to the EU Environmental Governance and Risk Management

At the UN Conference on Environment and Development (Earth Summit) in 1992, the EU played an active role with its new face. Since the Maastricht Treaty, European Community has signaled a high level of environmental concerns over the union and active player role for promoting global environmental sustainability. In this section the institutional and current problems are handled.

5.2.1. Environmental Governance in the EU

Although the European Union environmental governance structure is discussed in the third chapter in detail some brief explanations is given in this section for the comparison.

In the late 1960's concerns about environmental issues increased in the EU. For the EU officials development of an environmental policy at the union level increased the popularity and the power of the EU both at the citizen and at the global level. By this way, they desired to remove negative effects caused by different national standards to the common market .

Generally, EU was in a very different situation compared with the US. It is a supranational institution which constitutes by the nation states, and its members have very different perceptions, objectives and desires from the union. In the late 1960's most of the environmental decisions were taken in the form of directives. The adoption of the directives is made with unanimity in the council of ministers, therefore pressure of the community in this field is weak (Kelemen, 2004).

There is a big divergence in the union; members with strict environmental regulations such as Germany and Netherlands are favoured for the EU's role in the environmental policy, while the laggards are only in favour for the establishment of the common market policies because the leader countries can use the environmental standards as restriction on imports. Hence, The Community began to adopt the EU level environmental directives and regulations in the late 1960's, environmental policy is fortified by the establishment of a separate Directorate General (DGXI) in the 1983. Single European Act in 1987 was a treaty basis for EU environmental policy (Kelemen, 2004).

Throughout the 1980's EU's implementation problem has been mounted. EU parliament put pressure on the Commission for the enforcement of the noncompliant member states. It propose the establishment of European Environmental Agency (EPA) for monitoring the states. During the Maastricht treaty negotiations with the EU poor member states demand increased funding for the implementation of environmental directives and in 1997 Amsterdam treaty extended the codecision procedure in environmental policy (Kelemen, 2004).

Although many rules are taken and fortified by the treaties, the fragmented institutional structure of the EU was an handicap for the effective environmental policy. The separation of executive and legislative power and the lack of trust between the council, commission, the parliament and the member states within council have encouraged the enactment of legislation which underlines the rules that member states had to fulfill such as the deadlines or the procedures they had to follow. European Parliament distrusts both the commission and the member states, because it favored inflexible, detailed laws that limit member states discretion and encourage the commission to take enforcement actions. Not only the parliament but also the member states in the council distrust with one another and they are always in favour of the directives and regulations which were out of obligation (Kelemen, 2004).

The fragmentation of power also encouraged the Court to take an aggressive judicial review. This judicial assertiveness encouraged the commission to take an active role in the prosecution of noncompliant members (Kelemen, 2004).

5.2.2. Risk Management in the EU

Risk management process is very important for the Community and the member states. Until 1980's US was in favour of most of the environmental agreements such as The Convention on International Trade in Endangered Species of flora and fauna (CITES) in 1973 and Montreal Protocol on substances in 1987 ratified them. But neither European countries nor the EU supported them. An important factor which changed EU's perceptions about risk management was series of regulatory failures which decreased the public's confidence to protect people's health, safety and environment.

The observation of the Washington Post in December 1988 highlight the reason ,

Dead seals in the North sea, a chemical fire on Loire, killer algae off the coast of Sweden contaminated drinking water in Cornwall. A drumbeat of emergencies has intensified the environmental debate this year in Europe, where public concern about pollution has never been higher (Vogel, 2002).

According to Elizabeth Bomberg, “disasters made an impact. In 1992, the protection of the environment and fight against pollution had become an immediate and urgent problem in the view of % 85 of EU citizens”(Bomberg, 1998: 13). The view of the citizens pulled the attention of the Community thereby precautionary principle as a preventive action was spoken and discussed more broadly.

The roots of the risk management and precautionary principle could go back to the concept of *Vorsorge* that emerged in the West Germany in 1970's. In 1976 federal government reported that environmental policy was not successful about wording of imminent hazards because precautions furthermore would protect the natural resources (Vogel,2003). During 1980s Germany had a strong economic growth also Green Party gained political influence, after that time precautionary principle began to effect German environmental policies. German industry also started to play a crucial role in the commercialization of greener technologies. They brought technology based standarts to reduce sulphur emmissions and to protect German forests from acid rain and in 1990 Ministerial Decleration on the North Sea represented the first introduction of the precautionary principle in to the international environmental law (Vogel,2003).

It included the governments to apply precautionary principle to prevent potentially damaging impacts of toxic substances. Finally in 1993 with the Maastricht Treaty the precautionary principle was officially entered in to the European Union's environmental policy within the article 130. After that its number changed as Article 174 with 1999 Amsterdam Treaty (Vogel,2003).

Between the years 1994 and 1999, 27 resolutions adopted by the European Parliament. In April 1999 the Council of Ministers formed a resolution that urged Commission to direct the precautionary principle, preparing proposals to develop clear and more effective guidelines for application (Vogel,2003). Commission wanted to prevent the member states from using that principle for legitimating regulatory policies which undermined the single market and at the same time reassure the European public of its commitment to high level consumer and environmental protection (Vogel,2003). The commission declared that regulatory policies should be prepared in specific scientific base. If it is possible, every decision must be originated from a scientific information. It means precautionary measures should be prepared in the light of scientific progress and data (Vogel,2003). In this scientific progress, there was an adaptation of more flexible approach which argued that such an evaluation might not always be possible according to unsuccessful data or urgent risks that was discussed in the Nice Summit.

Also a big importance was given to the civic participation in formulating regulatory policies because there was a need to legitimate public views, in the decision making process. Although science experts or scientists were responsible from scientific data, essentially politicians were responsible for risk management process.

In 1998 , the decision of the European Court of Justice was a good example to the precautionary principle. The decision was about the banning of British beef import to the member states. Citizens were informed according to the precautionary principle. In 1999 by the European Scientific Steering Commity declaration member states were told to lift bans from import to British beef (Vogel,2003). In that case, French government informed French citizens that their beef was more safe. In such kind of situations , some parties try to gain profit while they were saying that they had tried to establish a reasonable risk mangement. European Commision was successfully charged French policy and decided to solve this question in the field of European Court of justice. Finally, French lift the ban in 2003. After that problem, European Union began to give more significance to scientific evidence. The European Court of Justice adoptad several help and safety standarts for adequate scientific justification(Vogel,2003).

5.3 Comparative Approach to the EU's and the US's Environmental Governance and Risk Management

After a general outlook to the United States and European Union environmental policies first of all it can clearly be shown that United States legal system is much more stronger than the European Union's because EU left adoption of the regulations to the authority of the member states (Vig and Faure ,2004). EU regulatory decision making becomes increasingly transparent, about public scrutiny and also about juridical review. The public participation opportunity gained weight in policy making process .

American regulator status prohibited the cost benefit analyse usage to form the standarts. The EU had no official requirement for quantitative cost benefit analyses. A number of member states have qualified the precautionary principle by considering the economic factors in formulating regulatory rules. For the EU, public health must take precedence over economic consideration (Dyke,2004).

Although the rule of risk management in the EU and the US are seen as a similar picture. American regulatory policy making change after the Supreme Court decision about the down standart of benzene exposure in the workplace in 1980 (Vogel,2003).

In this case, the Court struck down a standard for benzene exposure in the workplace issued by the US Occupational Safety and Health Administration. With this decision form of uncertain risk turned in to the significant risk (Vogel,2003).

As a result decision made some changes on the methodology of risk assessment obligatory for American agencies which engaged in risk regulation. There was an important emergence of risk base approach in the environmental and public health decision making process in US. EU considers scientific risk assessment as an essential component of the precautionary principle of both the EU and the USA courts acted similarly about taking advice of scientific commandators (Vogel ,2003). In 2001 White Paper identifies the future of chemical regulation in Europe. With this paper, high concern will need to be authorized and will be formulated by regulators if the firms can provide without risky methods. This means that burden of proof placed on companies to make stable their self safety.under current EU and US low risk assessment about chemicals which are under the responsibility of the regulators not the firms.

So very high concern chemicals will be evaluated not according actual risks but on the more sweeping bases of hazards assessment (Vogel,2003). Also the range of politically acceptable risks have widen in the EU although it was stabilized in the USA.

In some policy areas European public opinion is now more risk averse than the USA. In Europe public trust to the politicians and the scientists is very low that's why risk management policies in Europe and the USA are moving in different directions. European policy makers are reacting to policy failures stemming from inadequate regulation at the same time the USA policy makers are trying to minimize policy failures. Also scientific expertise becomes more important in the USA while it becomes less acceptable in Europe. European regulatory officers are trying to regain public trust for regulatory institutions, decision making has become more technocratic in the USA (Vogel, 2003). The regulations which are adopted by EU are more precautionary than the regulations of the USA. The Americans considered that new technology and the power of American market solve every problem and precaution is a waste of time and great handicap to the progress (Stirling, 2000).

In conclusion, the differences between the European and the USA regulatory policies do not come from the issue that the EU and several member states have adopted the precautionary principle, while the USA has not. The precautionary principle does not reflect a distinctive European way of risk management. Key elements in its official exposition by the EU – the right to act under conditions of uncertainty, the importance of public participation, and the priority accorded to risk avoidance - have long characterised many US regulatory policies as well (Weale et al, 2002).

The differences between the USA and the EU on how to challenge with the global environmental problems, European leaders always had some doubt whether the American government has taken seriously those issues. In recent years, US is unwilling to share its sovereignty with the international bodies in any policy areas. There is a profound commitment to the protection of America's economic interests. For their part American representatives does not accept European's suspicions. For example in the green house emissions issue, they argue that "improved technology will allow the industrialized and industrializing world to combine robust economic growth with effective action to reduce greenhouse emissions"(Schreurs,2004:76). More stringent health, safety and environmental regulations are now greater in Europe than in the US that a number of regulations enacted by the EU are now risk averse or precautionary than in the US. European Community Treaty also emphasize on the importance of the issue by stating that "Community policy on the environment shall aim at high level of protection taking into account the diversity of situations in the various regions of the Community" (Schreurs, 2004:77).

6. ENVIRONMENTAL GOVERNANCE IN TURKEY

This chapter starts with an analysis of Turkey's environmental governance agenda and follows by the environmental participation in Turkey, finally, it tries to clarify the importance of the education in environment. It aims to show whether Turkey is ready to the EU membership or not.

6.1. The Analysis of Turkey's Environmental Governance Agenda

This chapter tries to cover the evolution process of Turkey's environmental policy by emphasizing on the traditional perceptions of environmental governance, the effects of the Turkey's adoption process to the EU and finally the importance of education in the environment.

Turkey is located at the crossroads between Europe and Asia. It covers 779.452 square kilometers. Turkey's 8.333 kilometre coastline along the Black Sea, Sea of Marmara, The Aegean Sea and the Mediterranean Sea. The country has young population of more than 65 million and Turkey's gross national product was about usd 200 billion\ 2900 percapita.

According to United Nations Development Programme human development indicators, Turkey ranks 86 out of 180 industrial countries. The country is divided into four coastal and three inner zones. By its geographical variety, Turkey has different environmental concerns (Okumuş,2000) .

These different environmental concerns started to cover since 1970's. In 1978 , The Prime Ministry Undersecretariat for Environment was founded. Its responsibility was to coordinate all national and international activities related with the environment. It targeted to set an effective environmental policy regulation. Institutional and legislative bases of the environmental protection developed during the 1980's.

Although the 1982 constitution lack of democratic standards, provided many articles which gave so many environmental duties and obligations to the citizens and to the state for example; Article 56 defines environmental rights not only the state's duty but also the duty of the citizens (Keleş and Hamamcı,2005; Budak,2000). In 1982 the 2872/ Environmental law – forced in 9/8/1983- added many new measures. According to the Environmental Law “the environment as a whole, is not only to prevent and eliminate environmental pollution, but also to allow the management of natural resources and the land”(<http://www.ankara-bel.gov.tr>).

With the Environmental Law many regulations have been adopted such as;

- Air Quality Control Regulation (1986)
- Water Pollution Control Regulation (1988)
- Noise Control Regulation (1986)
- Control of Solid Waste Regulation (1991)
- Environmental Impact Assessment Regulation (1992)
- Regulation of Control of Medical Waste (1993)
- Control of Toxic Chemical Substances and products Regulation (1993)
- Control of Hazardous Wastes Regulation (1993) (Okumuş,2002:10).

In August 1991, the Undersecretariat was replaced by the Ministry of Environment. The responsibilities of the Ministry of Environment extended, its power glorified by the implementation and enforcement mechanisms (Somerson,2000). Today, the activities of the Ministry of Environment extended to the issues such as appropriate land use, conservation of natural resources, protection of plant, animal species, prevention of pollution and raising public awareness.

The rapid increase in the environmental degradation pushed not only international organizations but also Turkey to take action and to make rules, regulations, law. Although with the support of international organisations, Turkey tries to make an improvement in the institutionalisation and management processes, there is always a problem of implementation. The reasons of the implementation deficiencies in Turkey can be summarized in 3 main points.

First one is the lack of funds, second one is the lack of trained personnel, finally but very importantly, the political influence of the economic and social actors (Okumuş,2002).

Apart from the three main points, Turkey's industrial development does not contain any environmental values. Turkey does not pay any serious attention to the recommendation of the World Commission on Environment and Development - Bruntland Report, which was the first serious document that underlines the relationship between the environmental degradation and industrialization- (Aydın, 2005). Hence, Bruntland Report focuses on the interaction between environment and industrialisation. Until the late 1980's and early 1990's environment and the development were taken separately in Turkish industry.

By the international pressure on the sustainable development process environmental NGO's and Turkey started to come closer in the industrialisation and sustainability. Turkish state shows signs of "critical engagement¹³" with NGO's . The National Program on Environment and Development that was written for the Johannesburg Summit in 2002, is a very important sign of the critical engagement. State invited civil society organisations and academics to the preparation of the national program.

¹³ Critical engagement "refers to a two- way process between the state and NGO's in which each party recognises the other's distinct capabilities and powers and believes that the other's qualities are necessary to tackle and solve social and environmental problems." (Aydın, 2005: 60).

The active participation of the NGO's in environmental issues can also be seen at Rio, İstanbul and Beijing summits. Civil Society in Turkey suffered from lack of professionalism. NGO sector in the world creates employment and affect GNP. For example more than 4 percent of the national income in Germany is taken from this sector but in Turkey employment and full time approach are lacking grassroots organizations are so difficult and NGO's organised mostly around the big cities and the motivation are too week (Aydın,2005).

Most influential NGOs which represent Turkey's civil society are DHKB (Association for the protection of Wildlife), ÇEVKO (Environmental Protection and Packaging Waste Recovery and Recycling Trust), TURMEPA- DENİZ TEMİZ (Turkish Marine Environment Protection Association), ÇEVRETED (Association of Environmental Technology Constructors), TEMA (Turkish Foundation for Combating Soil Erosion for Reforestation and for the Protection of Natural Habitats) are established or supported by the big private companies. The target of the NGO's is, to construct public awarness by lobbying, or compaigning. Their participation have increased the pressure on central and local authorities for good governance (Aydın,2005).

In the good governance system citizens and business sectors saw themselves as stakeholder in this way positive changes for benefit of the environment can be succeeded and even though those changes may be attached to personal, individual interests, especially in the short run (Aydın,2005) Although there are sufficient legal standards in Turkey which open the way of participation from different interest groups to the decision making process, there are so many difficulties in transparency, sharing the documents and information. Special privileges which are given to companies bear the infringement of environmental regulation in some cases.

The aim of the Turkey's environmental policy is to set up environmental policies and strategies, coordinating environmental activities on local, national than international level, giving environmental licenses, collecting data. These activities should be sustained in parallel with other ministries such as Ministry of Environment and Forestry. The Ministry of Environment needs to develop an inspection and enforcement branch to strengthen its capability. The enforcement can solely be efficient when the power is given to a specific institution but this does not work in Turkey. Existence of different institutions for enforcement and lack of coordination between them increase the ineffectiveness (Somersan, 2000).

6.2. Environmental Participation in Turkey Before and After 1980

As it is known that environmental participation is the basic step for the protection of the environment. Turkey is mature in that field. Environmental movements before 1980 was the beginning of environmental activism in Turkey. In the early years of the republic “the formation of beautification associations and major health and sanitation issues dominated the environment related political agenda”(Adem,2005:73). This period was also the foundation of Turkish Forester Association in 1924. Apart from this, there was also semi governmental associations such as Association for Conservation of Trees. By the liberalisation of politics in 1946, the number of city beautification associations increased but these organisations did not present masses, they were limited. Environmental organisations of the pre 1980 period were voluntary with specialised persons (Adem,2005).

After 1980 military coup, new social movements occurred. Green Party was established in 1988 by a weak organisational structure. Offices were mostly located in the west of Turkey. The party was closed because of internal problems. Although the green party was a latecomer in the political arena, it opened the way of environmental resistance activities for example, Movements against Akkuyu nuclear power plant or Aliğa thermic power plant.

By taking power from the green party, new environmental organisations formed in the 1990's (Adem,2005).

In the 1990's new generation of environmental organisations formed. Mediterranean Association was established in 1990, was a working group under the green party. This period was seen as a period of loose and informal organisations. Another significant development in this period is the growth of conservation movements. One of their success is the declaration of Dalyan as special environmental protection region in 1987. In the second half of the 1990's the efforts of the radical environmentalists, the institutionalisation and professionalisation process take place. There are industry led environmental protection organisations such as Environmental Protection Packaging Waste Recovery and Recycling Trust in its Turkish acronym ÇEVKO. By the help of these organisations daily business practices and environmental concerns are matched. The most important step in the institutionalisation process of the environmental policy is the establishment of Ministry of Environment, environmental research centers and environmental student clubs at many universities (Adem,2005).

Another Major issue beyond 1980's is Habitat II Conference held in Istanbul in 1996. After this conference NGO's have a close network with other national and international organisations.

Habitat II is not only a key conference for the coordination of environmental NGO's but also it is a crucial in the internationalisation of the environmental problems in Turkey. United Nations Development Program (UNDP), The Global Environmental Facility (GEF), and the European Commission's Life Third Countries Program are important among the organisations which provide Turkish NGO's so many opportunities. Turkish NGO's work with other international organisations on project based level (Okumuş,2002).

The most effective outside pressure which pushed Turkey to take environmental measures is, the European Union. In July 1959, Turkey's application to the European Economic Community was finalised by the establishment of an association. The negotiations are resulted in 1963 by the Ankara Agreement. Turkey's environmental situation presents an obstacle to the EU accession. Turkey must challenge the main conflicting issues.

These issues are listed as below,

- Improving and extending water supply networks
- Improving and extending waste water collection and treatment plants
- Ensuring that air emissions from large combustion plants are reduced improving air quality in many urban centres, ensuring that dangerous substances released from installations are controlled and risks of accidents are minimised
- Collecting, treating and disposing of waste from households, industry and hospitals
- Cleaning up contaminated land and rivers where water quality is unacceptable
- Protecting ecosystems, habitat species from economic and environmental pressures
- Reducing emissions of pollutants from economic sector and ratifying the Aarhus Convention and implementing its provisions (Okumuş, 2002: 22).

Within the Accession Partnership, the European Commission underlines environmental priority areas to be taken into consideration. The aim is to increase the institutional, administrative, and monitoring capacity of Turkey and implementation of the acquis. In the Regular Reports on Turkey until the 2004 Report there has no specific improvement. In the 2004 Regular Report on Turkey, there is an improvement in the adoption of the acquis but there is lack of implementation and enforcement. The Report emphasizes that;

Turkey needs to take steps to integrate environmental protection requirements into the definition and implementation of all other policies and promote sustainable development. Weaknesses in implementation and enforcement are still sources of major concern (COM(2004) 656 Final:136,137).

Compared with the 2000 Regular Report , 2004 report seems as a huge step because the former Commission emphasizes the differences between Turkey and EU in the field of environment (COM,(2004)656 Final).

In Turkey's National Environmental Action Plan 1999, referred to the adoption of the EU's "environmental standards and regulations at a feasible pace for the integration with the EU in the long term" (İzci, 2005: 92). Although Turkey became the member of the European Environment Agency and joined the European Information and Observation Network (EIONET) , it did not sign Aarhus Convention which was the convention on access to information signed in 1998. However thirty nine countries and the European Community signed it.

It is obvious that information plays a vital role in the environmental management process. Despite significant advances in environmental monitoring many environmental information are available from State Institute of Statistics and State Planning Organisation, there is no accessible, regular data. The establishment of an environmental observatory, nationwide environmental information strategy, and action plan METAP are all pending projects (Okumuş,2002).

The European Union apart from the other social and political procurements as a part of the capacity building program give 2.3 million euros and in January 2004, after the meeting which was held in Istanbul under the name of Environmental Financing Strategies the EU financed Turkey as a part of the Environmental Heavy Cost Planning Project. Moreover, Regional Environmental Center opened an office in Ankara in May 2004, for assisting the Ministry of Environment (İzci, 2005).

6.3. Environmental Education In Turkey

Education is the fundamental tool for the protection of the environment and sustainable development. Environmental education deals with a wide range of issues from the Agenda 21. In Turkey, the disciplines which are related with the environment are branches of engineering, architecture, economy, sociology and biology.

In recent times, by the foundation of the Department of Environmental Engineering, a new branch named as environmental engineering emerged. In medicine, there are also branches such as Environmental Health and Public Health and Medicine. Twenty two environmental research centers, eleven environmental engineering departments have been established in Turkey. There are also master programmes and P.h.D Programme at Ankara University and many other university departments which are also deal with the environment. (Okumuş, 2002).

The Seventh Five Year Development Plan emphasizes on the importance of environmental education for the well informed society. Complementary Courses are given to the students. At all level surveys, it is seen that the importance which is given to the environment is too low. Not only students but also teachers should take seminars for environmental education(Okumuş,2002).

In 1977, by the mutual work of UNESCO and UNEP, an international conference on the environmental education was held. At the end of the Conference Tiflis Declaration was published. The aim was to assist environmental education program in middle schools for three years. In all the developed countries, environmental education has become important . In our country its importance can be understood gradually. In current times, many attempts in this field are seen. For example Youth and Environment Europe as an umbrella institution come into existence in Turkey by the METU Nature Club.

It prepared Youth and Environmental Education Project with the assistance of the associations from European and Mediterranean Countries. This project was shaped by the discussions of annual meetings of the Youth and Environment in Europe. In Turkey, first attempt was made in Ankara with the preparation of weekly courses and the second attempt was Environment Education Pocket which was distributed around the European and Mediterranean countries (Bezirci, 2005).

In Turkey apart from the above improvements, there are also courses at the Public Trainer Centers and Trainer Chambers. Their desire is to increase sensitivity to the environment in the society. Not only the Public Trainer Centers but also Driving Courses give education about the environment. Instructors are trained by the Ministry of Environment and Ministry of Education (Bezirci, 2005).

In conclusion, Turkey with the privatisation of state enterprises, price liberalisation, integration to the Custom Union, and being the fastest growing country in OECD should sustain economic development with the environmental one. It is a centralized country in the policy formulation and governance. The government is involved in economic life. This centralisation aim to promote economic growth. Today privatization is one of the main issue of the government agenda. The system gives market forces an important role. Although there are so many laws, regulations, fiscal and other measures in force, these measures are not well coordinated. Adopting a number of concrete

environmental policy objectives, Turkish government tries to establish sustainable development in many fields. The Ministry of Environment has a crucial role in the environmental policy. Apart from the Ministry of Environment, National Environmental Action Plan was prepared by the State Planning Organisation and funded by the World Bank. It was adopted as a part of the development plan in 1998. The environmental infrastructure, and consciousness need strict environmental rules and support from the central government. Also municipalities and private sector should be strengthened (Okumuş,2002).

The increase in urban industrialisation and uncontrolled population growth, lack of environmental information, collecting data, lower level of public participation, financial problems are forefront handicaps of the environmental policy in Turkey however the membership for EU motivates Turkey for an environmentally friendly economy, therefore EU's positive effects of the environmental legislation are always in the Turkish agenda (Okumuş, 2002).

CONCLUSION

Environmental issues have been emerged as a major focus for the international agenda in the last three decades. Since the beginning of the 1960's, it has become obvious that most of the world's seas and oceans have been overfished, soil has been degraded and natural habitat has been destroyed but the environmental impacts of over exploitation or pollution have been local and communities could be able to escape the consequences of such activities. Through the widespread industrialisation and the rapid population growth, the problems have been internationalised thereby the solutions shifted from local to global.

This study starts with the definition of the environment and continues to analyse the major environmental problems, ethics of the environment and the role of social movements as a cataliser. Finally, as an important global actor, the role of the USA and the EU is examined. The situation of EU is very crucial because it influences economically and socially its neighbours by the enlargement process, it gives special funds to the regions which are in need of reconstruction and it helps to make improvement in some policy areas such as environment and education. It plays a sustainable active role in the economic and social affairs however the situation of USA shows differences in some aspects, for example although USA plays an important role in the global environmental sustainability with its political and economic power and since 1970's the global spread of

environmentalism has been under the American influence in world politics. Since the 1980's and 1990's anti regulatory and pro business stance of the Reagan and Bush administrations have seen as an important actors behind the major anti environmentalist policy. It has not a constant position in the social affairs.

And apart from this comparison, Turkey's situation is reviewed in an historical perspective. After these discussions, it is addressed whether or not a global environmental governance is really established and worked efficiently. Although the methodology of the study is descriptive in some parts it is mostly based on comparative techniques.

Humans can pay the charges of environmental pollution by their lives that 's why this issue has taken strictly or weakly in the agenda of the states. Since 1970s, many agreements, institutions and regimes for international environmental governance have been developed. Most of the international political activity related to the environment has been focused on the implementation of these regimes which raise questions about the role of the states in the environmental politics and about the distinction between the international and domestic spheres of the activity.

Historical experience has shown that, including many failures, some effective institutions for collective management have been developed to respond the environmental issues..

The system for international governance has not just dealt with the narrow range problems. Additionally, they form a complex interlinked institutions shaping the activities and regarding the expectations of all the actors. To promote sustainability, including to protect biodiversity and preventing to damage climate change have been the challenges in 1990s. The UNCED agreements provide a framework for international efforts promoting and achieving this. During the analysis, it is implicitly mentioned that the protection of the environment has a dimension of ethics and requires a reciprocal attitude towards the society's surroundings. Also it must be kept in mind that the notion of sustainable development, and the protection of environment, not only necessary for the first generations but also for the next ones .

This type of protection may be best achieved by improving individual-level knowledge, and understanding of the environmental issues, and through increasing the opportunities for the individuals to act towards environmental protection. To attain this challenging introductory task, information channels can be employed in the encouragement of environmental consciousness in the global civil society.

Economic globalization has placed new demands on environmental management across national borders, it has raised new questions about the appropriate roles of the private sector and of the international organizations in the environmental governance. Increasing democratization of political systems around the world and the growing

acceptance of the good governance norms have widened the path to public participation in decision-making which has never been possible to attain before. Parallel to these progresses, the rapid growth of non-governmental organizations such as environmental groups and other public interest advocates have helped to organize and to enable the public to be participated into the governance of the environment. Finally, the multiplication of new information and communication technologies have allowed social movements to coordinate at the global level and helped the public to hold governments and corporations accountable for their environmental performance.

When it comes to the role of EU in the global environmental governance, as it is discussed by many academists , the big picture that can be seen is twofold. On the one hand, EU should not only act as a role model but also should give the highest importance to implementing the highest environmental standards in Europe as to be a positive example for the others.

On the other hand, EU lobbies for global support for the institutional reform of the United Nations and the establishment of a strong United Nations Environmental Organisation. EU can be seen as a successful example of how sovereignty-sharing can work on a large scale. Moreover the EU is a good example for implementing international agreements quickly and efficiently but there is a need for

the EU and its member states' to dedicate towards the implementation of the environmental legislation. Environmental protection is seen as an opportunity but, not a limitation. It opens new windows for investment and technological innovation.

Europe can have a vital contribution to manage global environmental issues. The environmental governance structure, which was analyzed in this thesis, presents some aspects of the European method. Neither this method can be perceived as a model for developing countries nor it can be related to success in environmentally sustainable industrialized societies. Each nation has its own policy nature based on its social, economic, and political characteristics. However it is important to mention that Europe could not act alone in international environmental governance. Most of the environmental problems are global and it is not possible to solve them at a regional level. Moreover, each nation has its own perception about the notion of the environmental risk. The important distinction about this issue emerges between EU and US.

For example, because of the differences between the current EU and US positions on the Kyoto Protocol, the agreement has had a long implementation period. Without a significant change in the US position toward the Kyoto Protocol in general, the EU has struggled to implement the Kyoto.

Kyoto Protocol as a cornerstone of the environmental trends in the world, has not only important for the EU's involvement to the protection of the environment but also is significant to show USA perception to the environment. The Kyoto Protocol and the precautionary principle as a risk management tool can declare the different perceptions of the EU and the USA in terms of environmental policy.

Within the European environmental governance framework, Turkey's position remains uncertain. Rapid economic development attempts on a market-based economy is largely designed to promote economic growth, as an economic infrastructure itself is not sufficient to ensure sustainable development.

It is obvious; that the privatization process, which is on the agenda of the Turkish Government today, gives market forces a much greater role. Through this phase, the integration of economic and environmental policies reduces economic and environmental losses today in Turkey and provides preventative policies for the coming years. Although, there are many laws, regulations, fiscal and other measures, which are in force to direct the economy and to protect the environment, they are often not well coordinated or enforced and in some cases contradictory. In this respect, as a developing country, Turkey shall not be directly included into the analysis presented in this thesis as it has severe tasks to accomplish towards maintaining its institutional base.

Finally, environment is very important for the survival of all living things. The protection or sustainable usage of environment enables in three levels; individual level, state level and international level. At individual level, a great responsibility depends on the families, because people are not only the polluter but also the protector of the environment. Children should grow up by taking environmental consciousness in their families.

At this point, not only the civil society organizations, but also the mass media are important channels to touch contact with the families. For example, civil society organizations should prepare booklets for the children, and cartoon films should be broadcasted on TV.

At state level, states are the pioneer protectors of the common treasures such as oceans, forests, and rivers. To increase the level of consciousness, states have to give importance to the environmental education since the primary school, or at a broader level, municipalities have to prepare seminars for the environment. States have also make inspections to the factories and other sources of pollution; they should give penalty to them or stop totally their activities.

At international level, international institutions should make monetary or educational assistance to the poor regions. It can also be possible to sustain environmental protection by sending trainers to the countries that lack of, because so many developing or under developed

countries suffer from this problem. Environmental education is not given in Turkish universities. In Turkey, the disciplines dealing with the environment are generally architecture planning, some branches of engineering (construction, chemistry, physics etc.), sociology, economics, biology and geography. In recent years, due to the foundation of the Department of Environmental Engineering, a new professional branch named environmental engineering has emerged. In medical, there are such branches as Environmental Health, Public Health and Medicine. Currently the Turkish Treasury does not give any guarantee to the international financing institutions for the financing of environmental funds. Economic instruments used for the implementation of the environmental policies are insufficient in Turkey.

To sum up, the outcome of the thesis is, although the US pioneered domestic environmental programs, which were adopted in other industrialised countries, today, the EU has a leading role. EU is more influential on its surrounding by its neighbourhood, trade development, and enlargement policies. It plays an active role in the Kyoto Protocol and makes monetary assistance to the regions which are in need. In that case, this is not to say that the USA is not an important player in the global environmental sustainability anymore but today's picture shows us that the EU is not a negligible actor in the social affairs especially on environment. Impact of the EU on Turkish environmental policy is also on the increase. Legislation and the adoption of the environmental practices, are very crucial for Turkey

and it is now on the agenda of Turkish Government. As Turkey attempts to fulfill the EU membership criteria, it increasingly needs to take environmental considerations into account .

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