DECOUPLING DEVELOPMENTALISM-ENVIRONMENTALISM: HUMAN NATURE CONCEPTUALIZATIONS IN FRESHWATER ECOSYSTEMS MANAGEMENT IN TURKEY

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SEPTEMBER 2009

DECOUPLING DEVELOPMENTALISM-ENVIRONMENTALISM: HUMAN NATURE CONCEPTUALIZATIONS IN FRESHWATER ECOSYSTEMS MANAGEMENT IN TURKEY

A THESIS SUBMITTED TO
THE FACULTY OF ARTS AND SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

CEREN AYAS

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN THE DEPARTMENT OF
SOCIOLOGY

SEPTEMBER 2009

Approval of the Graduate School of Middle East Technical University, Department of Sociology

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ABSTRACT

DECOUPLING DEVELOPMENTALISM-ENVIRONMENTALISM: HUMAN NATURE CONCEPTUALIZATIONS IN FRESHWATER ECOSYSTEMS MANAGEMENT IN TURKEY

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June 2009, 143 pages

Would it be possible to go one step further than proposing sustainable development as the ultimate answer where people live within nature harmoniously if natural resources were not managed by central authorities, who mostly are male, aged, middle-class bureaucrats? Bearing in mind that we have reached a stage where ecological credit crunch will define human's limits remarks for non-teleological and eco-friendly ways of conceptualizing the relationship between human beings and nature is explored with an emphasis of 'who' that is local, female, young, social science-based, active in civil movement. The objective of conducting the research is to find out the ways why green approaches in social, political and economic spheres in Turkey are not integrated as a first step to decouple the antagonism in man's relationship with nature. The analysis tried to grasp the discrepancies of conceptualizing human-nature relationship in order to find out which segment of the

society would be closer to adopt green values, with the intention of proposing them to be involved in a greater extent to decision-making mechanisms with regards to natural resources management, as well as an attempt to grasp the overall picture in understanding nature-human relationship in Turkey by focusing on wetland management based on the research conducted in Bafa Lake (Aydın), Uluabat Lake (Bursa), Salt Lake (Konya) and Egirdir Lake (Isparta). Thanks to the scale that is constructed by operationalizing the existing debates on environmental ethics, agents that would follow more ecologically sound discipline towards living harmoniously within nature is analysed.

Keywords: sustainable development, nature, conceptualization of environment (environmental ethics), water management, Turkey

ÖZ

KALKINMACILIK – DOĞA KORUMACILIK DUALIZMINI ÇÖZMEK: TÜRKIYE'DE TATLISU EKOSISTEMLERI YÖNETIMINDE İNSAN – DOĞA KAVRAMSALLAŞTIRMLARI

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Haziran 2009, 143 sayfa

Doğa ve insanın bir arada yaşamasını sağlamak için sürdürülebilir kalkınma söyleminin bir adım ötesine geçmek ve doğal kaynakların yönetiminden sorumlu, çoğunlukla erkek, yaşlı, orta sınıf ve insiyatif almaktan uzak bürokrasiden oluşan merkezi otoritenin dışında yeni aktörler belirlemek mümkün müdür? Ekolojik likidite krizinin baş göstermesiyle hızla artan nüfusun üretim ve tüketim limitlerinin yeniden tanımlanmasını gerektirecek bir aşamaya geldiği göz önünde bulundurulduğunda, teleolojik olmayan ve ekosistemin kendini yeniden üretebilme kapasitesiyle uyumlu bir şekilde kavramsallaştırılan insanoğlu – doğa ilişkisi, hem kapitalizm, hem de farklı üretim biçimleri içerisinde yerelden, kadın, genç, sosyal bilim altyapısına sahip ve sivil toplum hareketinde aktif olan 'kim' öğesine vurgu yaparak keşfedilmeye çalışılmıştır. 'İnsan-Doğa İlişkisinde Kalkınmacılık – Doğa Korumacılık Dualizmi: Türkiye'de Tatlısu Ekosistemleri Yönetiminde İnsan – Doğa Kavramsallaştırılması

Örnekleri’ tezinin amacı insanoğlunun doğa ile ilişkisinde var olan antagonizmanın harmonize edilmesi için ilk adım olarak nitelendirilebilecek olan, Türkiye’de sosyal, politik ve ekonomik söylemlerde yeşil yaklakımların entegre edilmemesinin altında yatan nedenleri keşfetmektir. Analiz insan-doğa ilişkisindeki antagonizmanın çözümünde, toplumdaki hangi kesimlerin yeşil değerler ile uyumlu olduğunu bularak, doğal kaynakların yönetimindeki karar verme mekanizmalarına dahil edilmeleri için alternatifler sunmanın yanı sıra Bafa Gölü, Uluabat Gölü, Tuz Gölü ve Eğirdir Gölü yönetimi örneklerinden yola çıkarak Türkiye’deki insan-doğa algısı farklılaşmasını irdelemektir. Mevcut çevre etiği tartışmaları ekseninde operasyonelleştirerek oluşturulan ölçek, doğa içerisinde uyumlu yaşamaya doğru ekolojik açıdan artı değeri olan bir disipline yakın aktörlerin belirlenmesini irdelemektedir.

Anahtar kelimeler: sürdürülebilir kalkınma, doğa, çevrenin kavramsallaştırılması, (çevre etiği), su yönetimi, Türkiye

To My Father

ACKNOWLEDGMENTS

The author wishes to express his deepest gratitude to her supervisor Assoc. Prof. Dr. Helga Rittersberger-Tılıç for her guidance, advice, criticism, support, encouragements and insight throughout the research.

The author would also like to thank Assoc. Prof. Ayşe Gündüz Hoşgör, Prof. Dr. Fikret Adaman, Dr. Adnan Akçay, Dr. Filiz Demirayak and Atilla Uras for their suggestions, guidance and comments.

The author would like to express her gratitude for Bilge Ayas for making everything achievable and everyday worth living. The assistance of Özge Kayakutlu is most gratefully acknowledged. The author would like to thank Can Ayas, Özlem Esma Güngör-Ayas, Berk Sarı, Özdeş Dönen, Berivan Dural, Zeynep Demirel, Ece Milli, Galena İş, Akın Topuzlu and Ece Erbuğ for their lifelong support. The author would like to thank Mustafa Özgür Berke for his guidance and assistance during the fieldwork.

The author wishes that the Year of Biodiversity - 2010 is going to be the year that the value of biodiversity is understood on governmental level not as ‘a value that human-beings can utilize’ with an anthropocentric approach but orienting human’s creative potential into live within the limits of a living planet.

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INTRODUCTION

Have you ever met anyone who recognizes himself or herself as an opponent to environmentalism? Probably not… This thesis was written at a time when the Prime Minister of the Turkish Republic called himself as the leading environment-talist in Turkey. Every policy maker and economist that we follow is in favor of sustainable development. Funny how we conceptualize the relationship between human beings and the rest of the biomes as if it can be solved with some innovation and little investment, where the natural resources lie at the bottom heart of the capitalist mode of production that assume natural *resources* as taken-for-granted, infinite and to serve the masters of the world. To a minor portion of the world, of course, like every other commodity…

The analysis 'Decoupling Developmentalism-Environmentalism: Human Nature Conceptualizations in Freshwater Ecosystems Management in Turkey' is aimed at presenting a dynamic and interpenetrative interaction between nature and humans rather than merely adapting to environmental pressures that human beings have considerable agency. Since nature is a social, political, economic, and cultural fact, it is worth analyzing the issue from a sociological perspective. Bearing in mind that we are living in a world where growth defines our relationship with biomes, it seems quite impossible to conceptualize natural spirituality that centers on the ability of an awakened humanity to function as moral agents in diminishing needless suffering, engaging in ecological restoration and fostering an aesthetic appreciation of natural evolution in all its productivity and diversity. The steam engine and 'GDP growth' are the two most significant discoveries of the 18th century, both of which improved the well-being of a small portion of humanity. GDP growth created jobs, avoided recessions, and has thus become a preferred yardstick for progress for many. However, the world has reached a state where the human inhabitants are consuming

the resources faster than they can be replenished. Social justice will be threatened if the world continues to deepen the gulf between those who have the use of ecological goods and services and those who do not.

It shall not be forgotten that even if we were to think the relationship between man and nature in valuating environment in GDP terms, a 1% per annum cost would be needed to protect the world economy from a loss of up to 20% of global consumption, is an example of such an “option premium” (cited in Sukhdev, 2009). Moreover, estimated economic value of ecosystem services at US $33 trillion compared to US $18 trillion for global GDP (cited in Sukhdev, 2009).

The Living Planet Index, prepared by Global Footprint Network, Zoological Society of London and World Wide Fund for Nature mentions that global biodiversity, asmeasured by populations of 1,686 vertebrate species across all regions of the world, has declined by nearly 30 percent over just the past 35 years lost. In other words, humanity’s demand on the planet’s living resources, its ecological footprint, now exceeds the planet’s regenerative capacity by about 30 percent. The biggest threats to biological diversity can be put forward as habitat loss, fragmentation or change (especially due to agriculture), overexploitation of species (especially due to fishing and hunting), pollution, spread of invasive species or genes and climate change, all anthropogenic. Evaluation of biodiversity without human interaction is meaningless since the threats are anthropocentric in origin and new social structures can fix what human beings have destroyed. It is crucial to approach nature within social ecology perspective not only because of the root of the problem but also that human beings would be directly affected by sovereignty of biological diversity.

The thesis is structured to provide alternatives to find out a diversified set of agents in Turkey than the already existing ones in order to find ways out of business as usual in sustainable development discourse. Women, young people, people working in environmental NGOs, people who do not take place in high-level decision-making mechanisms, people who have direct benefit from the natural resource and people

who live closer to the natural resource would be more in favor of ecocentric ethical values, whereas men, elderly, people working in government organizations, people who do not have direct benefit from the natural resource and people who live apart from the natural resource would be in favor of anthropocentric ethical values.

The dualism between economy and ecology arises from how to remake nature in ways that are consistent with sustainable profitability and capital accumulation. The scope of conducting the research 'Decoupling Developmentalism-Environmentalism: Human Nature Conceptualizations in Freshwater Ecosystems Management in Turkey' is to find out the ways why green approaches in social, political and economic spheres in Turkey are not integrated as a first step to decouple the antagonism in man's relationship with nature. The ultimate scope of the thesis is to serve for a more ecologically sound perspective to gain strength in sociology discipline. With the major assumption of the possibility that human beings can live within nature harmoniously, the thesis tries to find out whether ways other than sustainable development approach, which sees man as custodian, cooperative and places human beings to a conqueror role are possible, if different agents in decision-making mechanisms are empowered both in local and national levels. This analysis is aimed at presenting a dynamic and interpenetrative interaction between nature and humans rather than merely adapting to environmental pressures that human beings have considerable agency. The anthropocentric and ecocentric realms are separated from each other today in which we must choose one or the other, either natural evolution with its biocentric halo, or social evolution with its anthropocentric halo as the basis for a creative biosphere. The research tries to find out another relationship of human and nature than sustainable development with the conceptualization scala that was composed by the author to discover ways to go beyond both of the natural and social towards a new synthesis that contains the best of both. There is a need to conceptualize the relationship between human beings and nature as a part of it that also feeds its production rather than emphasizing development that serves the need for constructing human capital in order to produce profit. Placing nature into developmental concerns, unlike sustainable development, is not a mere articulation,

but a redefinition of the global economic system, give room to human creativity and find structural solutions to economical and ecological credit crunch. Quantitative research, conducted through closed and open-ended questions is prepared in order to find out different forms of conceptualization of human-nature relationship. Together with the quantitative research, interviews were to the stakeholders with regards to Bafa Lake (Aydın), Uluabat Lake (Bursa), Salt Lake (Konya) and Egirdir Lake (Isparta) who are involved in decision-making mechanism in local and national level as well as the stakeholders who are partly involved in the decision-making processes. The questionnaire questions were constructed based on the empirical observation during fieldwork that the researcher is involved for two and a half years in the four wetlands and took part in management plan processes. The qualitative research enabled to gather an in-depth understanding of the conceptualization of the relationship between human beings and nature, and personal experience of the interviewees. National green accounting, critical understanding of liberal democracy, ecological socialism, partnership ethic, post-industrial society and changing the way we think about development (degrowth), withdrawal of ecologically unbenign subsidies, tax reform, promoting lower consumption, controlling population, focusing mass-media on environmental issues, rejuvenating environmental movements, finding other ways to take off for developing countries, reducing domain of administrative state (free market environmentalism), creating an international public sector and ecological modernization are captured within the scope of study to decouple the dualism between developmentalism and nature conservation.

‘Let me die polluted’ cried out Gandhi at the Stockholm Conference in the year 1972. Environmental concerns are mostly perceived as an obstacle before development. The policy makers in Turkey look at nature and development in dualistic terms if they ever consider that issue at all. This analysis is aimed at presenting a dynamic and interpenetrative interaction between nature and humans rather than merely adapting to environmental pressures that human beings have considerable agency: they appropriate nature and act upon it. It is cited by Franks that,

> There has always been unavoidable conflict between intensive human activities/social-economic development and the eco-environment. This conflict has increased markedly in the last 50 years. Can this conflict be eliminated? A basis formed upon the principle of sustainable development from a macro-strategic perspective should indicate the solution methodology required to alleviate the conflict. A sustainable development model built upon eco-economic values would suggest a plausible economic development model is beneficial to its own environment." (Ed. by Franks et al., 2003, p. 20)

Since environmental issues are usually 'not as important as' other aspects and mostly take place at the end of every analysis about development as 'environment must also be concerned in order for development policies to become sustainable' as a motto, this research aims to place the issue at the centre and see if environmental concerns and development policies can go hand in hand after figuring out what crosscuts utilization of natural resources. In order to limit the focus of analysis, freshwater resource utilization is selected. The reasons can be put forward as water is on high agenda, every single person –irrelevant to how direct their relationship with the freshwater resource individually– is in need of water, agriculture, which is heavily bound to water is still the major income-generating activity for Turkish population, the state of freshwater resources in Turkey is severe and finally the author's personal experience with regards to wetland management on the field.

Natural resources are not distributed to earth equally, tensions with regards to natural resources pose threats to regional stability, and therefore the author believes it is worth providing insight into possible solutions for the steps in the path to forging positive outcomes. Since this issue is central in international relations, law, international policies and economics; the author believes it is worth examining the issue from a sociological perspective. When one looks at the process in relation with water, the importance of building decision-making structures is emphasized that would not directly and radically conflict with the existing decision-making structures. The transition should be smoothly managed with social engineering and collaborative planning; otherwise "*the inefficient management of drinking water supply, sanitation and irrigation infrastructure, politicization and power rivalry in*

water allocation further exacerbate the conditions of the poor," (Ed. by Ünver et al., 2003, p. 2).

In order to reach this aim, this thesis is constructed on the outline of the importance of natural resources socially, culturally, economically and politically; the need to analyze natural resources from a sociological perspective, since its utilization is parallel with economic and status-based (which therefore denotes that natural resources are social facts) put forward development –especially sustainable development– discourse in order to highlight the discrepancies of this Eurocentric approach in implication and describe the relationship between environment and development by the existing literature to construct a theoretical structure to the argument and finally examine ways out to eliminate the antagonism between environmentalism and developmentalism in Turkey both within the play of capitalism as well as beyond capitalist mode of production.

As stated by O'Connor, sustainability in the first place is ideological and political, not an ecological and economic question (O'Connor, 1994, p. 153). Parallel to this, environmental issues are not only physical, but also sociological, philosophical, ethical, economical, political and cultural. They are shaped and determined by processes of human judgment and social negotiations, even in their very definitions. Ecological analysis, devoid of sociological insight is incapable of dealing with the contemporary crisis of the earth. Furthermore, it provides a portal through which contemporary environmental analysts might better understand the metabolic relation between humans and nature. Sociologists can make a positive contribution to environmental debate by both incorporating and engaging. There is much to gain in applying the sociological imagination to the extradisciplinary study of contemporary environmental issues, for example, through political economy model or via sociology of science and knowledge (Hannigan, 2006, p. 15). The relationship between nature and humans is becoming more complex and more indeterminate and our relationship with nature should be conceptualized as both fluid and emergent, therefore in a dynamic way.

> The Brundtland Report noted four main environmental challenges: poverty (there are more hungry people in the world today than ever before in human history and their numbers are growing), growth (environmental problems linked to resource use will intensify in global terms), survival (nature is bountiful, but it is also fragile and finely balanced), the economic crisis (environmental degradation is eroding the potential for development) (cited in Irwin, 2001, p. 39).

Sociologists far too often end up as underlabourers in this attempt, being viewed as supporting agents in a cast dominated by natural scientists and environmental policy makers. Development tasks are extremely complex and draw upon many disciplines, including engineering, agriculture, economics, political science, social anthropology, and management science (Wiener, 1972). To sum up, the relation-ship between natural resources and development is not a major emphasis of sociologists, although utilization of nature is obviously economy and status based and as described earlier a social fact, therefore the thesis aims at looking at the issue in an interdisciplinary way. A striking aspect of the consequences of biodiversity loss is their disproportionate but unrecognized impact on the poor. Yet subsistence farmers, fishermen, the rural poor, and traditional societies face the most serious risks from degradation.

In an either/or propositional thinking, the social is either separated from the organic, or reduced to the organic, resulting in an inexplicable dualism at one extreme or a naive reductionism of the other. The dualistic approach, with its teleological promise that the world was made for human use is known with the name of anthropocentrity, while the reductionist approach, with its notion of a biocentric democracy is saddled with the name of biocentricity (Ed. by Zimmerman et al., 2001, p. 440). This analysis tries to figure out the relationship between human-induced and ecosystem-induced conceptualizations other than sustainable development –examined on the basis of the scala that the author provided- and the possible agents in Turkey for more ecocentric value system in order to propose different segments of population in decision-making mechanisms for eliminating the tension between human beings and nature.

CHAPTER 2

OPERATIONALIZATION

2.1 Description of the Research: Exploring the Relationship between Human-beings and Nature

Some sociologists treat environmental phenomena such as CO_2 emissions, deforestation, and soil erosion, as dependent variables. Other studies treat environmental phenomena as control variables into elegant explanations of societal phenomena (Dunlap, 2002, p. 14). The research is based on the thesis 'Decoupling Developmentalism-Environmentalism: Human Nature Conceptualizations in Freshwater Ecosystems Management in Turkey' can be classified as an approach to societal-environmental relations, questioning the very root of the nature/society dualism. The research does not serve to problematise environmental claims and deconstruct environmental knowledge.

The major aim of the thesis is to find out the differentiation of conceptualizing the relationship between human and nature that is not only restricted to sustainable development discourse. Moreover, the research is conducted in order to get an insight of stakeholders and decision-makers' approaches to demystify the antagonism between nature and human beings, or conservation-development and how Turkey's case fits to existing approaches. The aim of the research is to propose a prototype as decision-makers in order to minimize the conflict as a result of the differentiation. The ultimate scope of the thesis is to serve for a more ecologically sound perspective

that will gain strength in sociology discipline.In order to conformate what was captured in the already existing studies into the perceptions of the decision-makers in the four wetlands (Bafa, Uluabat Egirdir and Salt Lakes), an extensive literature study was realized. Accordingly, a questionnaire (see Annex) was formed based on what could be distinguishable in approaching human-nature relationship, mostly fed from Bookchin, Zimmerman, O'Connor and Leopold. As it would be further discussed on the conceptualization chapter, variables (based on the likert scale formed on completely agree/agree/no idea/disagree/completely disagree) were formed which led to an overall score that was added up by the author at the end of each analysis after finding out the general variables that assumed to be dependent (gender /age /status /income /institution /location to the lake). Additionally, participants were asked to place themselves, their perception, ideal and contemporary situation on the relationship scale (see page 45-56) in order to find out whether there is a differentiation between assumed and measured conceptualization of the relationship based on the general assumption of each environmental ethic. Moreover, open-ended questions were asked in order to find out what people think about sustainable development which are summarized on the table (see page 101-103) that shows the positive and negative connotations together with site-specific questions (major problem of Bafa, Uluabat, Salt and Egirdir Lakes), their approach to management of natural resources (mainly on institutional level) participation (mainly their perception on integrated and participatory management) and their perception on capitalist mode of production. Their perception on capitalism was also tried to be grasped throughout the questionnaire. A pilot study was conducted to 20 participants on a national congress that took place in Konya where decision-makers and stakeholders were involved in order to find out whether the questions were working. Thanks to the modifications of questions by the supervisor and feedback from the respondents, the questionnaire was finalized and disseminated via internet as well as face-to-face during field visits and congresses/seminars/ workshops in the four areas. Together with the questionnaires interviews were realized with thirty four decision-makers (see Annex for the list of interviewees) both at national and local levels. The interviewees were selected in order reach to a balanced perception from national and

local level that the four areas were reflected, gender-balance was realized (since it was not possible to reach gender-balance in the quantitative analysis based on the male dominance in decision-making mechanisms), that stakeholders from sectors other than public institutions were reflected, local knowledge is integrated, a different range of age was grasped and system-oriented and critical conceptualizations were reverberated by bridging the gap of conceptualization - provided by extensive literature review mostly focused on social ecology with operationalization – provided by systematically analyzing the perception of nature-human relationship crystallized in freshwater ecosystems management by quantitative and qualitative analysis that is formed to comprehend, compare, contrast, measure and interpret the data that is inferred from the existing debate on sustainable development, capitalism, technology, governance, management, participation to lead the author to demystify the dualism between developmentalism and conservation.

The research is conducted with stakeholders who are involved in decision-making mechanism in local and national level as well as the stakeholders who are partly involved in the decision-making processes. Detailed information on the state of wetland, biodiversity value and author's insights based on field experience is provided in 'Information on Bafa Lake, Uluabat Lake, Salt Lake and Egirdir Lake' chapter of the thesis after creating a background on the discussion of state of freshwater resources management in Turkey. The reason of choosing these four sites can be defined as biodiversity value, easy access, budget-constrains, acquaintance of key agents and deep knowledge on these areas due to the author's own professional background and experiences she acquired in taking part of management plan processes regarding the wetlands located in Bursa, Aydın, Konya and Isparta. This experience allowed the writer to get an insight on the contemporary situation, organization of wetland management and have a network in the related areas. As a part of the participatory approach for wetland management plan processes, it is one of her duties to get together all the relevant stakeholders to take part in the decision-making process, therefore acquaintance of and reliability from the stakeholders provided that it allowed the research not to be restricted by quantitative analysis,

rather a long-term deep-rooted involvement in the process. The questionnaires (which are site-specific) are sent to e-mail groups (susulukhavzasi/konyahavzasi/egirdirgolu/bafagolu@yahoogroups.com) that are formed by WWF Turkey which compose of 600 stakeholders, namely Ministry of Environment and Forestry, State Hydraulic Works, Ministry of Agriculture and Rural Affairs, companies operating within the basin, national and local NGOs, irrigation associations university professors and to a very small extent individual farmers) as well as on the field by the researcher herself. (N=77) The low return rate can be explained both because of the nature of internet questionnaires as well as reluctance of decision-makers in taking part in the research. Direct contact with key stakeholders allowed larger participation.

2.2 Assumptions

The author assumed the following in the trial of bridging conceptualization and operationalization of the relationship between human-beings and nature.

- Women, young people, people working in environmental NGOs, people who do not take place in decision-making mechanisms, people who have direct benefit from the natural resource, and people who live closer to the natural resource would be scattered more on ecocentric ethical values whereas men, elder, people working in government organizations, people who do not have direct benefit from the natural resource and people who live apart from the natural resource would be scattered on more anthropocentric ethical value part.
- Stakeholders from NGOs favor transformation of mode of whereas stakeholders from public institutions and private sector favor capitalist mode of production.
- Public authorities are conservative and authoritarian in the decision-making process of preserving and managing natural resources.

- Non-governmental organizations are not active in terms of conserving natural resources in Turkey.
- State Hydraulic Works is seen as the major authority in managing freshwater resources in Turkey.
- Decision-makers concerning natural resources in Turkey believe in the myth ‘more labor is required if consumption and production is made concerning conservation of natural resources’.
- Decision-makers concerning natural resources in Turkey believe in the myth ‘production must grow to save the environment’. In other words, they believe things go well economically only when production grows.
- Decision-makers would like to save the environment, however find it too expensive.
- The relationship between economic development and environmental protection has been seen as one of mutual antagonism.
- Governments in capitalist market systems see their first concern as the promotion of growth. If there are ecological limits to growth, then growth has to cease at some point (O’Connor, 1994, p. 177).
- Those who are principally concerned about the quality of the environment have tended to see economic development as the root of the environmental problem.
- Capitalism requires economic growth, the absence of which causes reduced investment, leading in turn to general economic decline. Without growth, capitalism must confront distributional inequality, unemployment and political instability (O’Connor, 1994, p. 177). In other words, capitalism means accumulate or die. Crisis-ridden – crisis dependent capitalism is in crisis.
- There exists strong preferences for the environment that cannot be fully expressed through market and budget mechanisms (Ekko et al., 2001).
- More production implies less environment (Ekko et al., 2001).

- There is a failure to distinguish consistently between the growth in the economy's use of matter and energy (its biophysical throughput) and the growth in economic output, measured in money terms, which is what is normally meant by economic growth (Ekko et al., 2001, p. 127).
- If there are no preferences for a good, its value is zero, irrespective of how important or even indispensable, that good may be for the human kind.
- There is no substitute for the assimilative capacity of the biosphere (O'Connor, 1994, p. 178).
- Those who are principally concerned about the quality of the environment have tended to see economic development as the root of the environmental problem.
- Women in developing countries are among those suffering most from the deterioration of the environment (Taylor, 1992). Women comprise more than 50 percent of the world's population and they constitute one third of the world's labor force. But they do not have the political representation and power according to their number and participation in production and economic activities. Women raise children, provide for the family, run the social networks, and do greater work in the health and social services. They recognize the importance of the environment for the well-being of a society and for the future of their children. But women do not have the power to make priorities in production and trade. Their access to land and water has diminished, and they own less than one hundredth of the world's total wealth (Taylor, 1992).
- Contemporary mode of production brings about new technology and new forms of firm organization have created the so-called 'post-Fordist' era. Mass production of standardized goods and services has given way to flexible specialization, batch production of differentiated products for niche markets (Jacobs, 1997, p. 84).

2.3 Hypotheses

The following hypothesis are tested through the thesis in order to find out the differentiation of decision-makers in freshwater ecosystems management. Extended discussion is going to be provided within the 'Conceptualization' and 'The ways in which ecology-development dualism reproduced in Turkey' chapters.

- There is no significant relationship between institutions in conceptualizing environmental problems shall be solved and conceptualized differently in the developing world and developed world.
- There is no significant relationship between institutions in conceptualizing that natural catastrophes such as climate change, deforestation, and desertification can be solved by science and technology.
- There is no significant relationship between institutions in conceptualizing natural resources are getting exhausted.
- 'Assumed' and 'measured' ethical values between stakeholders are different from each other. In other words, people are more likely to assume themselves to nature-friendly values whereas they are more anthropocentric.
- There is no significant relationship between men and women in conceptualizing the ethical approach.
- There is no significant relationship between institutions in conceptualizing the ethical approach.
- There is no significant difference between age and environmental ethical values.
- There is no significant differentiation between ethical values and occupation.
- There is no significant relationship between decision-makers and non-decision-makers in approaching nature-human relationship.
- There is no significant difference between participants who are located in a city that is directly related with the wetland and people living in another city than the location of the wetland.

- There is no significant difference between income and conceptualization of major problem of the selected wetlands.

2.4 Methodology, Method, Sampling and Limitations

Both quantitative and qualitative research techniques are used while conducting the analysis. In order to provide room for systematic scientific investigation of nature phenomena and its relationship with human activities hypotheses that were mentioned in the previous section were tested through structured questionnaires. Quantitative research method made it possible to make measurement, comparison, and statistical analysis. The researcher aims to quantitatively summarize a data set, rather than being used to support statements about the key stakeholders within the four wetlands namely Bafa Lake, Uluabat Lake, Salt Lake and Eğirdir Lake that the data are thought to represent the key decision-makers and to give the audience an overall sense of the data being analyzed. The questions were constructed based on the empirical observation during fieldwork that the researcher is involved for two and a half years in the four wetlands and took part in management plan processes. In order to enrich the results of the quantitative research, qualitative research technique is articulated in the data analysis. The qualitative research enabled to gather an in-depth understanding of the conceptualization of the relationship between human beings and nature, and personal experience of the interviewees. The discipline investigates the *why* and *how* of decision-making, not just *what*, *where*, *when*. Hence, smaller but focused samples are used rather than large random samples in order to discover further data that cannot be grasped through structured questionnaires. Thirty four people were interviewed through telephone calls (based on previous acquaintance of the researcher with the interviewees) as well as multiple field trips to Aydın, Isparta and Bursa on an unstructured basis. The interviews were conducted with General Directorate of Ministry of Environment and Forestry Wetlands Division, Regional Directorate of Ministry of Environment and Forestry of four areas, State Hydraulic Works, Environmental Protection for Special Areas, local

NGOs such as DOGADER and EKODOSD, national NGOs such as WWF, Doğa Derneği, Buğday and Greenpeace, Nilüfer Local Agenda 21, academicians of Selçuk, Süleyman Demirel, Antalya and Uludağ universities,.

The limitations of the research can be briefly summarized as stakeholders might perceive the researcher as an NGO activist rather than an independent researcher due to previous knowledge, this limitation have tried to be overcome by explaining academic mission and planning professional and academic field visits separately. Another limitation could be defined as more qualitative research would have increased the quality of the research, however, due to monetary concerns and time limitation the interviews were made with the key decision-makers and the researcher did not need to allocate time to have access to the interviewees. Furthermore, what can be argued as a limitation can be stated as the sample is gender-biased in the sense that gender balance could not be reached, this situation can be described as a reflection of male dominance in the decision-making mechanism and tried to be overcome by integrating more female participants into the qualitative analysis. Moreover, the qualitative research is mostly conducted in two areas, namely Bafa Lake and Uluabat Lake, this limitation has tried to be overcome by telephone interviews with the stakeholders that are located in or responsible from Salt Lake and intense interviews in Eğirdir Lake as well as conducting the in-depth unstructured interviews in national meetings that took place in Ankara, Istanbul and Bursa where access to the decision-makers were possible. Finally, it is possible to state that the outsider position of the researcher could not be overcome since it was not possible to live with the local community. However, it can be put forward that the structure research was not in need for living with the local community and perceptions of the local communities were tried to be grasped by visiting some of the villages that are located around the wetlands. On the other hand, strengths of the research can be summarized as previous knowledge of the area, managerial status and decision-makers due to professional experience by taking part in preparation and implementation of wetland management plans with regards to the four wetlands, easy access and possibility to spend time with the stakeholders.

2.5 State of Freshwater Resources Management in Turkey

Turkey's water policy is characterized on independency from external energy resources, provide food security and increase agricultural production, provide water for urban, industrial and agricultural water need and abolishing discrepancies due to regional, economic and social inequalities. (Retrieved on 18.06.2009 from the World Wide Web www.dsi.gov.tr*)* As it is mentioned in DSI country report and general government policies, Turkey's average annual runoff is approximately 186 billion cubic meters. The amount available for consumption of this capacity is more than 112 billion cubic meters, including 14 billion cubic meters of groundwater. Total arable land in Turkey is 28 million ha and 8.5 million ha of this area is suitable for irrigation. Starting from 1950s, with the establishment of the General Directorate of State Hydraulic Works (DSI) in 1954, dam construction in Turkey has been appreciated as a basis for social and economical development. State Hydraulic Works is responsible for the planning, design, construction and operation of nationwide hydraulic structures. It is charged with multiple utilization of ground and surface water and prevention of soil erosion and flood damages, building protective structures against floods, draining swamps, building irrigation and drainage systems, constructing hydroelectric power plants, supplying water for settlements over 100.000 population, and improving navigable rivers. After that, its accelerated in recent decades to meet with the demands of rapidly increasing population and developments. It became an important trend for the supplying of irrigation water and energy in addition as a political tool. Total number of constructed dams in Turkey is 555 and 210 dams are under construction. Currently, Turkey's dams provide water for 4.89 million hectares of arable land. Drinking water supplied by the dams amount to 2.96 billion cubic meters. Flood control area is 1 million hectares. (Retrieved on 18.06.2009 from the World Wide Web www.dsi.gov.tr) There are 142 hydropower plants in total and 41 hydropower plants are under construction. Projects for additional 589 hydropower plants are prepared or are being prepared currently. (General Directorate of Electrical Power Resources Survey and Development Administration, 2007)

There are many organizations involved in water management with overlapping, conflicting and unclear tasks. Because different laws and regulations authorize a number of different institutions to manage the same water resources, these overlapping competencies have given rise to conflicts over tasks and responsibilities in the water sector. The General Directorate of State Hydraulic Works (DSI) is responsible for water quantity management of both ground and surface waters including the monitoring of water resources. The Ministry of Environment and Forestry is responsible for pollution prevention of water resources and the related permitting and inspections. A current weakness of the Turkish system is the separation of water quality and water quantity management that tried to be overcome by placing State Hydraulic Works as a general directorate functioning within the Ministry of Environment and Forestry. This integration, however, is conflictual due to former structuration of State Hydraulic Works and unharmonious state is reflected in several occasions with regards to implementation as well as governance such as environmental flows. In addition the implementation of the Regulation on the Control of Water Pollution and the Regulation on environmental impact assessment both fall under the responsibilities of the Ministry of Environment and Forestry. Another major weakness of the Turkish system is that there is no sufficient delegation of tasks and responsibilities (like; planning, financing, permitting and enforcement) to competent authorities on the level of river basin districts to enable sustainable water management. State Hydraulic Works (DSI) has 25 well-organized district offices; Ministry of Environment and Forestry has Directorates in each of the Provinces, although some of these are still rather weak. Like other developing countries, water and energy demand in Turkey is increasing rapidly. There are large potentials for expanding hydropower and irrigation capacity. However, water scarcity is also a growing threat, in particular with the likely impacts of climate change. Today, Turkey can provide around 1430 cubic meters of water per capita per year but if current trends continue, Turkey will officially be classified as a water scarce country (less than 1000 cubic meters) by 2030. (Retrieved on 30.06.2009 from the World Wide Web www.wwf.org.tr) According to previous researches of WWF-

Turkey, it was estimated that during the last 40 years, 50% of the country's wetlands, equivalent to at least 1.3 million hectares (3 times of the Van lake) lost their ecological and economical character irreversibly because of dry, fill, and the intervention made to the water regime and unwise management. This has included the loss of some lakes and marshes internationally important for birds, the destruction of local fisheries and the salinisation of agricultural land in many areas. It can be stated that 433.000 ha of wetlands have been destroyed near important bird areas. After year 1953, 370.000 ha wetlands apart of important bird areas are lost due to the water infrastructure projects. In addition to this, 375.000 hectares of land is under small scaled flood control and small scaled drainage and drying projects. (Retrieved on 30.06.2009 from the World Wide Web www.wwf.org.tr) The main factor has been the unwise use of water in agriculture and the associated development of water infrastructure projects. Agriculture accounts for around 72% of water use in Turkey and more than half of this water is wasted through inefficient use: 88.5% of the total irrigation area is irrigated through flood (surface) irrigation, 8.5% is spring irrigation and only 3% is drip irrigation. (Retrieved on 30.06.2009 from the World Wide Web www.wwf.org.tr) According to the 2004 "Municipality Drinking and Utility Water Basic Indicators Results" the average drinking and utility water network loss, calculated as the difference between the amount of water supplied to the network and that received by the end-users, is 55% (Turkey Environmental Status Report 2007, Ministry of Environment and Forestry). The average loss in the municipal water networks of the 16 major cities, where 40% of Turkey's population resides, is approximately 50%. Most of the problems in urban areas are concentrated in slum areas. Providing drinking and potable water to these areas is harder and more expensive compared to similar investments directed towards areas where development, settlement and construction plans are present. 2004 data indicates that out of the 3213 municipalities existing in Turkey only 319 have waste water treatment plants. The number of treatment plants using both physical and biological purification as of 2004 is 168. There are only 4 plants using advanced purification throughout Turkey, thereby increasing the number of total plants to 172. Furthermore, only 19 of the total 65 Organized Industrial Zones present as of 2004

are using treatment plants. A total of 17.423 cubic meters/year waste water was discharged to rivers without any purification in 2004 by the 46 Organized Industrial Zones which have no waste water treatment plants (Turkey Environmental Status Report 2007, Ministry of Environment and Forestry). Waste waters of Organized Industrial Zones have been discharged to rivers (74.59%), to the sea (2.69%) and to the city sewage (%0.84) as of 2004. Treatment Sludge produced by the Organized Industrial Zones have been discharged through systematic storage (%56.14), in municipality dump (%28.75) and through release to the land (%14.72) as of 2004. (Turkey Environmental Status Report 2007, Ministry of Environment and Forestry) The total ground water potential of Turkey is estimated to be 14,000 hm^3/a (State Hydraulic Works), and 37% of this potential is allocated for agricultural water use. Uncontrolled groundwater extraction is prevalent in regions where agricultural irrigation and industrial production is intense (Central Anatolia, Marmara, Aegean, and Thrace). Although not officially declared, bureaucrats from 4^{th} District of State Hydraulic Works stated that by April 2008, 92.000 wells were identified in Konya Basin by a study in 2008 of which 66.000 are illegal. In a period of 33 years, a decrease of 14.3 meters in the groundwater level in Konya Basin has taken place. 80% of this fall was incurred during the last 10 years (WWF-Turkey, Analysis of the Change in Groundwater Levels in Konya Closed Basin: 2008). 46.9% of the water supplied to Organized Industrial Regions of Turkey was drawn from groundwater resources (Ministry of Environment and Forestry, Turkey's Environmental Status Report, 2007).

2.6 Information on Bafa Lake, Uluabat Lake, Salt Lake and Eğirdir Lake

At this part of the paper, general information on Bafa Lake, Eğirdir Lake, Salt Lake and Uluabat Lake are provided in order to form a background on water quantity, quality, biodiversity value, protection status and income-generating activities

therefore the deep interviews could be grasped by the reader in this context. Eğirdir Lake, in the flow line of Antalya Basin, is located in Isparta and covers an area of 480 km^2. Its deepest place is 13 meters, its north part, called Hoyran Lake, is narrower than its south part. The lake, which is important in terms of Turkey water sources and biodiversity, is Drinking and Usage Water Protection Area, Natural Protected Area and Important Bird Area. It is Turkey's 4^{th} biggest lake, 2^{nd} biggest freshwater lake. It is an important water source of Antalya basin and, in long term for Turkey for sustainability of tourism sector. It feeds from sources drying in summer, its water exits into Kovada Lake in the south. The level of the lake's water which is used for drinking and irrigation, is decreasing in the long term. Widespread fruit agriculture is being carried out in northern coasts of the lake. Fishing and tourism are some of the important income-generating activities. The main problem that the lake faces today is pollution. Intense agriculture provides an important income to local people, but excessive and unplanned usage of pesticides is causing substantial pollution to the lake. In the lake, with licensed 1.000 fishermen and 500 boats, carp and lobster production comes first, zander cannot be hunted due to excessive hunting. Tourism, sustainable and revenue-generating for local people, must be developed.

Salt Lake is the second largest lake of Turkey according to its acreage (max. 19,000 hectares). It is located in the intersect of the borders of Ankara Aksaray and Konya. It is one of the most important bird and plant areas in Turkey (with First Degree Site Area and Specially Protected Zone statuses). Salt Lake, with its 32.9% salinity level, provides 60% of the salt demand of Turkey. Salt production is a source of income for 6.500 people in Konya Closed Basin. Similar to the other wetlands in Turkey, Salt Lake is becoming smaller and dryer due to unwise agricultural practices. Dams (Melendiz River-Mamasın Dam) have been built on the surface water feeding the lake and water rate of the sources feeding the lake (Peçeneközü Brook-Şereflikoçhisar) has declined. Ground water, which is another source to feed the lake, is under the pressure of overuse. Due to agricultural irrigation, groundwater rate in the Salt Lake and in the Konya Closed Basin is declining 1-2 meters annually. With

regards to pollution, industrial, domestic and agricultural waste of Aksaray and Konya as well as Kulu, Şereflikoçhisar, Cihanbeyli, Eskil districts is being discharged to Salt Lake without any purification. Being placed within the borders of three cities (Konya, Aksaray and Ankara) necessitates constant cooperation, communication and effective coordination to have an active management process.

Uluabat Lake Ramsar Site (Ramsar Site No: 944, area 19.900 ha) takes place in the South of Marmara Sea in 30 km away from Bursa which is one of the biggest cities in Turkey with its high-population, high urbanization and industry. Uluabat Lake is a shallow (3 meters of depth) freshwater lake with an approximate surface area of 160 km^2 and a volume of 150 million cubic meters. The lake's basin consists of Bursa, Kütahya, Balıkesir and Bilecik city districts. Bearing in mind that Uluabat Lake take place in the migratory line of birds, and its vicinity to the Bird Lake (Manyas) it is counted as one of the most important wetlands not only in Turkey but also of Europe and Middle East. Uluabat Lake Ramsar Site is hosting several number of globally endangered species like phalacrocorax pygmeus, pelecanus crispus, chlidonias hybridus and aythya nyroca. The main factors that shall be stated regarding the socio-economic status of the Uluabat Lake can be stated as fishermen, industrial workers, animal husbandry, small-scaled merchants and seasonal wage laborers regarding milk industry. There are 17 residential areas across Uluabat Lake, Gölyazı, due to direct economic activities from the lake is the foregoing one. The other important residential areas can be summarized as Akçalar, Fadıllı, Dorak, Uluabat, Eskikaraağaç. Major problems of Uluabat Lake can be summarized as pollution (industrial wastes from industrial facilities around the lake, agricultural wastes, wastes from Mustafa Kemal Paşa streamlet which is one of the major incoming sources, industrial and residential pressure (initiatives for constituting new industrial and residential areas in the northern part of the lake is threatening the future situation of the lake) collapse of ecological equilibrium of the lake (several agricultural practices around the lake such as illegal paddy culture or overfishing are disturbing the water balance of the lake. This deterioration in the water balance is threatening the wildlife as well as economic facilities that take place on the lake.)

Bafa Lake, which is placed within the borders of Muğla and Aydın, is located in the flow line of Büyük Menderes Basin. It is declared as a protected area in 1989 and as a nature protection zone (12.280 hectares) in 1994. The lake is an Important Bird Area and authentic, converted from sea into lake. The most important source feeding the lake is water of Büyük Menderes River in overflow season. Bafa, a very brackish lake, is surrounded with mountains which are covered with forest and macquis groves. Söke Plain has a vital role in Turkish agriculture and is one of the leading regions from an agriculture value. Agricultural Association, Söke Agriculture Cooperative and major farm owners are leading the region in regards to develop strategies for a better income of the agriculture products. These institutes are working intensely for rising up the quality and the quantity of the agriculture goods. Furthermore, they actively work on many related issues as in finding various ways for strengthening up the irrigation infrastructure. The majority of economic income depends on the agriculture. Moreover, job opportunities, especially in cotton sector, for nonqualified workers in this region are quite high. Seasonal workers from the east (Gaziantep, Şanlıurfa, Kars, Ağrı) to the Söke Plain is taken its place and increasing each day due to the economical benefits the region provides. The population of the region is 15.000 mostly composed of old people due to migration of younger generations to urban areas. As a result of improving education level of the region, youth prefer to migrate to the big cities, which have more chance of employment. In contrast, older people as well as the retired ones show the behavior of staying in their homeland instead of spending their days in the urban areas. Nevertheless, around the Bafa Lake, the young population is increasing in parallel to the increasing tourism facilities which provide alternative income for the local community. There is a strong positive correlation between tourism development and youth population in the region. Tourism development and increasing youth population in the region has a positive effect on the socio-cultural structure of Bafa Lake. The Büyük Menderes River, groundwater sources and the Bafa Lake give the region its vitality. The economic state of the region depends on the agriculture and irrigation. Thus, the management and usage of the water is directly linked to the economic state of the region. Even though cotton and olive is the leading agriculture sector; corn, tobacco,

fruits, vegetables, feeding plants are also produced. Agriculture is done as irrigation in flat fields; where arable land is common on slopes due to water availability. Tourism, fishery, aquaculture on juvenile fish, beekeeping and farming are also other income generating activities. However, tourism around the Bafa Lake is not as dense as Kuşadası (at the northern side), Didim and Bodrum (both at south). In Bafa, day trips on nature and archaeological sites are organized. The health of the local sector strongly depends on the agriculture and extensively focuses on flour, cotton and textile sector. Major problems that the lake faces are decrease of water quantity and pollution. Excess and unplanned agricultural irrigation is pulling down the water level of the lake; with the effect of climate change, the lake is getting smaller. Shrinking of the lake affects income-generating activities. Along Büyük Menderes River, domestic, industrial and agricultural wastes pollute the lake. Wastes of facilities and residential areas near the lake shall not be given to the lake without refinement process.

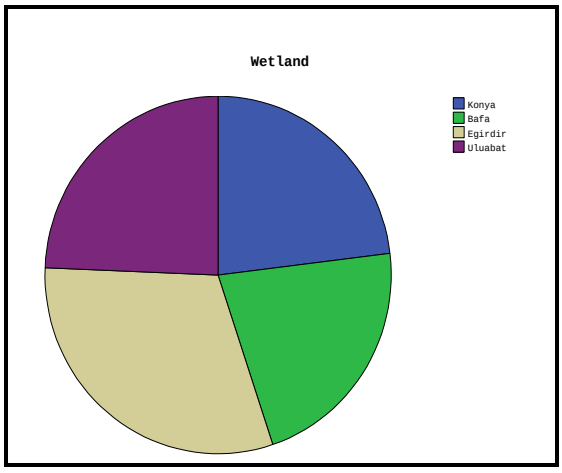


Figure 1: Analysis of Respondents' Location

The table above shows the percentage of people with stake to the wetlands that took part in the analysis. %23 of the participants has a stake in Salt Lake, 22% from Bafa Lake, %31 from Eğirdir Lake and 24.4% from Uluabat Lake. It can be stated that participants are evenly distributed in research sites.

The major problem is mentioned as pollution by 46% of the stakeholders. Managerial, legal problems and biodiversity related problems are not regarded as the major problems in the research sites.

Table 1: Analysis of Respondents' Perception of the Major Problem of the Freshwater Ecosystem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Water level	12	15,4	20,3	20,3
	Pollution	36	46,2	61,0	81,4
	Groundwater	2	2,6	3,4	84,7
	Capacity building	5	6,4	8,5	93,2
	Legal arrangements	1	1,3	1,7	94,9
	Loss of Species	2	2,6	3,4	98,3
	Managerial Problem	1	1,3	1,7	100,0
	Total	59	75,6	100,0	
Missing	System	19	24,4		
Total		78	100,0		

The major problems, regarded on the basis of wetland are shown below.

Table 2: Analysis of the Major Problem on the Basis of Wetland

		Majorproblem							
		Water level	Pollution	groundwater	capacity building	legal	species	managerial	Total
Wetland	Konya	6	8	2	1	0	0	0	17
	Bafa	2	8	0	0	0	0	0	10
	Egirdir	3	10	0	3	0	1	0	17
	Uluabat	1	10	0	1	1	1	1	15
Total		12	36	2	5	1	2	1	59

It has been put forward by several authors that Turkey has been experiencing, in addition to environmental degradation arising from global causes, for instance climate change, the burdens of population increase, economic development in industrial and agricultural sectors, urbanization, and the pressure on growing consumption (cited in Adaman et al., forthcoming).

Since the environment, perceived as a problem, has been a latecomer in international discourse on development, one might expect its reception in different quarters to be subordinated to various preoccupations already on stage: to economic growth, to access to the consumer society, to social revolution, to national security, to human rights et cetera. At the same time, its impact is probably strong enough to modify the perception of these problems (Marshall, 1996, p. 150). Perceptions and problems defined by Marshall are assumed to be valid for Turkey too. The ways of perceiving environmental problems according to Marshall are as follows:

1. The state or government facing demands to 'solve' the problem: In regard to most problems satisfying rather than maximizing solutions, that is doing just enough to keep the problem from reaching unmanageable dimensions.
2. The modern productive and commercial enterprises: The perception by the state or public opinion and assert that it will eventually solve itself through market mechanisms, technological innovations and the untrammeled growth of production; to shift the costs of whatever solutions are unavoidable to the state and the society, and finally, if the problem will not go away, to take the lead in devising solutions that will be profitable to themselves. That is probably why it is never accepted that the climate is changing and there is no need to adapt since technological innovations will eliminate the impacts and diminish the pace of this fact.
3. Intellectuals, scientists, ideologists, and concerned citizens: The perceptions are simplified and distorted in transmission.
4. Social groups directly experiencing the impact of current processes through environmental degradation and insecurity of livelihood, or suffering more diffused anxieties without a scientific or ideological frame of reference through which to interpret their origin: Their perception of capacity to participate in and benefit from the current style of development, or their perception of exclusion and powerlessness. Such indirectly perceived threats, combining with feelings of powerlessness

against manipulation by economic monopolies, politicians, or scientists can generate paranoid fears or movements devoted fanatically to single issues. The main aim of the thesis is to develop a further insight on this groups since in democracies and in capitalist mode of production, the supply is shaped by the demand and therefore policy propositions might be developed focusing and involving these groups.

Marshall argues that the urban working class is more exposed to easily perceived menaces such as polluted air, overcrowded housing, dwindling access to open spaces for recreation, long journeys to work and job associated illnesses. It also has fewer possibilities for escape or mitigate. For the non-owners, the problems have been deterioration of public transport, smog, congestion, accidents, and patterns on urban spatial organization and services that discriminate against them (Marshall, 1996, p. 153). The workers, however, encouraged by their employers, can also be expected to perceive environmental regulations as threats to their jobs and their access to the consumer society. The underemployed and marginalized poor, or their political spokesperson may perceive environ-mental concerns and public allocations mainly as competitive with their own immediate needs (Marshall, 1996, p. 152). The relative importance of different agents for the character of the aggregate societal response to environmental problems, naturally differ according to the specific problem, so will their perception of suitable channel for responses. In relation to other problems, the responses of groups within the society, expressed through the market, the vote, spontaneous or externally-stimulated mass protests may determine what happens, at least in the short run (Marshall, 1996, p. 152).

Leopold believes that a system of conservation based solely on economic self-interest is hopelessly unbalanced since it tends to ignore and eliminate elements in the land community that lack commercial value, but that are essential to its healthy functioning and the economic parts of the biotic clock will not function without the uneconomic parts. Leopold who believes that lack of economic value is sometimes a character not only of species or groups, but of entire biotic communities states that

An innumerable host of actions and attitudes, comprising perhaps the bulk of all land relations, is determined by the land-users' tastes and predilections, rather than by his purse. The bulk of all land relations hinges on investments of time, forethought, skill, and faith rather than on investments of cash. (Retrieved on 10.07.2009 from the World Wide Web http://www.luminary.us/leopold/land_ethic.html)

Table 3: Analysis of Income and Conceptualization of the Major Problem

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	31,807	6	5,301	2,837	,019
Within Groups	91,550	49	1,868		
Total	123,357	55			

It can be stated that there is no difference between income and description of the main problem with failing to reject the null hypothesis that state 'There is no significant difference between income and conceptualization of major problem'. It was assumed that lower income generating groups called for more direct impacts that they face since they are more directly affected by those impacts whereas stakeholders with higher income would call for more legal and managerial problems.

2.7 Conceptualization

An ethic may be regarded as a mode of guidance for meeting ecological situations so new or intricate or involving such deferred reactions that the path of social expediency is not discernable to the average individual (Ed. by Zimmerman et al., 2001, p. 98). Leopold by stating that people can be ethical only in relation to something they can see, feel, understand, love, or have faith in, defines ethic ecologically as 'a limitation on freedom of action in the struggle for existence' and

philosophically as ‘a differentiation of social from anti-social conduct’ (Leopold, 1970) and further argues that

> An ethic may be regarded as a mode of guidance for meeting ecological situations so new or intricate, or involving such deferred reactions, that the path of social expediency is not discernible to the average individual. Animal instincts are modes of guidance for the individual in meeting such situations. Ethics are possibly a kind of community instinct in-the-making. (Retrieved on 10.07.2009 from the World Wide Web http://www.luminary.us/leopold/land_ethic.html)

Bookchin defines social ecology as ‘natural spirituality centers on the ability of an awakened humanity to function as moral agents in diminishing needless suffering, engaging in ecological restoration and fostering an aesthetic appreciation of natural evolution in all its fecundity and diversity’ (Ed. by Zimmerman et al., 2001, p. 437). Social ecology challenges the entire system of domination itself and seeks to eliminate the hierarchal and class edifice that has imposed itself on humanity and defined the relationship between nonhuman and human nature. It recognizes that the future of life on this planet pivots the future of society. It means the use of ecotechnologies and renewable energy, use of organic forms of agriculture, design of humanly scaled industrial installations to meet regional needs recycling together with production of high-quality goods that will last for future generations, therefore limit consumption (Ed. by Zimmerman et al., 2001, pp. 450-451). Warren (2000) puts forward six features of social ecology which can be summarized as follows. Firstly it is a philosophy of process and potentiality that views life as active, interactive, proactive, relational and contextual. Nature is not a passive lump or matter: it is self-directive in its evolutionary development. Secondly, social ecology is a biological way of thinking that views nature as a constellation of communities that are neither blind, nor mute, cruel or competitive, stingy nor necessitarian: nature is freed of all anthropo-centric moral tappings. Thirdly, it is social in that it always present in the human communities are properly viewed on a nature-society continuum, stressing the nonhierarchical continuities between nature and society. Fifth, it asserts that there are no natural dominance-submission relationship. Lastly, social ecology sees otherness in terms of complementarity rather than rivalry. (Warren, 2000, p. 87)

Ecological socialism presupposes the development of a specifically global class politics, first because of growing economic oppression and exploitation, and because ecological degradation is increasingly a class issue. Socialism and ecology remains contradictory to some. Socialists are seen as productivist whereas greens as antiproductivist. O'Connor states that most socialists still believe that ecology is merely an ideology of austerity or a system for enduring amenities for the middle and upper classes. Most greens think that socialism is an ideology promoting growth without limit. The effect business and other groups use, the false choices between 'jobs versus environment', the capitalization of land and economic growth versus community values, and economic development versus sustainable society is a easy scheme to divide and conquer. To sum up, O'Connor does not require a new category that contains elements of socialism and ecology; rather he argues that what needs to be articulated politically is self-determination and overall planning, coordination and control of production.

The land ethic (Leopold signifies the land not merely soil; but a circuit of natural ecosystems) enlarges the boundaries of the community to include soil, water, plants and animals or collectively the land. The land ethic changes the role of homo sapiens from conqueror of the land community to plain member and citizen of it. It implies respect for his fellow members and also respect for the community (cited in Ed. by Zimmerman et al., 2001, p. 99). Leopold believes that land-relation is still economic, entailing privileges however not obligations since the characteristics of the land determined the facts quite as potently as the characteristics of the men who lived on it. (Leopold, 1970)

> The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land. (...) This sounds simple: do we not already sing our love for and obligation to the land of the free and the home of the brave? Yes, but just what and whom do we love? Certainly not the soil, which we are sending helter-skelter down river. Certainly not the waters, which we assume have no function except to turn turbines, float barges, and carry off sewage. Certainly not the plants, of which we exterminate whole communities without batting an eye. Certainly not the animals, of which we have already extirpated many of the largest and most

> beautiful species. A land ethic of course cannot prevent the alteration, management, and use of these 'resources,' but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state. (Retrieved on 10.07.2009 from the World Wide Web http://www.luminary.us/leopold/land_ethic.html)

Ecological modernization proposes that policies for economic development and environmental protection can be combined to synergistic effect. On a macro level; ecological modernization seeks structural change. It promotes the application of tight environmental policy as a positive influence on economic efficiency and technological innovation. It seeks to harness the forces of entrepreneurship for environmental gain. Thus, ecological modernization suggests that economic and environmental goals can be integrated within the framework of an advanced industrial economy. This occurs through shifts in the sectoral composition of the economy: as the relative prices of employment and energy/pollution change, the economy gradually becomes more labor and service intensive and less resource intensive. That is, this scenario projects a significant process of ecological modernization (Jacobs, 1997, p. 78). It looks for lower levels of environmental impact. It seeks to shift the emphasis of the macro-economy away from energy and resource intensive industries towards service and knowledge intensive industries. From a micro level, ecological modernization assigns a central role to the invention, innovation and diffusion of new technologies. It appears that advanced economies have begun to experience the environmentally gratis effects that would be associated with a program of ecological modernization. Three notions however need to be attached to this remark. First, much of the sectoral shift has occurred not because of the decline in the consumption of manufactured goods in advanced economies, but because their production has been relocated over time to newly industrializing countries (Jacobs, 1997, p. 75).

Ecological modernization is silent on questions of social change, for example, concerning social justice, the distribution of wealth and power, and society-nature relations. It is thus simply an attempt to legitimize and sustain the very structures and systems that have been responsible for environmental decline (Jacobs, 1997, p. 75).

Therefore, it can be stated that capitalist mode of production cannot be sustainable. This might be rooted from the reason that most of the people, working in government sector who are responsible for biodiversity do not, by any means, subscribe to green ideology and certainly not identify themselves as green in the overarching sense. Hence, government officials, at least the ones that took part in the questionnaires, do not adopt the discourses of sustainability, the precautionary principle, demand management and critical to natural capital. If we were to think about how people are located and promoted in government, it is easy to find out why they do not adopt these principles. However ecologically concerned an entrepreneur may be, the harsh fact is that his or her very survival at the marketplace precludes a meaningful ecological orientation. To engage in ecologically sound practices places a morally concerned entrepreneur at a striking, and indeed fatal disadvantage in a competitive relationship with a rival – notably one who lacks any ecological concerns and thus produces at lower costs - and reaps higher profits for further capitalist expansion (Ed. by Zimmerman et al., 2001).

Some other Turkey-specific studies such as that of Ecevit et al. and Adaman et al. (forthcoming), mention local residents' self-motivation in general or any groups' stakes in particular to fight for conservation are not high which hold true for this study as well.

The major conceptualization of the ways of naming the relationship between human and nature in the scope of this thesis analysis can be seen in the table that the author generated (see page 50). This conceptualization serves to understanding other ethical approaches in nature-human conflict, which emphasizes conservation and development respectively. In order to harmonize the relationship between the two, ethical approaches other than sustainable development are incorporated into the analysis. This classification is prepared in order to find out where the stakeholders in natural resources management see themselves, idealize the relationship and see the contemporary relationship. In the first case, which calls for human chauvinism, sees man as a tyrant. In anthropocentrism, man is seen as a steward, which was assumed

as the dominant tradition. Anthropocentrism can be briefly defined as viewing humans as separate from and above the rest of the nature. Dunlap sees the tendency is to treat nature as existing primarily for human use and enhanced dramatically in recent centuries by scientific and technological developments (Dunlap, 2002, p. 18).The third relationship type is free market environmentalism, which sees human beings as a commodifier. Our famous notion sustainable development defines man as custodian, cooperative and puts a conqueror role of human beings. Sustainable development is believed to be a metafix that will unite everybody from the profit-minded industrialist and risk-minimizing subsistence farmer to the equity seeking social worker, the pollution-concerned or wildlifeloving First Worlder, the growth-maximizing policy maker, the goal-oriented bureaucrat, and therefore the vote-counting politician (cited in Dobson, 1998: 33). The fifth ethical approach, Aldo Leopold's land ethic sees man as a plain member of land community. Moving towards more ecoanarchic approaches, ecofascism that sees man as a perfecter and has the connotations of primitism, romantism and mysticism was placed by the author, and the final classification that was placed regarding the types of relation between human and nature is ecoanarchism, which sees man as an inferior member of land community.

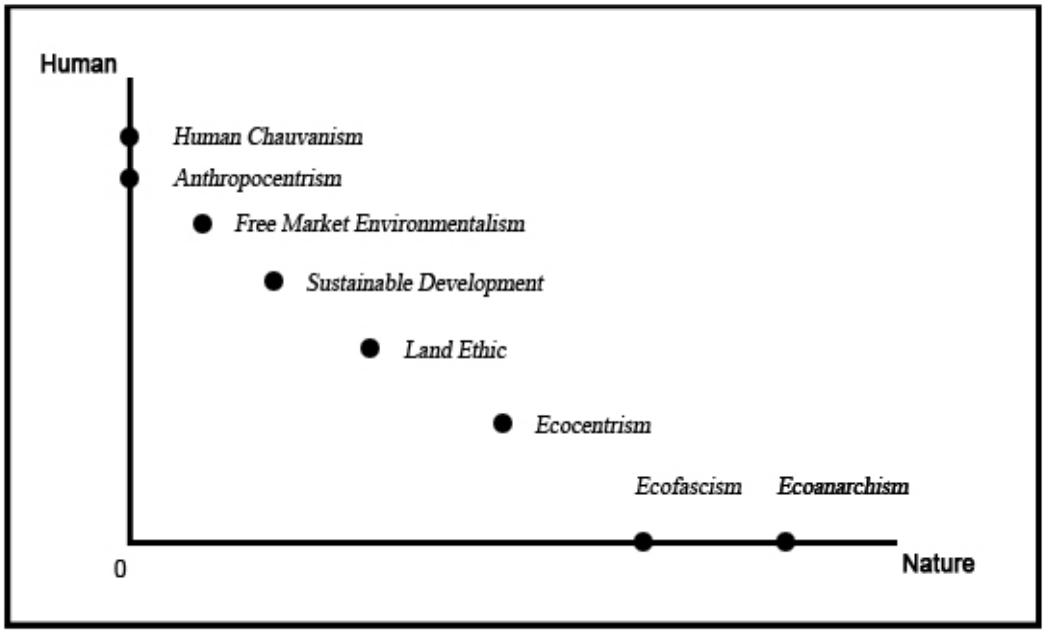


Figure 2: Conceptualization of Human Beings – Nature Relationship

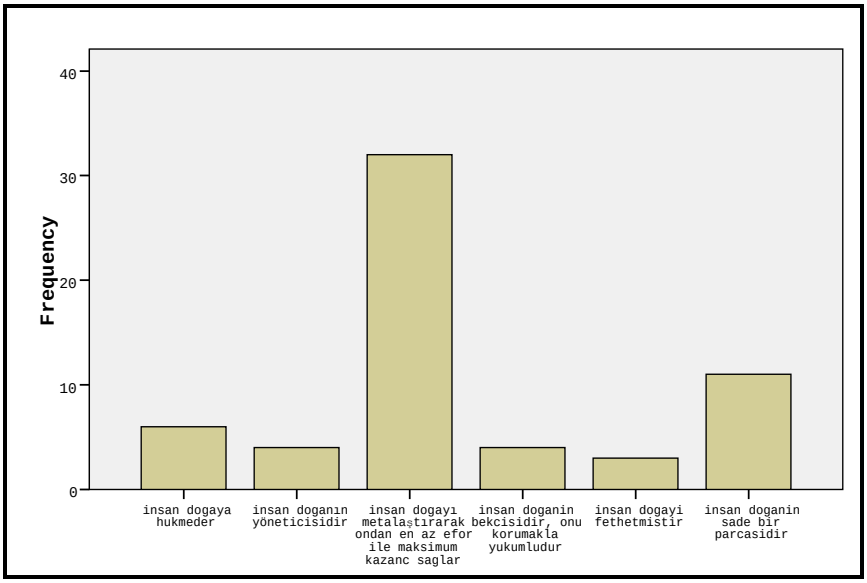


Figure 3: Conceptualization of the Relationship between Human Beings and Nature in the Contemporary World

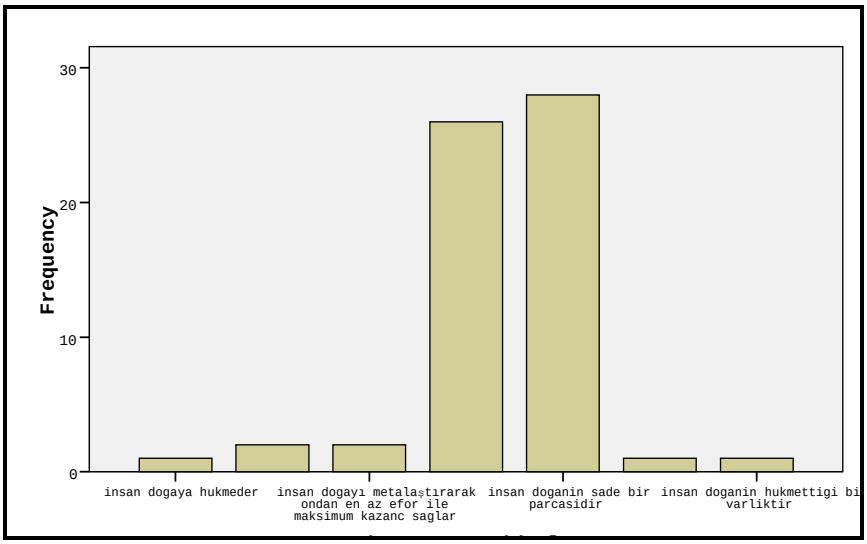


Figure 4: Conceptualization of the Relationship between Human Beings and Nature in the Ideal

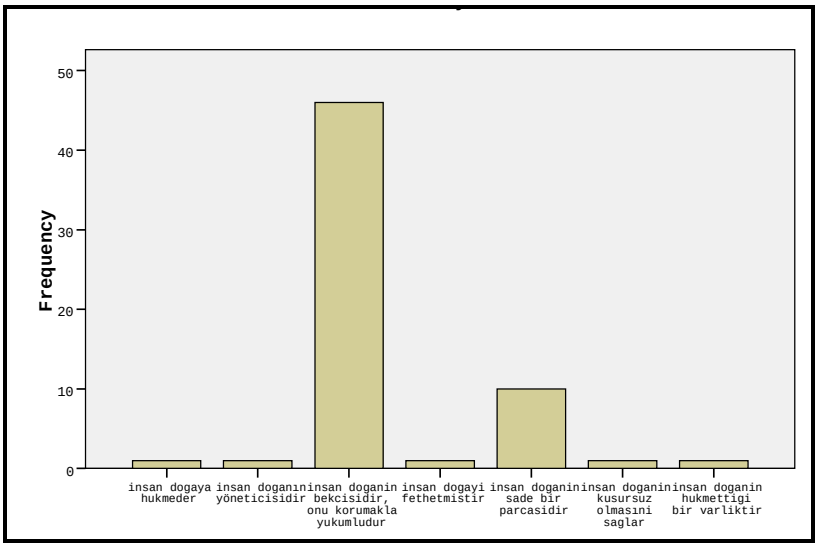


Figure 5: Conceptualization of the Relationship between Human Beings and Nature in Personal Affiliation

Figure 4 shows the relationship between human and nature in the contemporary world with the question 'Which of the following best defines human's position in nature in the contemporary world?' It can be put forward that 7% conceptualizes human-nature relationship as human chauvinist, 5% as anthropocentric, 41% as free market environmentalist, 5% as sustainable development, 3.8% as conqueror of nature, 14.1% as land ethic. When we turn our attention to what they conceptualize as ideal with the question 'Which of the following best defines human's ideal position in nature?' the statistics differ enormously with 33.3% of sustainable development approach and 35.9% with land ethic approach. When it comes to the personal statement of human-nature relationship with the question 'Which of the following best defines your lifestyle, attitude and behaviors regarding your relationship with nature?' the statistics show 59% in favor of sustainable development and 13% to land ethic. The other options were not emphasized more than 1 frequency in each of the three statements.

The table below shows the differentiation between what participants think about their ethical values and what was found in the questionnaire as a result of 40 questions conceptualizing the attitude towards nature and human relationship. The scope of crosstabulation between the 'assumed' and 'measured' ethical values show the differentiation between what people think about themselves that in fact are not. As assumed, the trend is that people are more likely to assume themselves as having nature-friendly values, whereas they are more anthropocentric. For instance, when we look at the 'land ethic' classification in which human is assumed to be a simple part of the nature, %0 of the participants who assumed themselves to be in favor of land ethic approach understands human-nature relationship according to their attitudes, behaviors and values.

Table 4: Analysis of Assumed and Measured Ethical Value (Human Chauvinism/Anthropocentrism/Free Market Environmentalism/ Sustainable Development/Land Ethic/Ecocentrism/Ecofascism /Ecoanarchism) with regards to the Relationship between Human Beings and Nature

			Assumed							Total
			1,00	2,00	4,00	5,00	6,00	7,00	8,00	1,00
Ethical value	Free Market Environmentalism	Count	0	0	3	1	0	0	0	4
		% of Total	,0%	,0%	3,8%	1,3%	,0%	,0%	,0%	5,1%
	Sustainable Development	Count	1	0	40	0	9	0	2	52
		% of Total	1,3%	,0%	51,3%	,0%	11,5%	,0%	2,6%	66,7%
	Land Ethic	Count	0	1	11	0	3	0	0	15
		% of Total	,0%	1,3%	14,1%	,0%	3,8%	,0%	,0%	19,2%
	Ecocentrism	Count	0	0	6	0	0	1	0	7
		% of Total	,0%	,0%	7,7%	,0%	,0%	1,3%	,0%	9,0%
Total		Count	1	1	60	1	12	1	2	78
		% of Total	1,3%	1,3%	76,9%	1,3%	15,4%	1,3%	2,6%	100,0%

It can be concluded that the participants propose neither a radical ecosystem, nor human defenders. Nearly all participants have placed themselves in the middle of the

conceptualization of the antagonism between human and nature. The assumption at the set-off, ‘women, young people, people working in environmental NGOs, people who do not take place in decision-making mechanisms, people who have direct benefit from the natural resource, and people who live closer to the natural resource would be scattered more on the right hand side of the table, whereas men, elder, people working in government organizations, people who does not have direct benefit from the natural resource and people who live apart from the natural resource would be scattered on more anthropocentric ethical value part is going to be examined in detail in the data analysis section.

It can be seen that there is a significant difference between what the participants assumed the contemporary situation regarding environmental ethical values and the idealized environmental ethical values by rejecting the null hypothesis that state ‘There is no significant difference between available and idealized conceptu-alization of human-nature relationship’ (Sig=0.000). In other words, what people witness today and what people idealize are not the same.

Table 5: Analysis of Idealized and Assumed Relationship between Human Beings and Nature

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	humannaturenov - humannatureide	1,45000	1,79854	,23219	-1,91461	-,98539	-6,245	59	,000

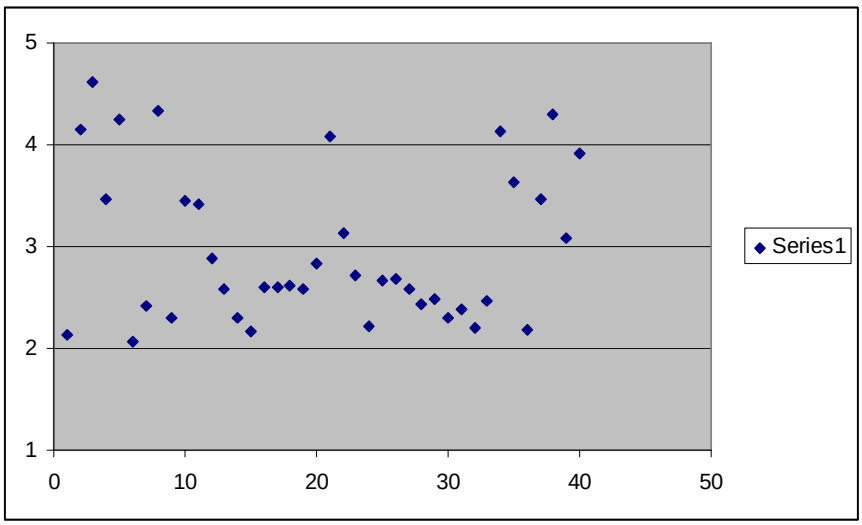


Figure 6: Scattered Plot Analysis of Respondents/Measured Relationship between Human Beings and Nature

CHAPTER 3

CONCEPTUALIZATION: EXPLORING NATURE IN DEVELOPMENT, CAPITALISM, TECHNOLOGY, PARTICIPATION, GOVERNANCE AND MANAGEMENT

3.1 Environment and Nature

After all, the men and women of every generation must share the same earth –the only earth we have- and so we also share a responsibility to ensure that one generation calls the future will be able to mature safely into what another generation will call the present.
Al Gore

Environment refers to aspects of the material world, with this understanding the original centre of the term is human-induced and something to be surrounded. Environment is described as non-human made elements of our physical surroundings, on which elements we are entirely dependent and which can be described as a collection of possible uses or functions. Goods can be produced solely by using and changing the environment (Ekko et al., 2001, p. 19-20). Most dictionaries follow Einstein's' famous remark 'the environment is everything that is not me' by defining environment as our surroundings, everything is not a part of us (Taylor, 1992, p. 9). Many writers and most policy-makers have relied upon a broad intuitive distinction between the built and the natural environment. Environment, obviously is taken as a political subject rather than a value-free concept that surrounds 'the environment is everything that is not me' with which is

framed by environmentalist ideology. Environment cannot be a non-political issue since power and sovereignty is involved. Environmental problems are intimately bound up with questions such as the distribution of power and wealth (Taylor, 1992). What matters is to decide what kind of world is possible, what kind of world we want to live in, and what kind of world our children are entitled to inherit. Political and ethical judgments are inescapable in this. Describing the environment as a 'non-political issue' is therefore equal to rejecting a political approach not just to environmental matters but from a holistic perspective.

Environmental issues are acknowledged and discussed overwhelmingly in physical terms – the state of wildlife species, habitats, landscapes, buildings, the atmosphere and oceans, and local and global polluters. On present trajectories, unavoidable and increasingly difficult environmental policy decisions lie ahead. Whereas for most other disciplines 'the environment' refers to our physical surroundings, within sociology it typically refers to social and cultural factors external to the entity being examined. In the process of rejecting environmental and biological determinism, sociology discipline became committed to socio-cultural determinism (Dunlap, 2002, p. 17). Life in industrialized societies created the impression that not only was the environment a source of inexhaustible natural resources, but that humans could manipulate and control that environment (Dunlap, 2002, p. 18). Environment, obviously is taken as a political subject rather than a value-free concept that surrounds human beings with which framed by environmentalist ideology. Environmentalism is defined by Jacobs as an ideology, which is a coherent set of beliefs about the essential nature of human society and the political principles under which it should be organized. It is interesting how all environmental issues are taken as a coherent concept. Jacobs, in his article 'The New Politics of the Environment' argues that there are three major distinguishing motivations behind the different environmental issues – long-run sustainability of economic systems, direct impact on present health and amenity, and ethical and cultural questions about the value of the non-human world. While being critical to take environment as a coherent body, it is understandable since green movement addressed the same essential problem of

human societies over exploitation of the natural world. The topic of this study, while being exclusive to all three, is mainly regarding the third one since it tries to find out how current trends of resource use is going to change and by who. However, as mentioned before the topic of this study covers the direct impact on present health or amenity on the basis of wetlands' ecosystem services of providing drinking water, agricultural use, recreation and fish stocks. The extinction of species and degradation of biodiversity is also being captured, with less importance than long-term sustainability in order to discover how different occupation/institution/income/gender/age structures the ethical and cultural questions about the value of the non-human world.

According to Taylor, the real challenge is to establish political and moral values that should inform our environmental decision making (Taylor, 1992). Thinking about environmental protection means thinking about the kind of values that should guide our decision-making (Taylor, 1992).

Environment is not an arena for serious disagreement between the major political parties or inter-governmental authorities in Turkey. It excites little political passion and parties do not differentiate their approaches regarding environment. It is quite hard to differentiate the message of the Ministry of Industry or Ministry of Environment and Forestry – bearing in mind that the Minister of Environment and Forestry used to be the General Directorate of State Hydraulic Works by the time that this thesis was written. In Turkey, environmental problems are regarded as minor, technical, soluble and politically uncontentious.

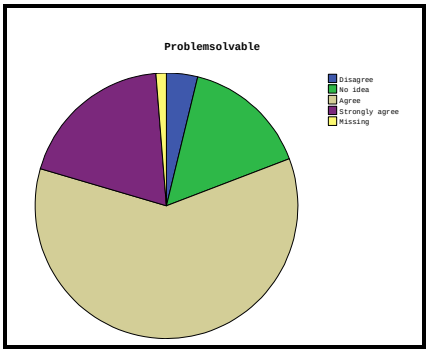
Table 6: State of Approaching the Limits of Natural Resources

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Natural resources are exhausted	76	1,00	5,00	331,00	4,3553	1,10398
Valid N (listwise)	76					

When analyzing the statement of 'natural resources are getting exhausted', the mean is 4.35 which means nearly all participants are agreeing with the current catastrophe of natural resources. Moreover, %79 percent of the participants believe that these problems are solvable. That supports the author's view of approaching structural environmental problems that is focused throughout the thesis as minor, technically solvable and politically uncontatious. It is interesting that %15 of the participants that are selected under the basis of 'experts' do not have any idea of the ways and possibility to solve the problems of the natural resource that they are responsible of as a manager or user.

Table 7: State of Approaching Solvability of Environmental Degradation by Technological Innovations

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Problem solvable	77	2,00	5,00	305,00	3,9610	,71528
Valid N (listwise)	77					



There is no claim that environmental problems represent a fundamental challenge to the economic system; in other words, minor environmental issues are going to settle down with more development while keeping business as usual. This is going to be further argued in the myths chapter. During the interviews, one of the professional workers in an environmental NGO mentioned,

> What is best for the system is not what is best for nature. We have known this for years. There is a systematic pressure from the corporate sector to the public authorities, and they cannot do anything about it. Nothing if the whole system is replaced. Nothing if we do not perceive it from a feminist point of view. (…) I have been working in the field for 5 years now on integrated river basin management. I can say that there is success on the infrastructure but that does not change the fact that multi-stakeholder platforms are in place. We will not achieve wise management if stakeholders –regardless of how educated they are- would sit on the same table, talk about the problems and get their own share with regards to responsibilities in order to solve problems. (Male/31/NGO/Ankara/not top executive)

Not quite parallel with this view, a chief executive from an NGO mentioned,

> Business as usual is no longer an option. It is evident. It proved wrong. Short-term money making to some segments of the society is harmful for the rest of the society as well as for the environment. I believe in sustainable development, I believe it is possible, I believe humanity can reach millennium development goals only if we start now. We do not have another day to think about if this and that are true or if they are stemming because of human beings (she refers to climate change). It is time to act to reverse our sins to the other living things that we share the world. (Female/52/NGO /İstanbul/top executive)

3.1.1 Environmental Sociology

Before going into details on the dualism between ecology and development that sustainable development lacks to eliminate, it is necessary to have a look at the perception of environmental sociology by functionalist, interpretative, and critical sociological paradigms because although ignored, they had an implicit environmental dimension. Dunlap, who analyzes the inherent complexity of human's relationship with the environment, defines environmental sociology as 'the study of interaction between the environment and society or societal-environmental interactions or relations'. Dunlap proposes that in classical sociology, there is a

distinctive fundamental anthropocentrism. This can be understood on the basis of the intention of favoring social, structural explanations over physical or environmental ones. To a certain extent, each of these schools had something significant to say about nature and society, although this has often been more implied than direct. Parallel to this Dunlap argues that

> Examinations of the relationship between social class and environmental degradation or the impact of energy shortages on society are qualitatively different from studies of public opinion toward environmental issues or of environmental sociology rather than just a sociology of environmental issues (Dunlap, 2002, p. 11).

Functionalist sociology deliberately elevates social facts over facts of lower order – that is psychological and biological. Nevertheless, functionalism frequently utilized biological concepts and metaphors in presenting functionalist theory of societal transformation. It is stated by Hannigan that functionalist theory was very much an attempt to devise a solution to what is essentially an ecological crisis of rising population paired with scarce resources. As societies become larger and denser, it would have been disastrous if everyone had continued to engage in agriculture. Increasingly, occupational specialization meant that the competition over arable land was lessened, even as land became productive thanks to technological innovations. It shall not be forgotten that in 1880s, today's knowledge of ecology and evolution was unavailable (Hannigan, 2006, p. 6).

Hannigan argues that interpretative approach analyzed concrete examples of struggles over natural resources, for instance the control of irrigation systems (Hannigan, 2006, p. 7). Ecological irrationality is manifested in a wide range of destructive consequences from sensational technological disasters such as nuclear accidents to routine pollution events such as industrial dumping into urban storm sewers (Hannigan, 2006, p. 8).

The impact of the functionalist and interpretative disciplinary traditions according to Dunlap can be summarized as follows

> The impact of these disciplinary traditions can be summarized as follows: The Durkheimian antireductionism legacy suggest that the physical environment should be ignored, whereas the Weberian legacy suggests that it could be ignored, for it is deemed unimportant in social life. Should one violate these traditions and suggest that the physical environment might be relevant for understanding social behavior, one risks being labeled an environmental determinist. Although these traditions were understandable at the time that sociology was still seeking firm disciplinary status, they seemed outmoded by the 1970s (Dunlap, 2002, p. 18).

Critical approach has provoked the most extensive response from present-day environmental interpreters. The pioneers of conflictual approach were only marginally concerned with environmental degradation per se but their analysis of social structure and social change has become the starting point for several contemporary theories of the environment. Critical sociology puts forward the social conflict between the two principal classes in society, that is capitalists and the proletariat, not only alienates ordinary people from their jobs, but also leads to their estrangement from nature itself. Parsons states that nowhere is this more evident than in capitalist agriculture, which puts a quick profit from the land and driven into crowded, polluted cities while the soil itself was drained of its vitality (cited in Hannigan, 2006, p. 8). A single factor, capitalism, was held responsible for a wide range of social ills from overpopulation and resource depletion to the alienation of people from the natural world with which once they were united. Conflictual sociology infers an anthropocentric approach direction depicting humans as achieving mastery over nature, in no small part because of technological innovation and automation (promethean, pro-technological, anti-ecological) attitude toward nature. Marx argues that ‘the soil, economically speaking, includes water’ (cited in Castro, 2006, p. 7), which synthesizes the rationale behind the dominance of land-centered research. From a critical understanding, humans will develop a new understanding of and empathy with nature. Contemporary conflictual theory emphasizes not only the role of capitalists but also that of the state in fostering ecological destruction.

According to critical sociology, there are three conditions of production: first human labor power, or what Marx called the ‘personal conditions of production’; second,

environment or what Marx called ‘natural or external conditions of production’; third, urban infrastructure (space can be added here too) or what Marx called ‘general, communal conditions of production’. The fictitious price of labor power is the wage rate and that of environmental and urban infrastructure and space is rent (O’Connor, 1994, p. 163).

Foster states that,

> Marx provided a powerful analysis of the main ecological crisis of the day – the problem of soil fertility within capitalist agriculture- as well as commenting on the other major ecological crisis of his time (the loss of forests, the pollution of the cities and the Malthusian specter of over-population). In doing so, he raised fundamental issues about the antagonism of town and country, the necessity of ecological sustainability, and what he call the metabolic relation between human beings and nature (cited in Hannigan, 2006).

Marx employed the concept of metabolism to describe the complex interaction between society and nature. Hannigan states that rather than a bargain for chemical agriculture, Marx and Engels appears to have been an early advocate of organic farming methods. For example, he writes at length about the benefits of spreading manure on crop lands, even suggesting that human waste from the city recycled as fertilizer rather than polluting the rivers and oceans.

In the formulation of material life (infrastructure) defining consciousness (super-structure); contemporary Marxist theory emphasizes not only the role of capitalists but also that of the state in fostering ecological destruction. Marx stressed the idea that since material life is socially organized, the social relationships of production determine consciousness. He muted the equally true fact that since material life is also the interchange between human beings and nature, these material and natural relationships also determine consciousness (Ed. by Zimmerman et al., 2001, p. 433).

What best describes environmental sociology is a new field which can arise out of the intellectual and political structure generated by movements for social reform and change. Each of the three widely acknowledged founders of the discipline of sociology addressed some aspect of nature and society, but this was not really

definitive to their work. Some key contributors took pains to distinguish strictly between a real environmental sociology that focused on the study of environment-society interaction; and sociology of environmentalist issues that did not. However, this distinction became blurred in the decades that followed and environmental sociology now tends to be used simply to describe the kinds of work that is conducted by self-identified environmental sociologists. Dunlap approaches the state of contemporary environmental sociology as follows:

> Besides the Durkhemian antireductionism taboo, another major tradition in sociology has contributed to our discipline's tendency to ignore the biophysical environment. Inherited from Weber and elaborated by Mead, Cooley, Thomas and others, this tradition emphasizes, the importance of understanding the ways in which people define their situations in order for us to understand their actions. Assuming that the reality of a situation is in the definition attached to it by participating actors, this perspective implies that the physical properties of the situation may be ignored (cited in Dunlap, 2002, p. 17). Some sociologists are going beyond treating environmental problems as sociopolitical issues, in fact, Dunlap argues employing environmental variables to examine societal-environmental relations, which he feels essential for demarcating environmental sociology as a distinct area of specialization akin to political sociology (Dunlap, 2002, p. 12).

In the contemporary environmental sociology, there are several distinct competing paradigms such as human ecology, political economy, social constructionism, critical realism, ecological modernization, risk society theory, environmental justice, actor-network theory and political ecology (Hannigan, 2006, p. 12). There is some evidence that environmental sociology has been making inroads into publishing and teaching in mainstream sociology, although it is by no means as influential as long-established specialties such as deviance, stratification, and demography. This, though, is not very surprising bearing in mind that environment and development are seen as dualistic and economy is seen as prior and first to be acted on. However, the author of this thesis believes that environmental sociology is going to be one of the leading sub-topics of sociology when natural resources will not leave any room for further development and take part with all segments as a part of infrastructure of all social sciences research.

There is still something lacking in the content of environmental teaching according to Zimmerman. This formula is too easy to accomplish anything worthwhile. It defines no right or wrong, assigns no obligation, calls for no sacrifice, no 'rights' ground, implies no change in the current philosophy of values. It urges only enlightened self-interest (Ed. by Zimmerman et al., 2001).

Bearing in mind that ecological problems' seriousness is increasing with a high pace globally, Dunlap claims that environmental sociology will continue to prosper and in process strengthen its foothold in the larger discipline in the years ahead (Dunlap, 2002, p.25).

3.3 Development and Nature

The modern world... has no notion except that of simplifying
by destroying nearly everything.
G. K. Chesterton

Poverty, hunger, disease and debt have been familiar words within the lexicon of development ever since formal development planning began, following World War II. In the past decade, they have been joined by another term called sustainability (Adams, 2001, p. 1). Versions of discourse of development formula have formed the standard basis for development discourses, but development itself nonetheless remains an ambiguous and unreliable concept, prey to prejudice and preconception (Adams, 2001). Economic growth, which is the 'increase of production measured in the standard national income', enjoys top priority in the economic policies pursued by every country of the world (Ekko et al., 2001). Growth theory is economic theory. It does not take out from the accounts the loss of nature, nor does it exclude from the accounts the defensive expenditures by which we try to compensate for nature's loss (building dykes against sea-level rise induced by climate change, or selling bottled water in polluted areas) (cited in Sukhdev, 2009). Development is also

conceptualized as perceptions, which model reality, a myth that comforts societies, and a fantasy, which unleashes passions. Escobar argues that reality has been so *"colonized by the development discourse that those who were dissatisfied with this state of affairs had to struggle for bits and pieces of freedom within it, in the hope that in the process a different reality could be constructed,"* (cited in Adams, 2001, p. 6). The word development came into the English language in the 18th century and soon acquired an association with organicism and ideas of growth. When we look at the evolution of development discourse, it can be put forward that

> (…) western development, because of the favor accorded industrialization and social conflict, has created a history for itself in which nature only figures as an object of labor and the terrain of socioeconomic struggles. It has no value other than the negative one of the peasant resistance to be overcome, of a biological limit always to be transcended, or of a traditionalist anchoring to be rejected (Conley, 1997).

Ideas of underdevelopment originated in the 19th century European thought. By the start of the 19th century, development had become a linear theory of progress, bound up with capitalism and Western cultural hegemony, and advanced through mercantilism and colonial imperialism (Adams, 2001, p. 6). Wiener states that if available resources were adequately allocated and utilized, Third World countries would today be much closer to a growth take-off (Wiener, 1972).

> This capitalist and Eurocentric developmentalism presents development as the process that recreates the industrial world: industrialized, urbanized, democratic, and capitalist. Development has been depicted as a crucible through which successful societies emerge purified both modern and affluent. Developmentalism suggested that countries developed through different stages, on a linear path towards modernization, and that progress down that path could be measured in terms of the growth of the economy, or some economic abstraction such as per capita gross domestic product. The word development then came to mean projects and policies, the infrastructure, flows of capital and transfers of technology, which were supposed to make that imitation possible (Adams, 2001, p. 7).

Development planning can be seen as the imposition of rationalization, where science provides knowledge that can be used to control environment, economy, and society in such a way that change can be directed in desire directions (Giugni, 2004). Development work, like all other forms of natural resources related problem solving

can contribute to worsening biological degradation, make them worse or end up having a range of variable social and political effects (Selby, 2003). According to Arsel and Adaman (2005) developmentalism has had serious negative environmental impacts, which are set to worsen in scope and depth.

3.3.1 Myths Regarding the Dualism Between Ecology and Development

Give me a one-handed economist!
All the economists say 'on the one hand... on the other.
Harry S. Truman

The only thing that matters in the context of sustainability is that vital functions remain available and the conservation of these functions is critical. Sixteen basic environmental functions of nature for humanity are distinguished by Ekko et al. These are oxygen production, waste removal, gene pool for improving or creating crops and livestock, supplier of medicines (vaccines, antitoxins), supplier of natural products (timber, fish, skins, ivory), hydrological regulation, erosion prevention, and maintenance of biological equilibrium (Ekko et al., 2001, p. 27). The revenues in the form of restoration of functions are equal to the costs of restoration, but remain invisible, because the environment remains outside the system (Ekko et al., 2001, p. 35). If there are no preferences for a good, its value is zero, irrespective of how important or even indispensable, that good may be for the human kind, this is mainly where the dualism between ecology and develop-ment is rooted. Weak sustainability (however, Hueting argues that there seems to be only one kind of sustainability in which it is sometimes possible to substitute elements of the environment –resources- by other elements in order to guarantee the availability of functions), assumes all or most natural capital is substitutable with other forms of capital, so that restoration of lost elements can be postponed, awaiting cheaper elements provided by future technologies (Ekko et al., 2001, p. 322). In other words, it means getting rich first and attaining to environment later.

There are three myths that are mentioned by Ekko, which provide an appropriate ground to how people perceive ways to overcome the dualism between development and ecology, which in fact cannot serve positively in providing ways to overcome this dualism. The first myth can be put forward as a given amount of production and consumption requires more labor with environmental conservation than without. The extra labor required is used for maintaining scarce environmental functions (Ekko et al., 2001, p. 78). Parallel to this Commoner states that historically, the number of men employed has increased as non-human energy use has increased and puts forward that

> The observed positive correlation between non-human energy and employment means not only that energy use and employment are both correlated to some third factors, which have been increasing historically, namely total output and total population. The positive indirect correlations via the growing third factors outweighed the negative direct correlation between energy and employment themselves. For a constant level of output and population, we know that the correlation between energy and employment themselves. If we insist on more employment and more non-human energy we must also insist on more output. Only if the total product growth creates more jobs than are eliminated by the growth of non-human energy will employment increase (Ed. by Commoner et al., 1975, p. 148-149).

The proposition that ‘to preserve environment we must sacrifice employment’ is probably the major obstacle standing in the way of a sound environmental policy. Possible uses or functions of the environment (including natural resources) are scarce goods that require the use of production factors for their restoration, preservation, and substitution. Of these, labor is the most important. Clean production creates structurally more employment and dirty production. This makes clean products more expensive, and this is why we produce and consume in a way that burdens the environment. Income has to be reduced in proportion to the costs of the measures required to conserve the environment. The conflict is between the environment and production or its growth, rather than between the environment and people (Ekko et al., 2001, pp. 78-81).

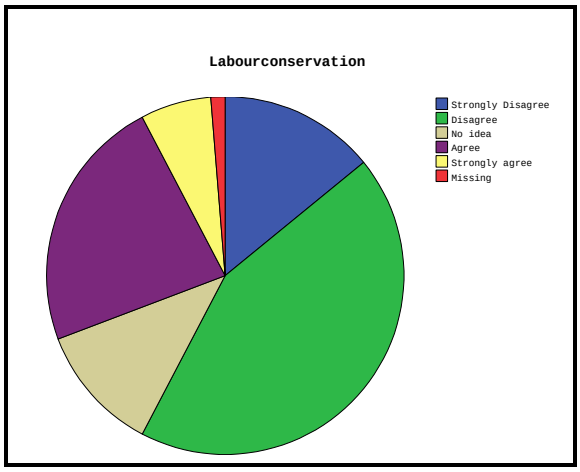


Figure 7: Analysis of Respondents' Perception with Regards to the Statement 'More Labor is Required if Consumption and Production is Made Concerning Conservation of Natural Resources'

More than half of the participants are agreeing with (14.1% strongly disagree, 44.2% disagree) and 30% are opposing with the statement 'More labor is required if consumption and production is made concerning conservation of natural resources'. Before the research, it was assumed the opposite way. In other words, more than half of the participants do not follow this myth.

The second myth can be summarized as production must grow to save the environment. 'Things go well economically only when production grows' completely contradicts economic theory. According to Ekko, economic theory assumes that humans, in their dealings with scarce goods, try to attain the highest possible level of satisfaction of wants-welfare (Ekko et al., 2001, p. 83). In other words, economic theory does not assume that humans try to attain the highest possible production. This not only means goods and services produced for the market that are involved 30% of activities, the most environmentally damaging, generate about 70% of production growth. Humans depend on the possible uses or functions of the environment for all their activities. Production growth, as measured in terms of national income, increasingly impairs environmental functions, including those that make life on this planet possible. The concepts production, money and market are

absent in the definition of the subject matter of economics. Welfare depends on many factors than only production, money and market are absent in the definition of the subject matter of economics (Ekko et al., 2001, p. 83). Production must increase in order to create scope for financing environmental conservation.

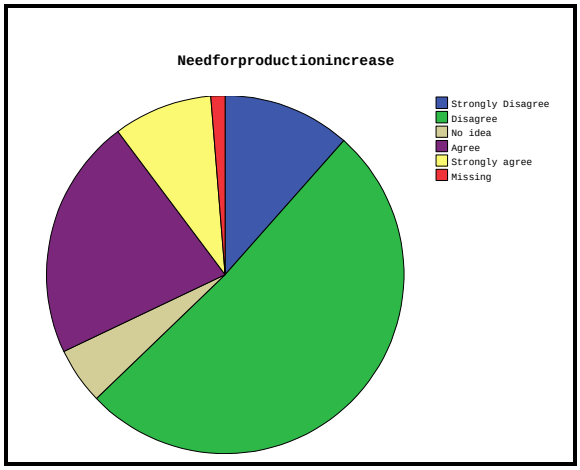


Figure 8: Analysis of Respondents' Perception with Regards to the Statement 'Production Must Grow in order to Create Scope for Financing Environmental Conservation'

Following the second myth, 62% of the participants are opposing with the myth that states 'Production must increase in order to conserve the nature'. 30% of the decision-makers believe in the myth.

Ekko argues that this proposition is the most dangerous ever invented due to two reasons. The first is to examine which activities contribute most to growth. The second is to examine what effects environmental protection has on production levels. Unfortunately, these are mainly precisely those activities that cause the greatest environmental damage, owing to their use of space, soil and resources, and their pollution in production or consumption. These activities include the oil and petrochemical industries, agriculture, public utilities, road construction and mining. Roughly, 30% of the activities, precisely the most environmentally damaging,

generate about 70% of production growth (Ekko et al., 2001, p. 84). To put it briefly, growth required to save the environment is impossible since the lion's share of the contribution to growth comes to the most damaging activities.

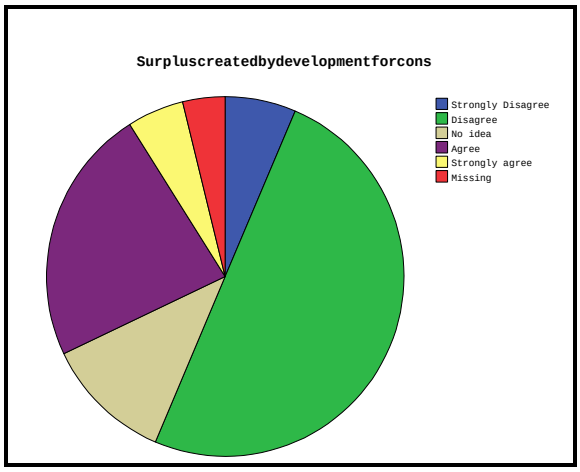


Figure 9: Analysis of Respondents' Perception with Regards to the Statement 'The Financial Mechanism for Nature Conservation Can be Possible Through Production Increase'

56% of the participants do not believe in the myth that states 'The financial mechanism for nature conservation can be possible through production increase' whereas 28% of the participants believe in the myth.

The third myth puts forward that we would like to save the environment, but it is too expensive. It shall not be forgotten that all fundamental solutions for safe-guarding the environment are clearly much cheaper than continuing the process that is threatening life on this planet (Ekko et al., 2001, p. 86). The burden on the environment is determined by number of people, amount of activity per person and nature of this activity. There is an economic sacrifice that needs to be made, otherwise there would be no environmental problem. Level of this activity is usually healthier and does not mean to return to middle ages. The shift to environmental sustainability comes down to adapting the number of individuals of human species

and the kind of activities we engage in the carrying capacity of our planet. (Ekko et al., 2001, p. 86). Given a certain availability, the value (and the scarcity) of goods depends on preferences. The true value of goods produced and consumed at the expense of the environment is equally unknowable (Ekko et al., 2001, p. 87). Scarce environmental functions, the most fundamental economic goods are at the disposal of human beings because they constitute the very basis of our existence, cannot be preserved as long as in any discussion concerning the weighting process the information on the key items –employment, growth and financial feasibility- is turned upside down (Ekko et al., 2001, p. 87).

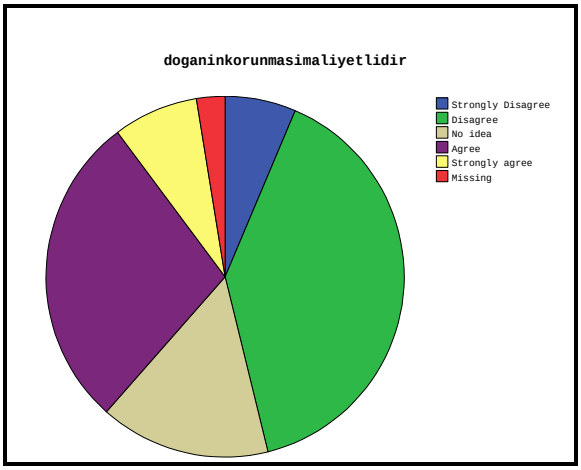


Figure 10: Analysis of Respondents' Perception with Regards to the Statement 'Nature Conservation is Expensive'

Another assumption that has failed is the statement 'Nature conservation is expensive'. 46% of the participants are disagreeing with the statement whereas 36% think it is expensive to conserve nature.

Modern economists favor discounting not because of 'pure time preference' but because of the decreasing marginal utility of consumption as growth takes place. The assumption of growth (measured by GDP) justifies human using more resources and polluting more now than they would otherwise do. Therefore, the descendants, who

by assumption are supposed to be better off will be paradoxically worse off from the environmental point of view than the contemporary situation (Sukhdev, 2009).

3.3.2 Economic Growth and the Valuation of the Environment

One basic weakness in a conservation system based wholly on economic motives is that most members of the land community have no economic value.
Aldo Leopold

The way developmental right can be the scope and tool for realization of other rights for well-being is the developmental policies that value environmental values because it is only possible that development rights to become ecologically balanced in a clean environment to become the base of freedom (Kabaoğlu, 1996). This implies that environmental rights come before developmental rights.

It can be stated that the way economy and policy-making is structured in Turkey today closes the door on ecocentrism, putting the ecosystem off our value system. This is not unique to Turkey or developing countries. Modern production was only possible by using depletable resources such as coal and iron. Goods can be produced solely by using and changing the environment (Ekko et al., 2001, p. 19). Taylor argues that even if it made sense to say that the ecosystem as a whole is more important than the human race, the ecosystem itself is not fixed in time but is something, which has changed dramatically throughout prehistory and through human agency during our tenure of the planet. *"It is too late simply to cry 'hands off the ecosystem!' we couldn't release our grip even if we wanted to,"* (Taylor, 1992, p. 13). During of the interviews 'hands-off ecosystem' approach's insignificance in Turkey context is mentioned as follows:

> I am in charge of rural planning, land consolidation and agricultural structure in Uludağ University for several years and have been active in the Uluabat Lake Management Plan Steering Committee for a couple of years. Actually my interest in nature conservation started when I met my wife. Franzi's passion for birds made me realize the role we have to combat what is going wrong. What was impressive was that she wasn't aiming to 'put fences around the lake, she

> wanted to make sure that enough water is secured for stork reproduction. It is us who need to propose solutions to the problems and our consideration shall be more than how much irrigated area can we utilize, for instance how can we better manage the (Uluabat) lake by, for instance drip irrigation. (Male/62/Bursa/University/not top executive)

The steam engine and "GDP growth" are the two most significant discoveries of the 18th century, both of which improved the well-being of a significant part of humanity has thus become a preferred yardstick for progress, however, GDP growth does not capture many vital aspects of national wealth and wellbeing, such as changes in the quality of health, the extent of education, and changes in the quality and quantity of our natural resources. (cited in Sukhdev, 2009) If there exists strong preferences for the environment, conservation measures will lead to a decline in the national income and an increase in welfare. (Ekko et al., 2001) It shall not be forgotten that even if we were to think the relationship between man and nature in valuating environment in GDP terms, a 1% per annum cost would be needed to protect the world economy from a loss of up to 20% of global consumption, is an example of such an "option premium". (cited in Sukhdev, 2009) Moreover, estimated economic value of ecosystem services at US$ 33 trillion compared to US$ 18 trillion for global GDP. (cited in Sukhdev, 2009)

Sustainable national income according to Hueting is,

> The maximum net income which can be sustained on a geological time scale, with future technological progress assumed only in the development of substitutes for non-renewable resources, where such substitution is indispensable for sustaining environmental functions, in turn essential for sustaining income (Ekko et al., 2001, p. 19).

The difference between the standard and the sustainable national income reflects the distance, expressed as costs, which must bridged in order to attain sustainability; that is our debt to future generations (Ekko et al., 2001, p. 24). If the sustainability standards are viewed as revealing current preferences for the environment (implying pollution reduction levels in the range between 60-100%) the change in income is tremendous, the SNI might be as much as 62% lower than current national income (depending on the variant of the approach used) (Ekko et al., 2001, p. 10). This

damage through loss of a function are prepared to pay at least the amount required to restore that damage in order to achieve restoration and lasting availability of the function in question. This can be achieved through environmental taxation in Turkey since, natural resources are taken for granted as god-given resources and no price is paid for either using or polluting the natural resources. Payment for ecosystem services is a new concept in Turkey that can create demand so as to correct the imbalances which harm biodiversity and impede sustainable development. A pilot study conducted by WWF Turkey states that in the Salt Lake area, the highest PES is the one for substituting wheat with maize (€771/ha) –including the change in irrigation– while changing the irrigation system only may require a payment of about €533/ha. The option of substituting half of the wheat production with sunflower (and moving to drip irrigation) seems to be more profitable than the current practice, so a payment in this case does not seem necessary (Ayas et al., 2007). Hueting argues that valuation exercises should also explicitly account for future generations and their rights on particular environmental services (cited in Ekko et al., 2001). With decreasing availability of the function, progressively more compensation measures must be taken and progressively more financial damage occurs: the price -and thus the marginal utility- increases (Ekko et al., 2001, p. 38).

Wolfe examines the relationship between environment and politics together with the concepts of human rights, gender equality, population growth, and poverty. If one accepts the proposition that ‘development’ must curb its aggressions against the ecosystems of the world, moderate its appetite for non-renewable resources and prefer enhancement of the quality of life to proliferation of consumer goods, the technical means to this end may not be too hard to elaborate. The question is how such a fundamental challenge to real trends can relate itself politically to our starting point of conflicting mutations, lowered expectations concerning state capacity to solve problems and precautious ascendancy of economic and cultural globalization (Marshall, 1996, p. 149).

3.4 ‘Linking’ Sustainable Development and Nature

The trouble with the profit system has always been that
it was highly unprofitable to most people.
E.B. White

The scope of conceptualizing sustainable development is to explore the discourse of sustainability in broad terms and specifically to consider its treatment of environmental knowledge, institutional practice, and social-natural relations (Irwin, 2001, p. 32).

Although various claims have been made for the first usage of the term ‘sustainable development’, it seems likely that the genesis of the concept stems from the 1970s when environmental awareness was becoming established in its modern reincarnation worldwide (Irwin, 2001, p. 35). The term ‘sustainable development’ did not actually come to prominence until 1980, when it was proposed by the International Union for the Conservation of Nature (IUCN) as part of World Conservation Strategy (WCS). The WCS defined the broad goal as integrating conservation and development to ensure that modifications to the planet do indeed secure the survival and well-being of all people. In anticipation of the Brundtland Commission’s best-known definition of sustainable development, conservation was defined as the management of human use of biosphere. This way, sustainable development is built on the notion that conservation and development are mutually dependent rather than opposed to one another (Irwin, 2001, p. 37). Sustainable development is announced to a wider public by World Conservation Strategy in 1980, and became popular by the Brundtland Report in 1987. As argued by Jacobs (1997),

> Business organizations and governments tend to adopt a conservative and incremental approach, seeking to balance economic and environmental goals; environmental organizations take a more radical line arguing for environmental limits and for the incorporation of social and democratic objectives (Jacobs, 1997, p. 4).

Sustainable development has become one of the most prominent phrases in development discourse, and was poised to become the development paradigm of 1990s. Interpretations of sustainable development differ from each other. The dominant definition described in Brundtland report in 'Our Common Future' is *"Development that meets the need of the present without compromising the ability of future generations to meet their own needs"* (cited in Adams, 2001, p. 4). Some definitions have a strong element of social justice; for example, calls for 'economic progress' that is ecologically sustainable and satisfies the essential needs of the underclass. The phrase sustainable development has become the focus of debate about environment and development. Kabaoğlu states that a kind of development that meets the needs of present generations without compromising the rights of future generations puts some limitations. These limitations that are directed to biosphere capacity to hold human activities' effects are not rigid and subject to change by technology and social organization (Kabaoğlu, 1996). It is stated in the Rio Declaration that every state has to fulfill the obligations of eliminating unsustainable forms of production and consumption together with population control in order to achieve well-being for all societies (quoted in Kabaoğlu, 1996, p. 34).

> In the end, sustainable development is not fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs (quoted in Irwin, 2001, p. 31).

Sustainable development is put forward by Ekko (2001) in four principles. Firstly, limit the human scale to that which is within the earth's carrying capacity. Secondly, sustainable development ensures that technological progress is efficiency increasing rather than throughput increasing. Thirdly, for renewable resources, harvesting rates should not exceed regeneration rates (sustained yield), waste emissions should not exceed the assimilative capacities of the receiving environment. Finally, non-renewable resources should be exploited no faster than the rate of creation of renewable substitutes (Ekko et al., 2001, p. 106). Irwin states that sustainable development represents the marriage of developmentalism (the commitment to continued economic development) and environmentalism. Such a reconciliation is

neither obvious nor straightforward – nor is it without its critics who see it as a centralizing approach, more concerned with business as usual than radical change. Sustainable development is much more a struggle between various unconventional political coalitions, each made up of such actors as scientists, politicians, scientists (Irwin, 2001, pp. 32-33).

Sustainable development implies that we must take control of our common future through a new and more active management of global change. To succeed, we must bridge the gap between the developing and the industrialized countries, between the poor and the rich (Taylor, 1992). Further discussion is going to take place regarding the possibility that sustainable development can fulfill these ambitious notions.

It is quite obvious that the balance between utilization and conservation of natural 'resources' has not reached to its ambitious aims.

- Over one billion people survive on less than US $1 per day. 70% live in rural areas where they are highly dependent on ecosystem services.
- Inequality has increased over the past decade. During the 1990s, 21 countries experienced declines in their rankings in the Human Development Index (HDI).
- Over 850 million people were undernourished in 2000-02, up 37 million from the period 1997-99.
- Per capita food production has declined in sub-Saharan Africa.
- Over one billion people still lack access to improved water supplies, and more than 2.6 billion lack accesses to improved sanitation.
- Water scarcity affects 1-2 billion people worldwide.
- Global improvements in levels of poverty are skewed by rapid economic growth in India and China; poverty elsewhere (especially in sub-Saharan Africa) is profound and persistent.
- At the end of the twentieth century, after five decades of formal development efforts, low-income countries had less than 10% of the world's gross

national product (GNP) of US $28,862.2 trillion. This figure fell to less than 2% if India and China were excluded (cited in Adams, 2008, pp. 27-44).

- In the last 300 years, the global forest area has shrunk by approximately 40%. Forests have completely disappeared in 25 countries, and another 29 countries have lost more than 90% of their forest cover. The decline continues (FAO 2001; 2006).
- Since 1900, the world has lost about 50% of its wetlands. While much of this occurred in northern countries during the first 50 years of the 20th century, there has been increasing pressure since the 1950s for conversion of tropical and sub-tropical wetlands to alternative land use (Moser et al., 1996).
- Some 30% of coral reefs –which frequently have even higher levels of biodiversity than tropical forests– have been seriously damaged through fishing, pollution, disease, and coral bleaching (Wilkinson, 2004).
- In the past two decades, 35% of mangroves have disappeared. Some countries have lost up to 80% through conversion for aquaculture, overexploitation, and storms (Millennium Ecosystem Assessment, 2005).
- The human-caused (anthropogenic) rate of species extinction is estimated to be 1,000 times more rapid than the 'natural' rate of extinction typical of Earth's long-term history (Millennium Ecosystem Assessment 2005).

3.4.1 Sustainable Development Discourse and Environment

The aim of this section is to show how sustainable development discourse tries to integrate environmental matters. Any fresh attempt to conceptualize environment-related matters needs to confront the nature-society divide. It is unwise to bracket out the natural from sociological analysis as it is to deny that nature and environment are socially constructed (Hannigan, 2006, p. 152).

People represent 0.5% of animal biomass on earth yet, on average, human appropriation of net terrestrial primary production are estimated to be 32%. Locally

and regionally, impacts are much greater (Adams, 2008, pp. 25-26). Roughly half of our present production and consumption depends on unsustainable use of the environment (Ekko et al., 2001, p. 22). The ecological dept is going to expand as it can be observed in the figure below.

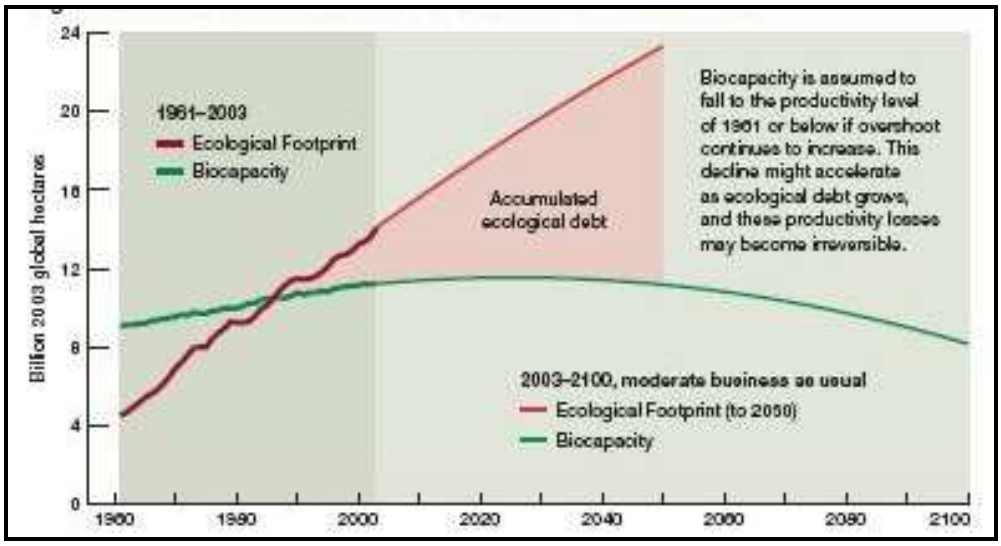


Figure 11: Business as Usual Scenario and Ecological Debt

Retrieved from Living Planet Report, WWF, 2006

Table 8: Conceptualization of the State of Human Beings In Nature

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	34	43,6	44,7	44,7
	Agree	21	26,9	27,6	72,4
	No idea	3	3,8	3,9	76,3
	Disagree	14	17,9	18,4	94,7
	Strongly Disagree	4	5,1	5,3	100,0
	Total	76	97,4	100,0	
Missing	System	2	2,6		
Total		78	100,0		

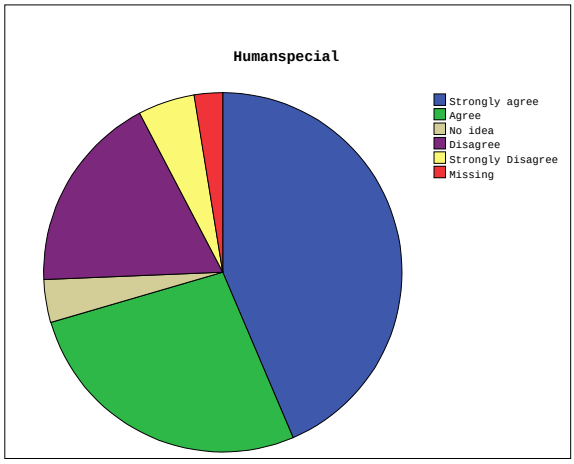
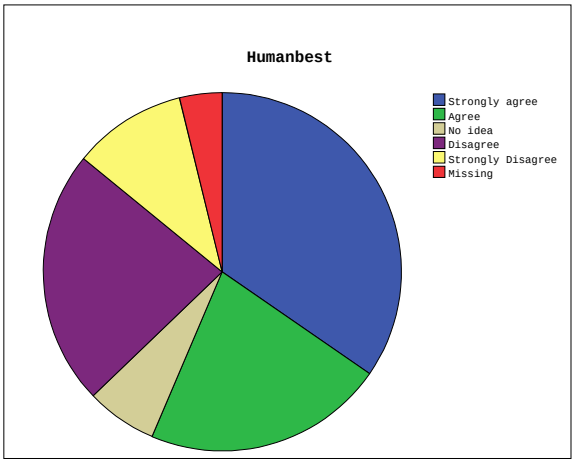


Table 9: Conceptualization of Human Beings' Position With Regard to Other Living Things

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	27	34,6	36,0	36,0
	Agree	17	21,8	22,7	58,7
	No idea	5	6,4	6,7	65,3
	Disagree	18	23,1	24,0	89,3
	Strongly Disagree	8	10,3	10,7	100,0
	Total	75	96,2	100,0	
Missing	System	3	3,8		
Total		78	100,0		



In the analysis, it is possible to state that the decision-makers that took part in the research are in favor of the master status of human beings over nature since it can be seen that the means are 2.1 and 2.5 respectively for stating 'Human beings are more special than other living things' and 'Human beings are the best living things' which denotes that they agree with the statement.

Table 10: Differentiation of Institutions in the way of Idealizing the Relationship between Human Beings and Nature

Public private NGO university

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13,495	6	2,249	,809	,568
Within Groups	144,607	52	2,781		
Total	158,102	58			

In the above table, it can be seen that there is no significant difference between the institutions in the way of idealizing the relationship between man and nature with 32% in idealizing sustainable development and 35% by land ethic. However, during the deep-interviews, one of the engineers from State Hydraulic Works who claims himself to be environmentalist stated,

> Sustainable development means not wasting tomorrow's resources today. We will need energy more in the future, probably to a greater extent. That is why we need to utilize what the nature provides us. We should not waste water running to the sea if we can produce electricity out of it, right? I sometimes think why you guys are angry at us and oppose dam building. State Hydraulic Works is building them in an eco-friendly manner, it is true that there used to be problems, what other country doesn't? (Male/44/State Hydraulic Works/not top executive)

On the other hand, the top executive of General Directorate of Nature Conservation and National Parks, Division of Wetlands approaches the relationship from another perspective.

> Every activity that we do has an effect on nature, depending on the size, capacity and the actor. The effect on nature is important because it is for us. Planning is the most crucial determinant when it comes to harmonization of human and nature relationship. However planning is not enough when you think about human's benefit in the short run. At the moment, the ones who are in the planning process are not familiar with nature conservation. Human is at the top of everything. The nature is created by God in order to serve to human beings. Humans commands on nature as well as being dependent on nature and benefit from it. Therefore, we have to create a balance between these three, otherwise human beings who are at the top of the food pyramid will be negatively affected. When we approach the issues from a religious point of view, the land, water, air is created in order to serve us. Of course, we don't deny other living things because they serve us, because human is the biggest consumer and must live in luxury. (Male/52/Bursa/Public Sector/ top executive)

The picture completely changes when it comes to a senior executive from a non-governmental organization, who favors ecological socialism.

> The relationship between human and nature cannot be harmonized. Human beings are different from other living things on the basis that we can organize what we produce. Human history is the history of organizing production. Hunting-gathering societies had the most plain and environmentally-friendly way of living was. With the taming of animals and plants and with agricultural revolution, the magic dissolves. The battle of sovereignty of men on nature becomes wilder with the introduction of mechanical production thanks to feudalism and infinite production matrix of growth becomes permanent with capitalism. With industrial revolution, the geometrical asymmetry becomes logarithmic and irreversible. This widens depletion of natural resources. (…) The conflict between men and nature can be solved by socialism based on central planning, allocation of surplus to general public together with being ecological, feminist and democratic. It cannot be solved within capitalism. The rhetoric of sustainable development is based on capitalism, there is a need to transform capitalist mode of production, otherwise it is not possible at all to save the nature and continue with growth within industrial civilization at the same time. (Male/53/Bursa/NGO/top executive)

As argued by Jacobs (1997),

> Business organizations and governments tend to adopt a conservative and incremental approach, seeking to balance economic and environmental goals; environmental organizations take a more radical line arguing for environmental limits and for the incorporation of social and democratic objectives (Jacobs, 1997, p. 4).

During the deep-interviews, the Regional Directorate of Ministry of Environment and Forestry stated that

> There is no way that they (corporate sector) will wake up one morning and realize that Uluabat is a dumping place. We need to make the polluters pay for what they cause. That, of course, does not mean that I have the money, so I will pollute as much as I can. The fines should be high and monitoring mechanism must be strict. Here, the organized industrial zone knows at what time the 'fine-makers' will arrive and they switch on the treatment facility, when they are gone, they switch it off again so that they do not have to pay for high electricity bills. Why bother when water is of no charge and you get nothing out of polluting? (Male/33/NGO/Bursa// top executive)

What we will be experiencing seems much worse than what we will be witnessing in the future. The Stern Review on The Economics of Climate Change in 2006 provided a detailed warning that, if unabated, climate change could cause environmental costs equivalent to 5-20% of global GDP (Adams, 2008, p. 40). The valuation of environment, both in terms of GDP and non-monetarized perspectives are examined in detail in the next chapter. It is also stated by Stern that the impact of anthropogenic climate change is going to be higher than the sum of World War I, World War II and the Great Depression.

The use of ecology in development planning, which in turn leaded to the concept of sustainable development, has the aim of both 'enhancing the goals of development' and 'anticipating the effects of development activities on the natural resources and processes of the larger environment'. Ecology had in the past been confined to assessing the potential productivity of a resource; now the adverse impacts of certain kinds of development and management technology on local and global environments. Ecological principles for economic development are pragmatic attempts to express the use of environmentalists in a way that those responsible for decisions in development would understand and take account of (Giugni, 2004).

Nature protection is said to have passed through three main stages of global institutionalization: change in world culture, change in world organization, and change in nation-state politics (Hannigan, 2006, p. 150). American environmental

sociology is more directly concerned with inequalities related to race, class, and gender. On the other hand, there is no class/status/race/gender/rural-urban differentiation regarding environmental issues. Environmental problems are seen as a coherent body without implying any disadvantaged group on the consequences. Fisher tends to consider environmental problems to be of relatively direct consequence, or at least a clear correlate of industrialization and capitalist accumulation. As argued by Ünver, sustainable environment concept started to be argued as a result of rapid deterioration of natural resources in the world and the negative consequences of massive development in 1950s. In other words, after fifties, preservation and enhancement of the water-soil-air ecosystem became a high priority consideration in development.

> The environment does not exist as a sphere separate from human actions, ambitions and needs, and attempts to define it in isolation from human concerns have given the very word 'environment' a connotation of naivety in some political circles. The word 'development' has also been narrowed by some into a very limited focus, along the lines of 'what poor nations should do to become richer,' (WCED, 1987).

The headman of a village nearby Uluabat Lake conceptualizes the place of human beings in nature as follows:

> Nature and men are enemies to each other but we are also part of nature. The nature of this animosity depends on our impact. For example, here in our village unconscious water use, pesticide and fertilizers damage the environment. The farmers act n the basis of hearsay information, the land becomes exhausted as a result. We used to have 9-10 tons of tomato from this land now it decreased up to 3 tons. This holds true for all products. There used to be 21 types of fish here. The cost of water increased from 1 TL to 3 TL while productivity dropped to 1/3. Most of the land that you see there are on sale… The farmers cannot make any profit from the products, they are in depth from 2007 drought already, the cost of water is increasing. What happens next? The farmers move to cities, we wait here… (Male/75/ Bursa/ Headman/top executive)

Parallel to this view, an elderly inhabitant of the village approaches the issue as follows:

> The relationship between me and nature is natural. The lake is a gift from God. I grew up within farms, within green land. Sometimes it seems hard to live here, there are some burdens but in the end it is nice to live here. I used to drink

> water from here, I used to use it for washing dishes, washing laundry. My children used to swim here, went to fishing. Now, no nothing except of free fish. My brother moved to Germany, my younger sister moved to Bursa with her husband. They tell me that they miss rural life. However, my relatives thought my sister was lucky to run away from the burden of living in here, like no need for cultivation and it must be a lot easier to take care of a flat. Frankly, I would not be in favor of being stuck within four walls. In the beginning, the Stork Festival sounded ridiculous to us, in time we realized that the lake is an important one with people like you coming from far places. We discovered the beauties we did not notice before, also we composed a women's association in order to get money out of the festival thanks to Nilufer Agenda. (Female/72/Bursa/Inhabitant/not top executive)

The point instead was that economic growth and environmental protection are not only compatible, but mutually dependent. In the analysis that is conducted to stakeholders in natural resources management (freshwater ecosystems, to be particular) -government authorities, NGOs, private sector, media and universities- it is contrary to define nature as an outsider when they consider themselves 'a pure part of nature'.

A farmer in Söke plain stated that,

> Now we have frog-collectors in Söke plain, I complained to the authorities about it but they are still there. You will see that the number of mosquitoes will increase because everything has a balance. (Male/47/Farmer/not top executive)

A local NGO representative adds that,

> The frog-collectors' ancestors used to be seasonal cotton collectors. They are from Hatay, Kırıkhan. When the cotton finished, the state of seasonal workers transformed into this. The frog collectors live in very poor conditions, six of them sleep at one car. Although it is illegal to collect frogs between May to June, here they are without the Yellow Permit document. The Yellow Permit which is provided by the Ministry of Agriculture and Rural Affairs is all about European Union criteria – whether the frogs which are imported to EU are of good quality, nobody cares if it is harmful to the ecosystem, I wonder what will happen to the stork or snake population. (Male/32/Aydın/ NGO/top executive)

Sustainability is defined by environmentalists and ecological economists to mean the use of only renewable resources, and also low or non-accumulating levels of pollution. The sustainability of rural and urban existence, the worlds of indigenous peoples, the conditions of life for women and safe workplaces are also inversely correlated with the sustainability of profits – if the history of the long economic crisis of the late 20th century is any guide (O'Connor, 1994, p. 170). Lecomber identified (1975) the three key effects that can reduce biophysical throughput, even as economic growth proceeds; firstly changes in composition of output, secondly substitution between factor inputs and finally technical progress (cited in Ekko et al., 2001, p. 127).

Underlying themes of linking nature and sustainability can be summarized as follows:

- A presentation of the kinds of social and institutional change being required (in terms of both scale and form),
- Notions of globality and linked to this, of togetherness in the face of environmental threat (both embodied within the notion that is our common future),
- An argument for democracy, empowerment and participation as an essential means of achieving sustainable development;
- An evocation of the crisis with which we are confronted (Irwin, 2001, p. 34).

Sustainable development is far from achieving widespread public support. This can be witnessed in the analysis, where some of the participants developed a very negative notion on the term emphasizing a safety valve of exploitative system of capitalist mode of production or an ideal and utopian way of growth that was called out from many participants. Most of the participants have their own serious anxieties about environmental change and how to deal with environmental problems, but find sustainable development an alien and non-functioning concept. When analyzing the conceptualization of sustainable development through the analysis that was conducted to the decision-makers regarding freshwater eco-systems management (see below table), it is not possible to witness the underlying themes that Irwin calls

for. Below, a brief summary of positive and negative connotations of the notion sustainable development is presented out of the research. As highlighted, sustainable development is conceptualized as fashionable, serving to functional system and having a balance. Nature is not seen as a being, rather a resource, something that can be utilized, a thing to use and leave some of it, fulfill demand, serving for life quality and happiness. The emphasis of tomorrow is quite common. When we turn our attention to the negative connotations of the term, eco-friendly is transformed into green wash and functioning system is replaced with capitalist exploitative system. Happiness is changed to guilt feeling whereas tomorrow notion does not take place. The negative connotations can be defined as more systematical criticism to capitalism, sustainable development is seen as a safety-valve and there is no hope that sustainable development can fulfill conservation of natural resources or to leave a world within the carrying capacity to future generations.

Positive Connotations of Sustainable Development	**Negative Connotations of Sustainable Development**
The **fashionable** term 'sustainable development' is not reflecting the message that can be summarized as a continuity of a process for a society or a country to reach better conditions. Sustainable development calls for the necessary progress that all creatures need (economic, social, and individual growth and development) in harmony with the nature. It serves a **functioning system.** It is the way to growth without getting stubborn with the nature or within ourselves. It serves to leave the **nature facilities** that we have to future generations. Sustainable development is needed for conservation-utilization balance between human beings and nature, aiming not to	The term 'sustainable development' does not mean anything to me. It is a **green wash** of prevalent system. It is an **unreachable** aim and a mechanism to minimize issues arising out of capitalism. It is obvious that we are going nowhere with the contemporary ecological footprint researches. With development, it is inevitable that nature will be damaged and destroyed by humans. I believe it is more important to promote and institutionalize 'sustainable living' rather than 'sustainable development' and put targets on economic, social and political spheres. It is an income-generating production model that preserves efficiency and productivity serving to utilize natural resources in

exhaust natural **resources** and prepare programs by eliminating luxury consumption in order for future generations to fulfill their needs and **demands**. It is a way of societal progress to deliver natural resources in a **better** shape than we had. It is a way of conserving and using natural resources in sustaining human beings' **healthy** lives. It is not possible to talk about continuity and success of development if it is devoid of nature. **Technology** serves to perk up human beings and we cannot talk about success of continuity of technological development in a good way if it does not promote human **profit**. We can define 'sustainable development' as developments in defending both nature and human advantages at the same time as well as the direct effect of nature's devastation on human life and **quality**. It is a way of living with minimum or no negative effect on contemporary natural environment. Theoretically speaking, sustainable development means a **balanced** growth of social and environmental circumstances with minimum effect to each other. It is a way of development that the principles of meeting the needs of future generations demand, not extending nature's capacity, within **conservation-utilization** balance, eliminating over-consumption, wise use of resources, reaching to income and good life standards both in urban and rural areas, preserving biodiversity values and ecosystem services. Sustainable development means **benefiting** from natural resources without causing harm to natural ecosystems and natural life, without consuming nature (e.g.: wind or solar power). It means benefiting from	order to meet the needs of a society. It is a perfect front **to get rid of the guilt** feeling arising out of the priorities people emphasize for economic activities. However, I feel obliged to go for the principles that sustainable development dictates bearing in mind the contemporary situation. Sustainable development is a good scope of environmental movement in the recent years however it is going to be limited to **exceptional** case in case of a total change in human beings. Although it seems impossible to implement, it means utilization of natural resources with today's and tomorrow's needs out of the degraded resources we have after the industrial revolution and the selfish society is systematically created. It is a concept that was found meaningful to preserve the **exploitative** system out of global **capitalism**. It is a **lie** that capitalism came up with in order to sustain the system. Utopically, it is an environment-friendly management method that can limit over-exploitation of resources and use of resources to fulfill the demand. However, the concept is used to curtain an environmental catastrophe.

the resources that are not limited and not destroy the nature. It is a way of development that maintains today's and future **happiness**. It is something that we need to take from nature without compromising that of future generations and to give back the **right** that the other living things deserve. It is a way of meeting our needs by preserving natural reserves. It is a way of sustaining technological innovations without destroying natural balance in a recyclable way. It is a way to **leave some natural resources** in the development process in order for future generations to develop. Sustainable development serves to program today's and future's development with taking into consideration natural resources and future generations' needs. Sustainable development serves for continuity between progress and **utilization** with minimum harm or preservation to natural resources. Sustainable development, which implies ecological, social and economic spheres, can be defined as creating a balance between humans and the environment they live in, without deteriorating the natural balance and utilize the available resources and develop together with transforming to future generations. Planning of today and **tomorrow** without consuming natural resources. Sustainable development is a mechanism for resource use for **recreation** and allow room for future utilization. A development model to do necessary production and consumption without **earth's capacity.**	

Environmentally rational planning, improvement and utilization of natural resources with regards to social, economic and environmental needs. The term implies **eco-friendly modes of production and consumption** bearing in mind degradation of nature by human beings. Utilization of nature by humans without earth's balance. Sustaining more comfortable and '**humanly'** life without destroying natural balance. Not wasting tomorrow's resources.	

As it can be seen from the table above, most of the decision-makers who are responsible for management of Bafa Lake, Uluabat Lake, Salt Lake and Eğirdir Lake follow the classical definition of sustainable development that states 'development that meets the needs of today without compromising the needs of future generations' and have faith that development and nature conservation can go hand in hand. However, there is a considerable portion of the respondents, mostly from non-governmental organizations as had been expected who stood at a critical position to sustainable development that is usually linked with capitalist mode of production. This is also witnessed in the way that the participants perceive capitalism that is going to be further explored in the next analysis. The intertwined relationship of ecology and economy is crystallized in the following testimony. The chairman of the Chamber of Agriculture that have stake from Bafa Lake stated,

> It is not feasible to decrease the price of cotton. The peasants are already in dept due to the drought in 2007. It is not feasible to grow cotton in Söke plain anymore. Several farmers will not sow anything to their land because the dept is more than the profit'. Parallel to this, the head of Ziraat Bank in Söke stated 'the cotton market is defined by USA which is the biggest cotton producer in the world. It will be around 0.62 dollars compared to 0.47 last year. That sounds like a good deal, however with the increase in supply, the prices will decrease again during the harvest time therefore the rumor that 'the farmers

> will be able to sell the cotton for 1 TL/kilo is just absurd. (Male/58/Aydın/Chamber/top executive)

The village headman of the largest fisherman population around Bafa Lake stated that,

> A kilogram of bream is around 12-15 TL at the moment, however it will be 30-40 TL when the demand increase and the supply decrease. There is no more bream at the lake, which we make our living. The lake is over, peasantry is over, fishing is almost over, what will this village do? Will we all move to İstanbul? (Male/68/Aydın/Headman /top executive)

As a result of the falling water level of Bafa Lake, severing the connection between the lake and the river (so that fish stocks were unable to reproduce by natural means) and continuous over-fishing, the fish stock has drastically declined by 2006 and 2007. According to the local knowledge and Long-term Development Plan of Bafa Lake, 328 tons of fish in 1987 dropped to 14 tons in 1991 and 22 tons in 1994 that this dramatic decrease causes the bankruptcy of fisher cooperative of 700 members into 30. Decreasing fishing population makes farmers to concentrate on animal husbandry and partly tourism in the eastern part of the Lake. On the rote of important tourism routes; lake presents nature for eco-tourism activities. Bearing in mind that Great Meandros Basin is a special historical and cultural value together with its rich biodiversity and therefore can be transformed into a culture-nature centre with appropriate conservation activities and management. The villages on the eastern side provide limited but precious ecotourism opportunities. However, when the level of water decreases, the stink that arise out of the lake does not allow any tourism activities around Bafa Lake. It is stated by local small-scaled hotels that 2007 was a year that tourists ran away together with stinking incident. Therefore it is crucial to think of eco-tourism activities with the health of wetland since the habitat of the wetland (ex: bird species) is a distinctive attraction for tourists together with the impossibility to conduct any eco-tourism activity with the contemporary state of the lake. It is not possible to talk about mass tourism around the wetland scale. However, with its vicinity to Kuşadası, where mass tourism is gaining importance day by day, one has bear in mind the potential effects of mass tourism around the lake in the

planning phase. Utilization of fresh water resources without conservation measures is of course not specific to these four lakes. An academician in Isparta put forward that,

> The fish farms are being moved to Dilek Peninsula after Morova and Bozdoğan. You kill it first and then pray for it to come back to life again. The king of dams, Süleyman Demirel allowed Avlan Lake to be dried for it to be turned to apple trees (by showing his five fingers) because the community begging him. After a couple of years, they demanded once again to turn the land back to lake. Is it possible? Of course not, you cannot restore the lake by filling it with water like an empty cup. Therefore, one got money out of it, another got power, another got land, yet another got apples, and now the community asks where their share is. (Male/60/Isparta/Academician /not top executive)

3.4.2 The Understanding of Development and Environment Between First and Third World

Economic growth without social progress lets the great majority of the people remain in poverty, while a privileged few reap the benefits of rising abundance.
John F. Kennedy

In this part of the paper, the state of environmental movement in the 20th century will be discussed while examining the issue from first world-third world perspective in order to provide a background for non-teleological recommendations for coupling the dualism between human beings and nature since policies are usually Eurocentric and take the steps to reach a more harmonized way of people within nature by following 'first world trends'. However, the author believes that leap-off stages are possible and notions of environment and development is region and culture-specific and agriculture-ridden semi-feudal capitalist societies, understanding of developmentalism and environmentalism shall be captured in its own context. The reason that environmental movement in 20th century is divided accordingly is due to the fact that the character of movement changes drastically between the West and the third world, the main problems that pave the way to green movement are not the same, and finally this distinction might give some insights that the third world might

adopt a different green movement character that would lead to a way other than the teleological developmental patterns that the West imposes both ideologically and financially. Whereas the rich world is beginning to cope with the first generation of environmental problems, these same problems are still very much on the increase in the third world. In the country-side, poverty leads to greater pressure on marginal lands, thus increasing the rate of deforestification. In cities, the explosive rate of urbanization will lead to staggering pressures on local governments to provide basic management. Urban decay is too often overlooked in our discussions on environmental problems (Taylor, 1992). However, it shall not be forgotten that national boundaries drawn on maps are irrelevant to the actions of particles of air, earth, and water within that system (Taylor, 1992, p. 6).

Characteristics of Environmental Movement in 20th Century in the West

1. The movement has grown from a new social movement into a network of professionalized mass membership organizations at the national level.
2. Emphasis has shifted from local pollution issues to global environ-mental problems.
3. Impacts are increasingly sensitizing and procedural, and less substantive and structural.
4. Environmental discourse has developed from radical social change to ecological modernization.
5. The emergence of a radical countercurrent (Dryzek, 2003, p. 204).

Characteristics of Environmental Movement in 20th Century in the Third World

1. Articulation of environmental demands with developmental demands: Unlike Western environmental organizations, third world groups rarely campaign on the greenness of an environmental issue alone. Many third world-based environmental NGOs are mainly concerned with development issues, notably the promotion of social justice. Yet, what often distinguishes them from regular development is that NGOs is their emphasis on the need to pursue such objectives via the mechanisms of

environmental conservation. Social justice and equity is attained by insuring that the poor gain access to local environmental resources – that is timber, fuel, and clean water (Dryzek, 2003, p. 207).

2. A strong emphasis on forests and trees (especially in Asia), on urban pollution of air, water and soil (especially in Latin America) and on desertification (especially in Africa)
3. The local character of many environmental actions and the cooperation of local groups in national umbrella organizations since late 1970s. A recent development in many third world countries has been the creation of national ENGOs (environmental non-governmental organizations) or national coalitions ENGOs to develop and indigenous nationwide response to the environmental problems.
4. The radical tendency in environmental discourse in third world countries: Despite the inclusion of many ENGOs in governmental consultation structures, important parts of the third world environmental movement do not accept the hegemonic global discourse of capitalism, neo-liberalism, modernism, scientism, and anthropocentrism. All over the third world, environmental groups remain to articulate their struggle against environmental degradation with the struggle against capitalist economic structures and western political and cultural imperialism.

It is declared that industrialized countries and ‘developing’ countries perceive environmental problems differently. Certainly, the configurations of problems differ and so do the dominant perceptions of them, but the formulation can be misleading. Countries as such do not perceive any more than they ‘choose’ styles of development (Marshall, 1996, p. 155).

Marshall argues that one of the most striking features of the industrialized countries during the recent past has been the extent to which conflicting perceptions of environmental problems, ranging from the complacent to the catastrophist, have become explicit, have entered into public opinion, have been debated in the mass

media, and have been advanced by specialized organizations trying to influence legislation, allocations of public resources and private behavior. The more organized and articulated sources of perceptions and public positions can be classified roughly as industrial and agricultural enterprises in general, transnational enterprises, energy producers and vendors in particular, trade unions, ecological, conservationist and consumer movements, organizations of sportsmen and campers, journalists, economists, scientist, religious bodies, 'enlightened' public opinion, mobilizers of groups experiencing exclusion or discrimination, NGOs and the state itself (in principle the final arbiter of policy but in practice a conglomerate of bureaucracies and political factions allied with different social forces advancing their own perceptions and responses) (Marshall, 1996, p. 155).

In other words, Third World makes it improbable that ecological modernization and sustainable development discourses forged in the course of pragmatic compromise between contending environmental interests in the affluent and materialist First World, will be universally appropriate or accepted (Rootes, 2002, p. 6). The most fundamental characteristic of green parties that distinguishes them from mainstream political parties is that they take universal condition of the finitude of planet and they ask what kind of political, economic, and social practices are possible, applicable and desirable in this ecological framework and finite natural resources. It is argued by Dobson that *"Green reformers need a radically alternative picture of post-industrial society, they need the phantom studies of the sustainable society, and they need occasionally to be brought down to earth and to be reminded about limits of growth"* (Dobson, 1995, p. 199). Dobson goes further by stating that economic growth is unsustainable by definition and highlights that

> The primitive peoples exemplify how we can live in harmony with nature (and with each other) that thorough going decentralization, leading to local autarky, is necessary for social and ecological health; that technological advance, is inherently harmful and dehumanizing, and that the capitalist market system is inescapably destructive and wasteful (Dobson, 1995, p. 200).

In practice, Orthodox development thinking sought to follow the success of Marshall plan by applying the same approach to the non-industrialized world: it was assumed

that rapid industrialization and generalized improvement in material conditions of life could be won quickly by following the formula that have worked in reconstructing Europe after World War II. The modernization paradigm was built on the conceptual separation of modern and traditional societies. Such concepts, which welded seamlessly into ideas of development, came from the same roots in Western enlightenment rationality and built on profoundly encoded Western preconceptions about civilization and improvement versus barbarism (Adams, 2001, p. 7).

In order to point the state of turning the developing world into the dumping field of the West, one of the NGO representatives stated that,

> USA is saving its own resources with jealousy but attacking the world. Europe has shifted the pressure to developing countries. The relatively safe and welfare states shift the heavy industry to the already poor ones other than transforming their industrial infrastructure. (Male/52/Nilüfer Local Agenda 21/top executive)

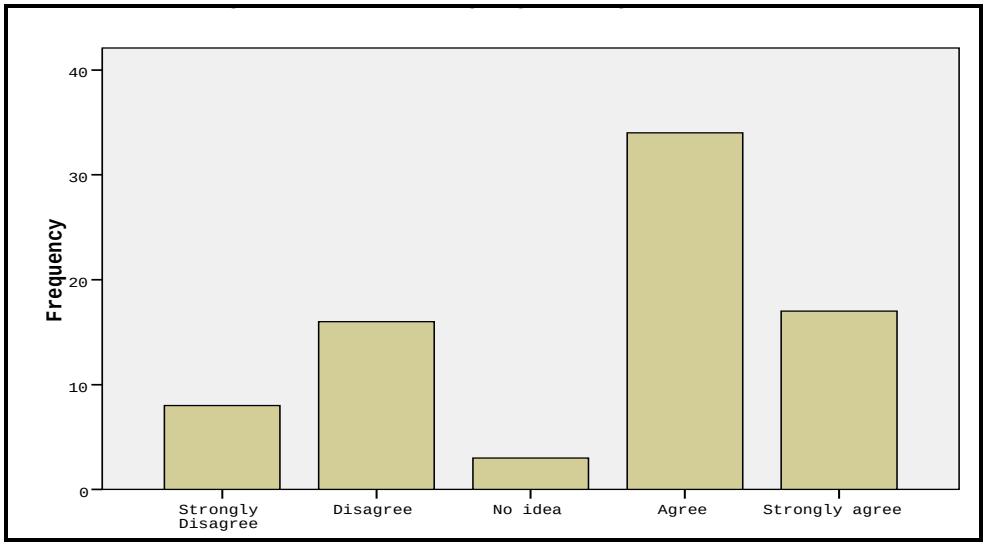


Figure 12: Differentiation of Developing and Developed Countries with regards to Development Policies

As it can be seen from the chart above, 66% of the participants agree (%22 strongly agree, %44 agree) with the statement that 'Environmental problems shall be solved

and conceptualized differently in the developing world and developed world. The reason might be explained on the basis of Kyoto discussions that took place in the recent years. Kyoto Protocol, that puts 'equitable burden share' to developed and developing countries was the major point of Turkish government authorities in order not to fulfill the obligations under Annex-I countries in United Nations Framework Convention on Climate Change which attracted media attention not only for environmentalists and Ministry of Environment and Forestry but also 'potentially effected' sectors.

3.5 Nature in Capitalist Mode of Production: Can capitalism be sustainable?

Man is the only creature that consumes without producing.
George Orwell

Capitalism is self-destructing and in crisis; the world economy makes more people hungry, poor, and miserable everyday; the masses of peasants and workers cannot be expected to endure crises indefinitely, and nature however, ecological sustain-ability is defined, is under attack everywhere. The crises-ridden and crises-dependent nature of capitalist accumulation appending a short review of world crises in the 1980s (O'Connor, 1994, p. 154). The most driving imperative of the capitalist market, given the dehumanizing competition that defines it, is the need to grow and to avoid dying at the hands of savage rivals (Ed. by Zimmerman et al., 2001). Today, the kind of economic thinking is one sided and limited but remains valid. The reason is that it presupposes limitless supplies of Marx called 'conditions of production'. This traditional model presupposes that capitalism can avoid potential weaknesses on the 'supply side', that growth is demand-constrained only. However, if the costs of labor, nature, infrastructure, and space increase significantly, capital faces a possible second contradiction, an economic crisis striking from the cost side (O'Connor, 1994, p. 162). The second contradiction of capitalism results in economic crisis that

strikes not from the demand side but from the cost side. Put simply, the second contradiction states that when individual capitals attempt to defend or restore profits by cutting or externalizing costs, the unintended effect is to reduce the 'productivity' of the conditions of production, and hence to raise average costs (O'Connor, 1994, p. 165).

The logic of self expanding capital is anti-ecological, anti-urban, and anti-social. All three logics combined are contradictory in terms of developing political solutions to the crisis of conditions of production; hence, chances of instituting a systematic capitalist solution to the second contradiction are remote. It can be stated that in Turkey, there is no rational environmental plan, intra-urban and inter-urban planning, health, and education planning organically linked to the environmental and urban planning either from governmental, business or NGO side. Instead, there are piecemeal approaches, fragments of regional planning at best, and irrational political spoils allotment systems at worst. If capitalism is not sustainable in terms of international macro-economic regulation, there will be a global crisis, a general deflation of capital values and a depression (O'Connor, 1994, p. 168). It is yet unknown how individual capitals, government, business sector or NGOs will respond in Turkey since, there is no coherent set of values, approaches or regulations regarding environment.

Biehl (1998) puts forward that capitalism and the global ecology simply cannot coexist indefinitely. (Biehl, 1998, p. 139) Capitalism's grow-or-die imperative, in particular which seeks to profit at the expense of all other considerations, stands radically at extremes of interdependence and limit, both in social terms and in terms of the capacity of the planet to sustain life.

Crisis-ridden and crises-driven capitalist accumulation is wrecking the conditions of production and creating more poverty, unemployment, inequality, economic insecurity, and marginalization on the one hand and harming human health, urban and rural communities, and ecological systems on the other. The rise of environ-

mental, urban, labor, peasant and other social movements defend the conditions of life for workers and peasants, women, communities and the environment. In a capitalist economy, a low or no growth policy would create an economic crisis, which in turn would lead to more ecological degradation as business scampered to reduce costs in various ways (Ed. By Zimmerman et al., 2001, pp. 423-425). O'Connor states that there is a need to redefine productivism. A society can achieve higher levels of productivity via more efficient use and recycling, reducing energy, reform green cities, decommodifying land, and labor. The histogram below is depicted in order to emphasize that 69% of the participants agree (%26 strongly agree) that it is only possible to conserve natural resources with a change of mode of production, %21 of the participants are disagreeing with the statement.

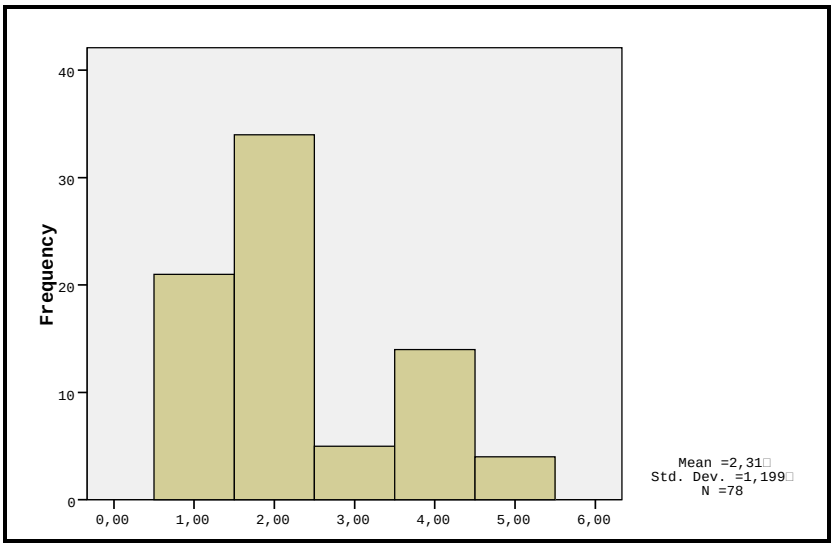


Figure 13: Attitude towards Transformation in Mode of Production in order to Stop Environmental Degradation

When we turn our attention to the differentiation between institutions to this statement, it can be put forward that NGOs favor transformation of mode of production (%0 disagreeing with the statement) whereas almost half of the stakeholders from public institutions are disagreeing with the proposition as

assumed. The situation can be different when people in the public institutions take part actively in management of natural resources. One of the interviewees mentioned *"I believe we can make a difference, I always did. The only thing is I am trying to change less political things, within the system, with more money. The fact that I am in Local Agenda 21 does not mean that I am not critical to the system."* (Male/53/Bursa/NGO/top executive)

Table 11: Institutional Differentiation of Attitude towards Transformation in the Mode of Production in order to Stop Environmental Degradation

		Institution						Total
		Public institution	Private Sector	NGO	University	Media	Unemployed	
Mode of production transformation	Strongly agree	6	3	7	1	0	3	20
	Agree	13	2	10	7	1	0	33
	No idea	2	0	0	2	1	0	5
	Disagree	12	1	0	1	0	0	14
	Strongly Disagree	3	0	0	1	0	0	4
Total		36	6	17	12	2	3	76

Capitalist mode of production cannot be sustainable. O'Connor asks if one can plausibly suggest that capitalism might be reformed to respect the integrity of the social and ecological domains hitherto subject to savage exploitation and if capitalist production, distribution, exchange, consumption, and accumulation are consistent with ecological sustainability (O'Connor, 1994, pp. 1-5). For most people, the free market and modernity have so far produced little more than a phantom of freedom. The unequal distribution of wealth and power is a hallmark of liberal capitalism. As August Bebel once formulated it *'economic liberalism is the free folks in the free chickencoop,'* (O'Connor, 1994, p. 2). He argues that ecologically sustainable capitalism is not possible unless capitalism changes its face in ways that would make

it unrecognizable to bankers, money makers, venture capitalists and CEOs looking at themselves in the mirror today (O'Connor, 1994, p. 158).

The fear of natural resource depletion is as old as the idea of an expanding economy based on drop down of god-given resources. Depletion of natural resources are not unknown by the users and managers of those natural resources. However, the ways of approaching it is necessary to overturn this depletion and how to do it. O'Connor suggests that contemporary environmental problems represent not only a major economic crisis of supply, but also a new crisis of legitimacy for the market system (O'Connor, 1994, p. 3) He argues that the legitimacy of this crisis stems from two relationships: firstly, appraisal of the contradictions of capitalist accumulation in their ecological and economic dimensions, and secondly, people with each other and with non-human nature under capitalism.

Capitalist mode of production has costs on social and environmental aspects; the environmental costs pave the way to social costs even if one approaches the issue from an anthropocentric way. A dictionary of economics defines social costs as *'a man initiating an action does not necessarily bear all the costs (or reap all the benefits) himself. Those that he does bear are private costs; those he does not are external costs. The sum of the two constitutes the social costs.'* The monetization of external costs as a precondition for this aggregation seems to be a self-evident result of the opportunity cost principle. There may be both monetary and non-monetizable aspects to social costs, as for example, with disputed and uncompen-sated destruction, damage, or reduction in quality in physical/psychological environment (O'Connor, 1994, pp. 92-93). The basic picture of environmental issues as those which threaten the capacity of our surroundings to support us in good physical health is not adequate in itself. We must have a much broader understanding of human well-being, which is attentive to the quality of our surroundings as well as to their life-supporting function. We must regard issues which touch upon the quality of our surroundings as environment. (Taylor, 1992, p. 15). Welfare-influencing indicators are defined by Ekko as the package of goods and services produced, scarce

environmental functions, leisure time, distribution of scarce goods, that is income distribution; conditions under which scarce goods are acquired, that is labor conditions, employment, or involuntary unemployment; and future security, to the extent that this depends on our dealings with scarce goods, and specifically the vital functions of the environment and summarizes that a decrease in production will lead to greater welfare (Ekko et al., 2001, p. 27). The first antinomy is between private production and the social context resulting from the material interdependence of economic agents. In the present discussion, the social costs incurred by such misallocations and over-actions are called ‘economy induced social costs’. The second antinomy is between quantities and prices. In the present discussion, the shifting of costs that is thereby possible is called ‘ecology induced’ and ‘labor induced’ social costs. By influencing the cost return ratio (maximization of income) these conditions of exploitation also effect economic allocation. The social costs incurred by the use of nature (ecology induced) are linked to those incurred by the mode of allocation (economy induced) (O’Connor, 1994, p. 94).

In other words, the costs of capitalist mode of production, expenditures on measures to compensate for a loss of function (such as preparing drinking water as a result of overuse of the function -compensation costs), and expenditures, actually made or yet to be made, relating to damage (such as harvest losses caused by flooding due to loss of the function ‘hydrological regulation’ of forests and soil, and production losses and medical costs ensuing from, loss of the function ‘air for physiological functioning -financial costs), and rent paid via the price of raw materials (Ekko et al., 2001, p. 38). Human well-being, poverty reduction and the state of the global environment remain closely linked (Adams, 2008, p. 10), therefore the costs mentioned above are interrelated.

To put it briefly, the contemporary critique of political economy must therefore term from Marxism’s traditional focus on the mechanisms of exploitation of labor power within growing industrial economies to analyze, in addition to the social mechanisms of destruction and exploitation of nature (O’Connor, 1994, p. 7). During one of the

interviews it was mentioned, *"I believe we can make a difference, I always did. The only thing is I am trying to change less political things within the system, with more money. The fact that I am in Local Agenda 21 does not mean that I am not critical to the system."* (Male/48/municipality/Bursa/ top executive)

Parallel discussion to the one regarding environmental movement differentiation between developing and the developed world, economic valuation of natural resources is not coherent either. Bookchin (1998) states that some countries, such as Denmark, France, Germany, and the United Kingdom, have experienced an absolute decoupling. In these cases, in certain key sectors, economic output has increased and environmental impact has simultaneously decreased in absolute terms. Austria, Finland, Norway, and Japan have experienced only a relative decoupling of economic output and environmental impact. Although each unit of output in the key sectors is associated with a lower environmental impact than before, these gains in environmental efficiency have been more than offset by additional impacts arising from an expansion of output. Former Central and Eastern Europe have experienced a negative relationship between economic output and environmental impact: as growth occurred, environmental damage rose too (Bookchin, 1998).

3.6 Technological Innovations as Pain-Killers

As Taylor puts forward, for far from being 'the problems' in themselves, science and technology are the very instruments by which we have come to an under-standing of the limitations of the planet (Taylor, 1992, p. 7). As mentioned before, approximately 40% of the authorities conceptualize environmental problems as technically solvable to the extent that manufactured capital and technical change do not fully perform the environmental functions of the natural capital; they replace each other, and substitutability between them is not complete and there is a trade-off (Ekko et al.,

2001). As Ekko stated, the combination of growth and environmental conservation is only possible in the case of technologies being invented that are sufficiently clean, do not deplete energy stocks and other natural resources, leave the soil intact, leave sufficient space for the survival of the plant and animal species, and finally cheaper than currently available technologies (Ekko et al., 2001). Commoner (1975) states that '*The sharp changes in the technology of agricultural and industrial production and transportation in the last 25 years has intensified the impact of production on the environment and has reduced the efficiency with which energy is converted into goods and services*' (Ed. By Commoner et al., 1975, p. 3). As mentioned in the previous chapter, when we analyze participants' responses regarding the statement 'Natural catastrophes such as climate change, deforestation and desertification can be solved by science and technology' it can be seen that 64% are disagreeing with the proposal whereas 32% are agreeing with it.

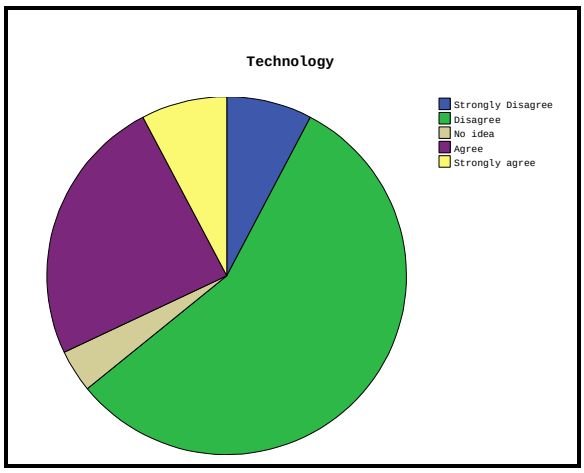


Figure 14: Attitude towards Technological Innovations In order to Solve Natural Catastrophe

When we analyze participants' responses regarding the statement 'Natural catastrophes such as climate change, deforestation and desertification can be solved by science and technology' it can be seen that 64% are disagreeing with the proposal

whereas 32% are agreeing with it. In other words, the research releases the opposite view that states the problems are by-products of development and further application of growth will solely solve this comparably 'minor' problems that it created with improved technology.

3.7 Importance of Participation in Natural Resources Management

We don't have a society if we destroy the environment.
Margaret Mead

While central to participation and dialogue, the interactive perspective seeks to find ways of engaging government, business and civil society stakeholders in processes of learning and negotiation that can transcend the limitations of centrally controlled and technically orientated bureaucratic decision making on one extreme and 'decisions' made by a 'free market' on the other (Roling, 2001, p. 3). Dialogue defined by Roling is *"a contrived situation in which a set of more or less interdependent stakeholders in some resource are identified, and invited to meet and interact in a forum for conflict resolution, negotiation, social learning, and collective decision making towards concerted action."* An effective dialogue requires attention to conflict resolution (which means understanding the different interests and underlying values that lead groups into conflict and what method-ologies and political strategies can be used to overcome them), social dilemmas (which means understanding situations in which short term individual interests are in conflict with longer term collective interests), social learning (which means developing ways of engaging different stakeholder groups in processes of learning how to collectively resolve natural resource management problems), and facilitation (which is establishing the

methodologies, forums and institutional context that will enable and facilitate dialogue) (Roling, 2001, pp. 3-4).

In essence, dialogue requires a shift from a reductionist and positivist paradigm (characteristic of classical biophysical science) to a holistic and constructivist paradigm. Community participation and multiple stakeholder dialogues have emerged as central themes in contemporary natural resource management in attempts to overcome the social dilemmas associated with common property resource management. In the case of Turkey, the multi-stakeholder platforms regarding natural resources management is quite weak since the governmental authorities would like to be the unique authority regarding any managerial decision and the dialogue between stakeholders is uninstitutionalized and there are very limited and weak organizations to facilitate dialogue and strengthen multi-stakeholder platforms.

Leopold believes that participation is not obeying the law, voting right, joining some organizations, and practicing what conservation is profitable per se and waiting for the government to handle the rest since it defines no right or wrong, assigns no obligation, calls for no sacrifice, implies no change in the current philosophy of values and in respect of land use, it urges only enlightened self-interest. (Leopold, 1970)

Biehl (1998) puts forward that ‘in the next century global warming alone is expected to take revenge with the climate (…) hunger and disease will soar at least, while states will become more authoritarian to repress social unrest (Biehl, 1998, p. 140). She favors that ecological question demands a fundamental reconstruction of society. She mentions that either people will establish an ecological society, or else the underpinnings of society will collapse.

The political tragedy of the commons is defined by O’Connor as increasing the access to interests claiming a share of environmental resources. Energy to confront environmental crises is best generated by the mobilization of democratic participation, not centralized administration, and that the positive moments in the

record of environmental improvement through governmental action bear him out (O'Connor, 1994, p. 183). Since democratic participation is perceived in Turkey as a number of duties instead of having a word in decision-making processes that people are directly or indirectly affected by the decision regarding the natural resources. According to Adaman, conservation strategy ensuring participatory decision-making among stakeholders is plausible for taking into account local needs and concerns, including those of the farmers, decrease the level of alienation.

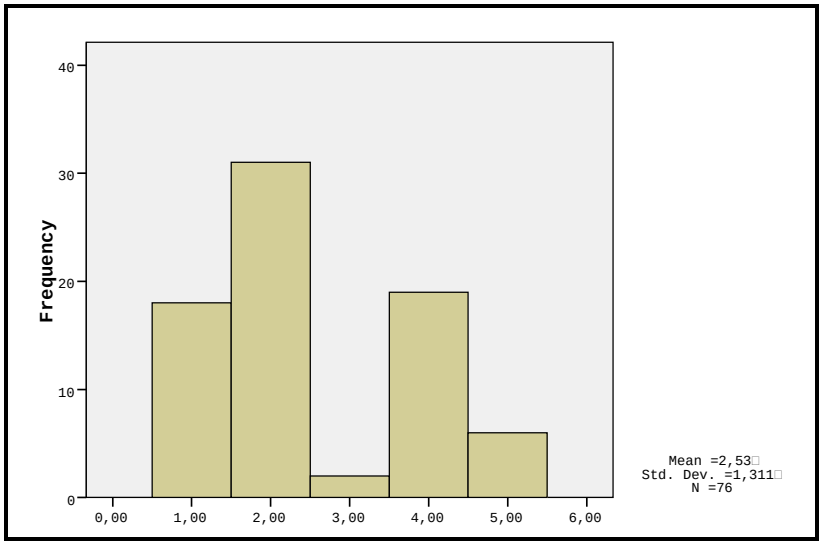


Figure 15: Attitude towards Integrated Management of Natural Resources

As can be seen from the histogram above, 64% of the participants believe in integrated management of natural resources. On the other hand, 33% of the participants are opposing to the statement 'Sustainable development is possible if responsible stakeholders and authorities are participating in the decision making process'. One of the reasons why institutions, other than the public authorities responsible for conserving and managing natural resources can be explained with this conservative and authoritarian understanding of getting the most share of power and authority with regard to management of natural resources as well as uninstitutionalized state of non-governmental organizations in Turkey and state of approaching privatization of natural resources which used to be quite a dogmatic

issue in Turkey, which in the recent years has started to increase its share with positive approach of laissez faire understanding of the recent government.

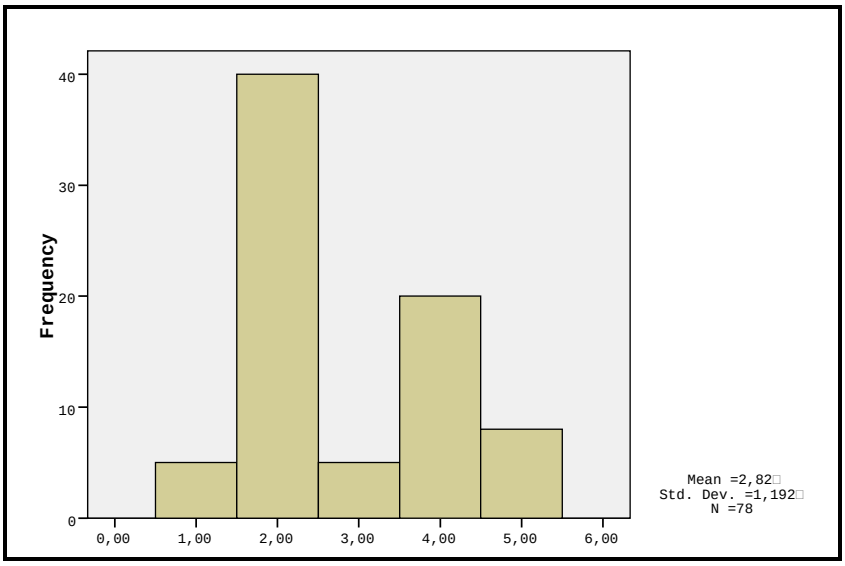


Figure 16: Evaluation of National NGOs in Turkey

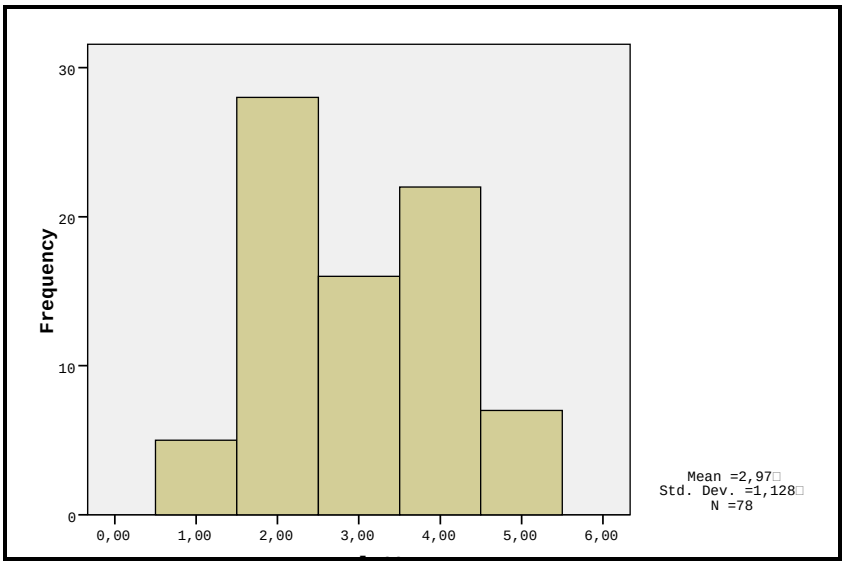


Figure 17: Evaluation of Local NGOs in Turkey

Bearing in mind that non-governmental organizations play a crucial role in facilitating dialogue and institutionalizing multi-stakeholder platforms, evaluation of current NGOs (both structured in national and local level) are asked to the respondents. When the histogram above is analyzed, it can be seen that approximately 57% of the participants think that national NGOs are active in Turkey (%51 agree, %6 strongly agree), whereas 36% (%10 strongly disagree, %26 disagree) of the participants are disagreeing with the statement. The percentages drop drastically when the question is directed for local NGOs. 42% of the participants think that local NGOs are active in Turkey (%36 agree, %6 strongly agree), and 37% disagreeing with the statement (%28 disagree, %9 strongly disagree). An NGO representative noted the significance of NGOs in capitalist mode of production as follows:

> The nature conservation work is based on small scale efforts that has no emphasis on capitalism assessment, but you cannot move a step further if you move on with 'teach your kid to save water, change your light bulb' kind of rhetoric. When you think about industrial business as usual, you can postpone the negative effects but you can never run away. However, it is totally absurd to wait for capitalism to dissolve, if we were to make 1000 units of benefit with transformation of capitalist mode of production you can make one unit and we have to struggle for saving that one unit. (Male/27/Isparta/NGO/not top executive)

The scale and funding of the NGOs, therefore their limited role in conservation of natural ecosystems in Turkey are not even questionable. One of the officers working in an NGO summarized the importance of NGOs in Turkey by stating,

> My father kept asking me when I will start earning money from a real job idealizing my brothers -he works in Deloitte (auditing firm)- it has been three years since I have been working in WWF and I guess he will never be satisfied with it. That is how NGOs are understood in Turkey, even from the point of view of educated people. (Female/25/İstanbul/NGO/not top executive)

The fact that both national and local NGOs are not declared to hold importance in decision-making processes with regards to natural resources management might arise from not being able to be influential enough to bring the Salt Lake, Uluabat Lake, Eğirdir Lake and Bafa Lake cases onto the national agenda. According to the

research conducted by Adaman et al., even though the local people, who have a direct stake on a natural resource (Burdur Lake case, which is quite similar to the cases that are described within the scope of this study) have reported that they made monetary contributions to an environmental cause, and/or engaged in a tree-planting campaign, and/or carefully studied political parties' programs on environ-mental issues; only two percent indicated membership in an environmental organization (Adaman et al., forthcoming). The reason why the percentage of active involvement of national NGOs may be interpreted in three ways. Firstly, the respondents that took part in the research have been involved, or at least have some knowledge of NGO activities in the related areas. Secondly, in the areas (namely Bafa Lake, Eğirdir Lake, Salt Lake, Uluabat Lake) where the research is conducted NGOs are quite active for several years due to biodiversity values of the wetlands, therefore a completely different picture could have emerged if the research was conducted in different areas. Finally, the respondents know the researcher as an NGO worker, therefore it is possible that they did not want to express negative notions to their 'partner'.

The histogram below shows the responses of the participants in seeing the major authority in management of Bafa, Salt, Eğirdir and Uluabat Lakes. 40% of the stakeholders see State Hydraulic Works as the major authority, followed by Ministry of Environment and individuals. NGOs, Chambers of Commerce, and municipalities are the least important authorities regarding management of the respected wetlands. The respondents have claimed State Hydraulic Works to be the major decision-maker with regards to water management although functions and responsibilities of different institutions (fourteen in Turkey) overlap, which creates a platform not only for disintegration and mal-management, but also an atmosphere where each institution blames some other institution when it comes to degradation. Adaman states that *"when asked which institutions/actors were respon-sible for the decline of the Lake's ecosystem, all parties -industrialists, government regulators, local authorities, local residents, environmental groups- were considered to be equally guilty,"* (Adaman et al., forthcoming, p: 16). It is interesting that the participants favored

State Hydraulic Works (DSI) as the major authority bearing in mind that DSI is in favor of utilizing freshwater resources rather than conserving. DSI is the primary executive state water agency in Turkey, operating as a General Directorate under Ministry of Environment and Forestry since 2008, has been charged by law to develop all of water resources in the country. It is one of the most powerful government institutions in Turkey. DSI's total and investment budgets for 2000 fiscal year constitute over 30 % of National Investment Budget. This shows the government policy to development of water infrastructures and the power of DSI. State Hydraulic Works' water vision can be summarized as considering public benefit in every intervention directed towards water resources and looking after future generations' rights, adopting the perspective of supply instead of demand in water use, integrated river basin management and considering water's nature circle as well as ecologic and economic value created by it. (Retrieved on 18.06.2009 from the World Wide Web www.dsi.gov.tr) In one of the interviews, one of the DSİ engineers mentioned,

> Sustainable development means not wasting tomorrow's resources today. We will need energy more in the future, probably to a greater extent. That is why we need to utilize what the nature provides us. We should not waste water running to the sea if we can produce electricity out of it, right? I sometimes think why you guys are angry at us and oppose dam building. State Hydraulic Works is building them in an eco-friendly manner, it is true that there used to be problems, what other country doesn't? (Male/44/Konya/Public sector/ not top executive)

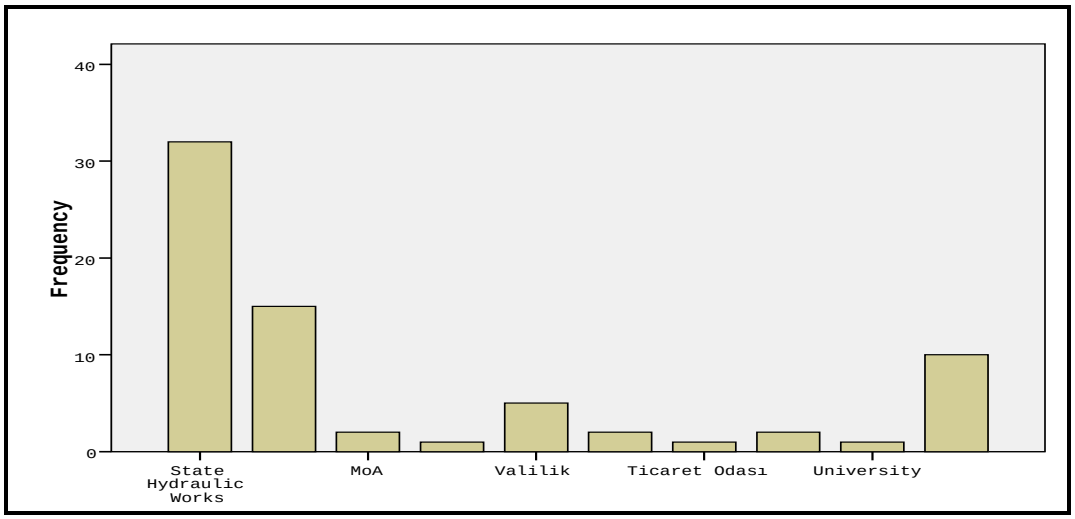


Figure 18: Evaluation of Institutional Importance In Management of Freshwater Resources

3.8 Governing and Managing Nature

Management of natural resources is an ethical decision, it requires prioritization. As mentioned in the previous chapters, growth-oriented approach to biomes cannot go one step further than utilization of natural resources and conserving them on the extent of guaranteeing further use in the future. It is not surprising that the Minister of Environment and Forestry is usually selected from the least voted party in the coalitions in Turkey. Bearing in mind that Turkey is in the very early stages of democratization, involvement of parties outside the government in governance is weak and evolving in a slow pace; it is not quite possible to talk about multi-stakeholder platforms concerning management of natural resources in Turkey. A young officer from the public sector provides an insight on ways of stakeholder involvement in decision-making mechanisms. *"Our division* (General Directorate of Ministry of Environment and Forestry, Wetlands Division) *is in charge of wetland management. Of course people's contribution is important here too, we would like NGO's involvement."* (Female/26/Ankara/Ministry of Environment and Forestry, not

top executive) Adams states that sustainability must be incorporated into economic planning, not tackled on. In a context of prioritizing development parallel with the discourse of developing countries in general environmental concerns are articulated to economic, fossil-fuel based development paradigm. The most obvious example of it can be witnessed in ratification of the Kyoto Protocol in which the government only evaluated the issue within the scale of international reputation and being able to say a word in 15th Convention of Parties process without having any emission reduction targets. Governments need to adopt green accounts, and use them in allocating budgets and raising taxes (Adams, 2008, p. 89). Green accounting, payment for ecosystem services and environmental taxes are new concepts in Turkey and environmental planning is seen minor and articulated to economic priorities. Some of these concepts are controversial from some of the segments of the society as well.

> After all, you cannot change the way people think. I hate the way people try to promote environmental services to lay people, do you really think that people will turn green with this discourse. In order to say that we should conserve species, the goat for instance, in order to be able to eat Ezine cheese, is the biggest mistake to reach our aim. Let's be frank with ourselves, I've been working here for 15 years and I have never written or pronounced the human benefits of the environment, because we are targeting wrong audience with that…What we need to do is to target the people who care for nature for the sake of itself, not for the sake of human beings. (Female/41 İstanbul//NGO/ top executive)

The following two anecdotes put forward the state of conservatism within the public sector with regards to discrepancies in governance and management:

> I have been working for Eğirdir Lake for 9 years now but I am sick and tired of being with the Ministry, nothing changes here, you know. You know the problem, you know how to fix it, you can create the financial resource for it, but you have to wait for ages to come out from his mouth and it never happens. Yes, that is one of the reasons why I moved to Antalya and became a staff in the academy. (Female/46/Isparta/Public-academy/ /not top executive)

> Funny how they treat the committed ones. You know the reason why I was kicked out here? Because I was favoring what is right for here, not for some money-makers. When you disagree with what you are obliged to do, I wasn't there to sign whatever comes in front of me and here is what I get. I knew it

> from the very beginning and I will prove innocent from this case. (Male/49/Aydın/Public sector/top executive)

Warren, who favors that ecofeminist philosophical perspective is not only distinctive but a transformative perspective on human-nature relationship, states that (2000)

> Environmental ethics focuses on questions about how human ought to treat nonhuman nature with answering the questions such as 'What is the nature of our responsibility to the natural environment? When and why are we obliged to preserve wilderness areas, protect endangered species, engage in sustainable development and appropriate technology?' (Warren, 2000, p. 73)

Warren argues that (2000) Western environmental ethics is about how humans should treat nonhuman nature and calls for four types of positions along a continuum tend to emerge (rather than fixed and rigid) as house, reformist, mixed reform and radical and finally radical. The mainstream house position is not regarded as an environmental ethic whereas the other three generates environmental ethic. Reformist position considers accounts the nonhuman natural environment morally considerable but do so without introducing new and different ways. The mixed reform and radical position sees humans as co-members of the ecological community, humans should love and respect the land and it is wrong to destroy the integrity, stability and beauty of the biotic community. Warren distinguishes radical position on the basis of being more comprehensive in scope and introducing non-Western considerations. She conceptualizes radical position with deep ecology, bioregionalism, social or political ecology and ecofeminism. (Warren, 2000, p.73-87)

CHAPTER 4

STATE OF APPROACHING ENVIRONMENT-DEVELOPMENT DUALISM IN TURKEY

In the previous chapter, qualitative analysis was integrated to literature review to provide an insight on the antinomy between development and environment. At this part of the paper, quantitative analysis' results are discussed mainly focusing on gender, institution, age, occupation, decision-making mechanism and location (therefore direct-indirect benefits) respectively.

First of all, state of approaching environment-development dualism in Turkey with regards to gender is examined. The table below shows the differentiation between man and women in approaching human-nature relationship. It can be stated that within %95 confidence interval, it can be stated that there is no gender aspect (in terms of means) of the approach by failing to reject the null hypothesis 'There is no significant relationship between men and women in conceptualizing the ethical approach'. Before the research is conducted, it was assumed that females would be more environmentally friendly whereas men would be in favor of more development-based human chauvinist approaches based on postmodern and feminist theory. It is possible to state that gender differentiation was reflected during the interviews. According to the author, parallel with the methodology that feminist theory encourages, quantitative analysis did not work for grasping gender differentiation that was reflected in the interviews. However the author did not find major contradictions in approaching human-nature dualism with regards to gender, only minor modifications of 'politically correct' sustainable development discourses with

more emphasis on sustainable utilization rather than an overall diverse perspective on the value of nature as was dictated by postmodern theory. This might be explained on the basis that individuals working within male hegemony (not only quantitatively but also qualitatively) do not have the playground to reflect – even compose their perspectives to survive and become what they have been previously criticizing with only minor reprehensions to the capital, male hegemony and global propeller.

Table 12: Analysis of Gender Differentiation with regards to Conceptualization of Ethical Approach to the Relationship between Human Beings and Nature-1

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound	Upper Bound
Man	50	4,3400	,77222	,10921	4,1205	4,5595	3,00	6,00
Woman	28	4,2857	,59982	,11336	4,0531	4,5183	3,00	6,00
Total	78	4,3205	,71157	,08057	4,1601	4,4809	3,00	6,00

Table 13: Analysis of Gender Differentiation with regards to Conceptualization of Ethical Approach to the Relationship between Human Beings and Nature-2

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	,053	1	,053	,103	,749
Within Groups	38,934	76	,512		
Total	38,987	77			

Secondly, state of approaching environment-development dualism in Turkey with regards to institution on the basis of public, private, non-governmental and academic is investigated. The analysis below is presented to show the differentiation between institutions in approaching nature-human relationship. Out of the answers that the participants provided, the scale of private sector, public institution, NGO,

academician, media and unemployed scales are provided. It can be stated with %95 confidence that there is a significant difference between institution and approaching to human-nature relationship (Sig=0.39). The differentiation takes place between public and private sector as well as public sector and NGOs.

Table 14: Analysis of the Institutional Differentiation (Public, Private, NGO, University, Media, Unemployed) in Approaching Nature-Human Relationship-1

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Public institution	36	4,5833	,87423	,14571	4,2875	4,8791	3,00	6,00
Private Sector	6	3,8333	,40825	,16667	3,4049	4,2618	3,00	4,00
NGO	17	4,0000	,00000	,00000	4,0000	4,0000	4,00	4,00
Univertiy	12	4,3333	,65134	,18803	3,9195	4,7472	4,00	6,00
Media	2	4,0000	,00000	,00000	4,0000	4,0000	4,00	4,00
Unemployed	3	4,3333	,57735	,33333	2,8991	5,7676	4,00	5,00
Total	76	4,3289	,71904	,08248	4,1646	4,4933	3,00	6,00

Table 15: Analysis of the Institutional Differentiation (Public, Private, NGO, University, Media, Unemployed) in Approaching Nature-Human Relationship-2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,860	5	1,172	2,492	,039
Within Groups	32,917	70	,470		
Total	38,776	75			

Table 16: Crosstabulation Analysis of the Institutional Differentiation In Approaching Nature-Human Relationship

(I) Public private NGO university	(J) Public private NGO university	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
		Lower Bound	Upper Bound	Lower Bound	Upper Bound	Lower Bound
Public institution	Private Sector	,75000(*)	,30238	,016	,1469	1,3531
	NGO	,58333(*)	,20180	,005	,1809	,9858
	University	,25000	,22858	,278	-,2059	,7059
	Media	,58333	,49818	,246	-,4103	1,5769
	Unemployed	,25000	,41208	,546	-,5719	1,0719
Private Sector	Public institution	-,75000(*)	,30238	,016	-1,3531	-,1469
	NGO	-,16667	,32563	,610	-,8161	,4828
	University	-,50000	,34287	,149	-1,1838	,1838
	Media	-,16667	,55990	,767	-1,2834	,9500
	Unemployed	-,50000	,48489	,306	-1,4671	,4671
NGO	Public institution	-,58333(*)	,20180	,005	-,9858	-,1809
	Private Sector	,16667	,32563	,610	-,4828	,8161
	University	-,33333	,25855	,202	-,8490	,1823
	Media	,00000	,51262	1,000	-1,0224	1,0224
	Unemployed	-,33333	,42943	,440	-1,1898	,5231
University	Public institution	-,25000	,22858	,278	-,7059	,2059
	Private Sector	,50000	,34287	,149	-,1838	1,1838
	NGO	,33333	,25855	,202	-,1823	,8490
	Media	,33333	,52374	,527	-,7112	1,3779
	Unemployed	,00000	,44264	1,000	-,8828	,8828
Media	Public institution	-,58333	,49818	,246	-1,5769	,4103
	Private Sector	,16667	,55990	,767	-,9500	1,2834
	NGO	,00000	,51262	1,000	-1,0224	1,0224
	University	-,33333	,52374	,527	-1,3779	,7112
	Unemployed	-,33333	,62599	,596	-1,5818	,9152
Unemployed	Public institution	-,25000	,41208	,546	-1,0719	,5719
	Private Sector	,50000	,48489	,306	-,4671	1,4671
	NGO	,33333	,42943	,440	-,5231	1,1898
	University	,00000	,44264	1,000	-,8828	,8828
	Media	,33333	,62599	,596	-,9152	1,5818

* The mean difference is significant at the .05 level.

In order to find out the institution, which resulted in this differentiation, least significant dependent test is implemented and the public sector is the different one.

The table below shows that there is no significant differentiation between institutions when public sector is not included in the analysis (Sig=0.111). Before the research was conducted, it was assumed that NGOs would score more in the human-nature scala that the author formed (in other words show a more ecocentric attitude towards human-nature relationship), however public institutions showed more ecocentric ethical values in the dualism between development and conservation.

Table 17: Analysis of Differentiation between Institutions When Public Sector is not Included in the Analysis-1

	N	Mean	td. Deviatio	Std. Error	% Confidence Interval f Mean		Minimum	Maximum
					ower Boun	pper Boun		
Private Se	6	3,8333	,40825	,16667	3,4049	4,2618	3,00	4,00
NGO	17	4,0000	,00000	,00000	4,0000	4,0000	4,00	4,00
Univertiy	12	4,3333	,65134	,18803	3,9195	4,7472	4,00	6,00
Media	2	4,0000	,00000	,00000	4,0000	4,0000	4,00	4,00
Unemploye	3	4,3333	,57735	,33333	2,8991	5,7676	4,00	5,00
Total	40	4,1000	,44144	,06980	3,9588	4,2412	3,00	6,00

Table 18: Analysis of Differentiation between Institutions When Public Sector is not Included in the Analysis-2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,433	4	,358	2,034	,111
Within Groups	6,167	35	,176		
Total	7,600	39			

Bafa Lake used to belong to a single family and later expropriated. Countrywide, ownership is mostly belongs to the men and/or under their control. The same tradition also applies for the Söke Plain. The size of the land they own is larger than the Turkish average; especially the average size of cotton lands is larger than 50 decares.

A senior officer at State Hydraulic Works stated,

> Well, it is true that the peasants become the supporter of environmentalists when they see a camera. DSİ is a investor institution and the investment is defined by political will… You see that phone? I have been working here for thirteen years and I have never heard this phone ringing for 'let some of the flow to the Bafa Lake in order for fish population to increase', it usually rings for 'Özbaş's (land-owner with power in the region) land is under water, provide a discharge. (Male/40/Aydın/Public Sector /top executive)

A representative of an NGO, who approaches the authority of public institutions critically and favours declaration of national parks in Turkey stated that,

> The Ministry of Environment and Forestry says that 'do not pronounce me the word of protected areas, we are not declaring anymore. The process will continue with turning protected areas into enterprises. The way MoEF approaches to PAs is to put the map of State Hydraulic Works' plans on top of Natura 2000 designated areas map and proceed without hesitation around them. (Female/25/İstanbul/NGO/not top executive)

Today, only 4% of Turkey's surface area is declared as protected areas. The Natura 2000 Protocol which Turkey is entitled to follow the criteria due to the candidacy to European Union, calls for the designation of at least 10% of surface area in order for sustainability of natural ecosystems. This connotes for less area for agricultural practices, less irrigation, and less industrial discharge; more hands-off conservation which the Turkish government strongly opposes to in the name of development which signifies the more you exploit the natural resource, the more you create wealth and increase the number of votes. More information with regards to differentiation of institutions in the way of idealizing the relationship between human beings and nature is provided in the previous chapters thanks to the interviews conducted with different occupations.

Moreover, state of approaching environment-development dualism in Turkey with regards to age is probed. It can be stated that there is no significant difference between age and environ-mental ethical values by failing to reject the null hypothesis that state 'There is no significant relationship between age and ethical conceptualization' (Sig=0.753). Before conducting the analysis, it was assumed that

younger people would show more ecocentric attitude towards the antagonism between developmentalism and environmentalism while older people would be more anthropocentric. The author assumed a differentiation bearing in mind that younger generations would follow more idealist ways to harmonize developmentalism and nature conservation before conducting the analysis. Although it is not possible to generalize from a number of questionnaires and deep interviews, it can be put forward that the young generation is as system oriented as the elderly. It might be explained on the basis of cessation of civil movement in Turkey in the last three decades.

Table 19: Analysis of Age Differentiation with regards to Environmental Ethical Values-1

	N	Mean	td. Deviation	Std. Error	% Confidence Interval f Mean		Minimum	Maximum
					ower Bound	pper Bound		
1,00	25	4,2800	,73711	,14742	3,9757	4,5843	3,00	6,00
2,00	30	4,2667	,78492	,14331	3,9736	4,5598	3,00	6,00
3,00	22	4,4091	,59033	,12586	4,1474	4,6708	4,00	6,00
Total	77	4,3117	,71192	,08113	4,1501	4,4733	3,00	6,00

Table 20: Analysis of Age Differentiation with regards to Environmental Ethical Values-2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,295	2	,147	,285	,753
Within Groups	38,225	74	,517		
Total	38,519	76			

Furthermore, state of approaching environment-development dualism in Turkey with regards to occupation is studied. The below table shows that there is no significant

differentiation between ethical values and occupation by failing to reject the null hypothesis that states 'There is no significant difference between different occupations in conceptualizing human beings and nature relationship (Sig=0.256). The author assumed a differentiation between more social sciences-oriented occupations and engineers bearing in mind that engineers would be unidirectional and based on operationalization whereas decision-makers with social sciences background would approach environmental issues more critically.

Table 21: Analysis of Occupational Differentiation with regards to Environmental Ethical Values

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12,625	23	,549	1,238	,256
Within Groups	23,505	53	,443		
Total	36,130	76			

Afterwards, state of approaching environment-development dualism in Turkey with regards to respondents status in decision-making is examined. The table below shows the differentiation between the people in the decision-making mechanism would be more anthropocentric whereas people that do not take place in the decision-making processes would show more ecocentric attitudes towards the antagonism between development and conservation bearing in mind that people in the decision-making processes would be more system-oriented and would have to follow the rules whereas the non-decision-makers would be more idealist and would be following recent strides in the world to propose different leap-frog effects. It can be put forward that there is no significant relationship between decision-makers and non-decision-makers in approaching nature-human relationship. This might be explained on the basis of 'more monarchy-oriented than the king' understanding in Turkey where people with lower status would be more passionate than their seniors on conflicting issues in

order to upgrade their status at the workplace. This conjuncture is quite malignant since it does not provide hope for transformative potential in the coming decades.

Table 22: Analysis of Differentiation with regards to Decision-Making Mechanism

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12,625	23	,549	1,238	,256
Within Groups	23,505	53	,443		
Total	36,130	76			

The table below shows the differentiation between location of the participant and conceptualization of environmental ethical values and it can be stated that there is no significant difference between participants who are located in a city that is directly related with the wetland and people living in another city than the location of the wetland (Sig=0.105). The result is probably the most staggering one since proposing strong regional governance and participation of local stakeholders in the decision-making processes was one of the major gist of the thesis before the analysis was conducted. However no strong base for proposing regional multi-stakeholder platforms for integrated management of the four wetlands where ways out other than sustainable development can be reflected due to diverse set of agents in conceptualizing the relationship between human beings and nature emerged both in quantitative and qualitative analysis.

Table 23: Analysis of Differentiation with regards to Location

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1,251	1	1,251	2,690	,105
Within Groups	34,879	75	,465		
Total	36,130	76			

At this part of the thesis, some views on eliminating the antinomy between developmentalism and nature protection such as national green accounting, changing the way development is understood, partnership ethic with emphasis on what is missing in liberal democracies, rejuvenating environmental movements, reducing domain of administrative state and against free market environmentalism debates are provided. O'Connor states that a necessary step toward ensuring a sustainable capitalism defined in some sense of ecologically rational or sound would be national budgets that put high taxes on raw material inputs, (e.g. coal oil, nitrogen) and certain outputs (e.g. gasoline, chemical building blocks), meanwhile slapping value added taxes on a wide range of environmentally unfriendly consumer products (cars, plastic products, throw-away cans) complete with an enforceable 'green label' policy that would promote green products with green defined strictly in terms of ecological impacts at every stage of the production, distribution and consumption process. He argues that steps would include national expenditure policies that heavily subsidize solar energy and other benign alternative energy sources; techno-logical research that leads to eliminating toxic chemicals and other substances at their source; innovations in mass transit; improvements in occupational health and safety conditions coupled with national, regional, and community enforcement procedures; and a re-definition and re-orientation of scientific and technological priorities generally. He finalizes his argument by stating that this kind of green budget with appropriate changes in budgets of national income accounting is being developed except on paper by a marginalized group of green economists and activists, and the green may be forcing capital to end its primitive exploitation of precapitalist nature by remaking nature in the image of capital – also to lower the costs of capital, especially the costs of reproducing labor power or the cost of wages. Until the rise of ecological economics, - which despite precursors dating back more than a century, is still at the fringes of the profession – economists discuss the sustainability of capitalism in purely economic terms for example, more capital, investment and consumption, profits and wages, costs and prices. He concludes that the physical or material world appeared in models of economic growth are firstly in the form of location and rent theory; second

in the concept of the ‘accelerator’ or the amount of the physical product that the new productive capacity can be expected to produce (O’Connor, 1994, pp. 156-159). At the macro-economic level, effective environmental protection can be achieved through realignment of broader policy goals – a shift towards a more environmentally benign, more labor intensive macro-economic development path (Jacobs, 1997, pp. 81-82).

O’Connor favors ecological socialism, which is a society that pays close attention to ecology along with the needs of human beings in their daily life, as well as to feminist issues, anti-racism, and issues of social justice and equality generally. Individually, social movements are relatively powerless in the face of the totalizing force of global capital. He conceptualizes liberal democracy as competition for elective office, the opportunity to exert popular pressure upon government through free political association, a range of individual rights against government secured through constitutional limitations, and a politics of the strategic pursuit of interests defined in the private realm. There are limits to the problem solving capacity of liberal democracy. Firstly, distribution of power in liberal democratic systems is inevitably unsymmetrical. Business always has a ‘privileged’ position due to the financial resources available to it, government officials’ need for business cooperation in implementing policies, and government’s fear of an investment strike an economic downturn if it pursues anti-business policies. Secondly, liberal democracies identify and disaggregate environmental problems based on the particular interests of affected parties. Thirdly, the political currency of liberal democracy consists of tangible rewards to identifiable interests. It is of no use when it comes to large-scale non-reducible ecological problems. Fourthly, the time horizon in liberal democracy is often no longer than that in the market. Short-term problems receive the most attention and the next election often acts as the outer limit of foresight. Finally, liberal democracy no less than the market, is addicted to economic growth (O’Connor, 1994, p. 180).

O’Connor suggests the need for three general and related strategies:

1. Self-conscious development of a common or public sphere, a political space, a kind of dual power, in which minority, labor, women, urban and environmental organizations can work economically and politically through strategic alliances.
2. Self-conscious development of economic and ecological alternatives within this public sphere or 'new commons' – alternatives such as green cities, pollution free production, biologically diversified forms of silviculture and agriculture, and so on the technical aspects of which are well-known today.
3. To organize struggles to democratize the workplace and the state administration so that substantive contents of an ecological, progressive type can be put into the shell of liberal democracy. There should be a consensus on political goals themselves especially the democratization of some national and international state apparatuses and the elimination of others (O'Connor, 1994, p. 172).

Rearrangement of property rights to give each actor a private stake in former commons, regulation of access to resources, and the control of harmful practices shall be given. Obviously, all such regulation requires governmental action. Capitalism displaces on to government the environmental problems that it generates but cannot solve. However, governments operating within mixed capitalist political-economic systems may not be able to respond effectively (O'Connor, 1994, p. 181).

Hierarchy may be adequate for the coordination of routine tasks but not for complex and variable problems (O'Connor, 1994, p. 182). This is valid for the Turkish case since environmental issues are perceived as simple, solvable and with an authoritarian manner.

In an ecological society composed of communers, property will belong neither to producers, nor to the nation-state; property interests would become generalized, not reconstituted in different conflicting or unmanageable forms (Ed. by Zimmerman et

al., 2001). *For civilization as a whole, the faith that is so essential to restore the balance now missing in our relationship to the earth is the faith that we do have a future (cited in Helvarg, 1994).* Ecologism seeks radically to call into question a whole series of political, economic and social practices in a way that environmentalism does not. Ecologism envisages a post-industrial future that is distinct from that is known at the moment. While the post-industrial future revolves around high-growth, high technology, expanding services, greater leisure time and material satisfaction in consuming, the post-industrial society questions growth and technology, and suggests that a good standard of living involves more work and less material objects.

Adams believes that there is an urgent need to move beyond the old-fashioned idea of development as a single task of investment to achieve 'take off', in the conventional developmentalist model of the second half of the twentieth century. According to this standard model, the process of development involves a translation to Western-style modernity, industrial, urban, democratic, and capitalist. In Walt Rostow's classic book 'Stages of Economic Growth: A Non-Communist Manifesto', development was a linear path of change from traditional society, through take-off, maturity and the age of high mass consumption. The present global dilemma of environment offers huge risks, yet also big opportunities. The need to create a 'sustainable post fossil-fuel society and economy' should be more widely recognized, although the challenges on the road to achieving are still hard. More fundamental than these, however, is the need to re-conceive growth. Adams moreover proposes the idea of 'degrowth' (décroissance) (Adams, 2008, p. 59). Degrowth is a term created by radical critics of growth theory intended to make space for alternative projects as part of post-development politics. Degrowth is (like sustainability) an ethical concept of how the world needs to change. Proponents of contraction want 'to create integrated, self-sufficient and materially responsible societies in both the North and the South'. (Adams, 2008). As mentioned before, the dualism between economy and ecology arises from how to remake nature in ways that are consistent with sustainable profitability and capital accumulation (O'Connor,

1994, P. 157). Environmental degradation will make economic growth unachievable (=environmental unsustainability) leaving the society to cope with both economic and environmental disintegration. In order to achieve fair shares of the global resources available, theories of growth need to be transformed to theories of contraction and convergence, to balance the increases in energy and material use that are needed to raise living conditions among the poor against contractions among the wealthy and super-rich (Adams, 2008, p. 107). It shall not be forgotten that planetary life support systems are not substitutable, nor are most functions of natural ecosystems. Ekko argues that we should abandon the GNP as the main indicator of economic success and not get upset when it drops (Ekko et al., 2001, p. 325).

Merchant calls for a partnership ethic that goes beyond egocentric and homocentric ethics in which the good of the human community wins out over the good of the biotic community. It likewise transcends ecocentric ethics in which the good of the biotic community may take precedence over the good of the human community. (Merchant, 1996, p.217) A partnership ethic of earthcare is defined by Merchant as an ethic of the connections between a human and a nonhuman community. She sees the relationship is situational and contextual within the local community, but the community is also embedded in and connected to the wider earth, mainly national and global economies. A partnership ethic, that is called by Merchant has four precepts that are; (i) equity between the human and nonhuman communities, (ii) moral consideration for humans and nonhuman nature, (iii) respect for cultural diversity and biodiversity and finally (iv) inclusion of women, minorities and nonhuman nature in the code of ethical accountability. Merchant states that a partnership ethic is calling for a new balance in which both humans and nonhuman biomes are equal partners, neither having the upper hand, yet cooperating with each other. She claims that both humans and nature are active agents and both the needs of nature to continue to exist and the basic needs of human beings needs to be considered (Merchant, 1996, p. 217-218).

Sustainable development is viewed as the latest version of development, rather than a new concept that challenges orthodox assumptions and means a radical departure from conventional thinking and practices. Sustainability could be called the post-modern equivalent of a grand narrative, replacing the modernist narrative of progress, which held sway for much of the twentieth century. Sustainability is our way of seeing the present in the perspective of the future and provides a societal story line for justifying change (cited in Irwin, 2001, p. 44). Together with this, subsidies should be withdrawn, tax system shall be reformed (ecological tax reform helps society shift from taxing "work" to taxing "waste") and market should be regulated favoring ecology. We should rethink today's subsidies, to design policies and market structures which reward unrecognized benefits and penalize uncaptured costs, and to share the benefits of conservation and protected areas in a more equitable manner. Furthermore, we must link together communities and organizations working out practical solutions to sustainability challenges, and ways to live with more happiness and lower energy and material consumption. Moreover an institutional architecture to bring about change shall be built so that transition to sustainability depends on the collaborative and coherent actions of political and business leaders, governments and most importantly, local stakeholders. It shall be noted that these attempts are insignificant without an effective international environmental regime.

Adaman proposes five recommendations for institution at the national level that would (i) produce and disseminate knowledge by combining technical and local competencies on the ecological and social importance of wetland sites, (ii) make it easier for local stakeholders to follow global developments on wetland conservation and facilitate the sharing of conservation experiences, (iii) periodically monitor the status of wetlands by gathering, and if necessarily producing, data, (iv) propose case-specific conservation policies in line with the political-ecology framework, and (v) play a transformative role in sensitizing and mobilizing actors on ecological issues (Adaman et al., forthcoming, 18).

Bearing in mind that media is in favor of the state's modernizing perspective, and pays minimal attention to environmental issues (Adaman et al., forthcoming, 13), mass media can be used as a tool to further explore and promote bio-prospective values to a wider audience.

Leopold argues that conservation still proceeds at a snail's pace and progress still consists largely of letterhead pieties and convention oratory (Leopold, 1970) and believes that not only the volume but also the content needs to be reshaped rather than calling for more conservation education. Adams argues that we need to rejuvenate the environmental movement and develop institutions that are responsive, dynamic, equitable and resilient and we need to develop practical tools and coherent political strategies to help us make the transition. Above all we must go beyond counting the problems and 'doom and gloom' messages to fostering the vision that gives us hope and that inspires us to change (Adams, 2008, p. 2). The green movement makes the environment the centerpiece of a new utopianism. Raising environmental crisis to the status of a fatal flaw in capitalist society, the green ideology of this period saw salvation only in the ending of economic growth and materialist consumerism. To achieve this, the entire post-Enlightenment value system of the Western world has to be overturned. It also assumes developing countries to find other ways to take off in this teleological way of development.

Developed countries do not provide good models for a transition to sustainability: they are the least sustainable on earth. Their levels of consumption are the major drivers of anthropogenic climate change and biodiversity loss; their economies draw poor communities in the developing world into systems of production and exchange, but even where they generate wealth they do not stimulate equity. Business as usual is no longer an option (Adams, 2008, p. 45). The success of development on the standard 'fossil fuel automobile based throwaway consumer economy' model does not work. There is a need for systemic change in the way development is understood and brought about globally. This case holds true for developing countries such as Turkey (Adams, 2008, p. 58).

O’Connor calls for three strategies. Firstly, self-conscious development of a common and public sphere, secondly, new commons development of economic and ecological alternatives within public sphere and finally organize struggles to democratize (O’Connor, 1994, p. 172). As decentralized systems, governed by a logic of self-interest, markets have no mechanisms for dealing with the common property and the public goods problems they generate. The tragedy of ‘the commons’ is that instrumentally rational actors motivated by private material self interest in an unregulated social environment will eventually ruin resources held in common (O’Connor, 1994, p. 178). The only escape would be if capitalism could shift the growth to economic activities that do not involve consumption of materials or environmental services centered on production, exchange and dissemination of information rather than material goods (O’Connor, 1994).

Other than the ecological socialism that O’Connor favors, Phalke calls for reducing the domain of the administrative state and increasing that of liberal democracy. He notes that contrary to the projections and recommendations of ecological centralizers the addition of environmental issues to the political agenda needs to be accompanied by more openness in policy debates rather than less. This openness should take the form of public hearings, interest group activity, right to know laws, public inquiries and so forth.

Ekko proposes win-win policies that correct distortions or inefficiencies in markets, and thereby increase economic input while improving the environment: removing environmentally damaging subsidies, increasing the take up of already competitive, environmentally benign technologies, and ecological tax reform (Ekko et al., 2001, p. 128). Reallocation in order to slow down the depletion of the environment and natural resources can be accomplished in two ways: by prescribing environmental conservation measures for production and consumption activities, and by direct changes in production and consumption patterns. The ways to reallocate is through prescribing environmental conservation measures for production and consumption – real price increase national income decreases together with direct change in

production and consumption- buy less with same income (Ekko et al., 2001, p. 84). According to Dobson, it seems irrelevant to 'put all our environmental eggs in the fiscal basket' (Dobson et al, 2006, p. 1). He believes that there are other approaches to the business of getting people, corporations and institutions to behave sustainably other than sustainable development approach. Barry locates environmental citizenship in the civic republican tradition and reclaims the notion of service that goes with that tradition. Pointing out that the voluntary approaches to sustainability have had limited success, Barry suggests that the state should play a more forceful role and puts forward that

> One aspect of this might be to ask citizens to carry out occasional sustainability-related activities, in the spirit and context of the civil republican demand that citizens contribute to the common good – in this case, a broad conception of sustainability. (…) This will be uncomfortable, even an illegitimate message in liberal societies where compulsion of this sort is regarded as an inappropriate assault on individual liberties but (…) there is a possibility that such service might be rewarded in some way through fiscal incentives (cited in Dobson et al, 2006, pp. 1-8).

In short, Dobson's position is that ecological citizenship is one part of a wider sustainability project '*One by one, then the signposts to sustainability are being erected, and I regard ecological citizenship as a key addition to the collection'* (cited in Dobson et al, 2006, p. 185).

Taylor approaches environmental policies by stating that we must aim at nothing less than a shift in the overall direction of the world economy. It means creating a new kind of growth and that we must change the way economic decisions are made. (Taylor, 1992) The war against hunger, disease, poverty, or ecological degradation cannot be left to the market to fight. She argues that the humanity is not going to see the day when the market alone brings about sustainability on the global level. She believes that we need to build a strong international public sector. We must pool our sovereignties and share the responsibility for peace, human rights and sustainable development. To meet the challenges of environmental degradation, we must develop a new generation of international agreements, based on cost effectiveness and on equitable burden sharing. (Taylor, 1992) She however, does not imply any

other mode of production, rather ecological modernization and environmental regulations. More proactive forms of environmental policy are needed if further reductions in the level of environmental quality are to be avoided because according to Jacobs, both governments and industry tend to favor reactive and standardized approaches to policy, even though proactive and flexible solutions are available which are both more efficient and more effective (Jacobs, 1997).

The anthropocentric and ecocentric realms are separated from each other today in which we must choose one or the other, either natural evolution with its biocentric halo, or social evolution with its anthropocentric halo as the basis for a creative biosphere. However, we must go beyond both of the natural and social towards a new synthesis that contains the best of both. Such a synthesis will transcend them in the form of a creative, self conscious and therefore free nature in which humans intervene with natural evolution with their best capacity- their moral sense, conceptual thought and power of communication (Ed. by Zimmerman et al., 2001). In order to couple environmentalism and developmentalism a philosophy of process and potentiality that views life as active, interactive, proactive, relational and contextual platform must be realized. Bearing in mind that nature is not a passive lump or matter, nature must be freed of all anthropocentric moral tappings and human communities must be properly viewed on a nature-society continuum, stressing the non-hierarchical continuities between nature and society. Moreover, dominance-submission relationship between nature and human beings shall be eliminated. The natural resources, upon which the global economy depends on are coming to an end. It is only possible that natural system shifts commodity and energy into human creativity. If we are to diminish the nature-human antagonism within capitalist mode of production in Turkey, producing new markets, withdrawing ecologically unbenign subsidies, providing tax reform, ensuring lower consumption, controlling population, influencing mass-media, rejuvenating environmental movements, finding developing countries to find other ways to take off, reducing domain of administrative state (free market environmentalism), creating an international public sector (against free market environmentalism), constructing a

partnership ethic and ecological modernization are needed to realize change. If we are to move beyond understanding development as increasing GDP, human well-being rather than labor intensity must be put on center. This implies human beings' becoming a part of the nature that also feeds its production rather than emphasizing development that serves the need for constructing human capital in order to produce profit. Industrialism's two main key points are harmonization and crystallization of natural resources and labor. The decision-makers in Turkey shall put the emphasis that the earth is a closed box where the resources are limited. Decision-makers in Turkey that are not only from the public authorities shall frame economy not only favoring human, but also placing the nature. Placing nature into developmental concerns, unlike sustainable development, is not a mere articulation, but a redefinition of the global economic system, give room to human creativity and find structural solutions to economical and ecological credit crunch. This type green development does not mean limiting or tailor growth, but a different social system that has its own form, content, and power mechanism. The decision-makers - stemming from local to national, in line with global, not only governmental but feeding from institutionalized civil movement – shall model the cycles on ecosystem and develop another relation between commodity and labor as well as between nature and human.

CHAPTER 5

CONCLUDING REMARKS: HOW THE DUALISM BETWEEN ECOLOGY AND DEVELOPMENT CAN BE ELIMINATED?

Another world is not only possible, she is on her way.
On a quiet day, I can hear her breathing.
Arundhati Roy

The thesis 'Decoupling Developmentalism-Environmentalism: Human Nature Conceptualizations in Freshwater Ecosystems Management in Turkey' can be classified as an approach to societal-environmental relations, questioning the very root of the nature/society dualism. The relevant metric of sustainability is 'the production of human well-being (not necessarily material goods) per unit of extraction from or imposition upon nature'. Monetary calculation of development is an inadequate measure of quality or richness of life, both for human beings as well as for the non-human world. The twentieth century fixation with GDP as a measure of human development is not valid. In line with Leopold's views, the decision makers must quit thinking about pure utilization of natural values as solely an economic problem and examine each question in terms of what is ethically and aesthetically right (preserving integrity stability and beauty of nature) as well as what is economically expedient. (Leopold, 1970)

Differentiation of conceptualizing the relationship between human and nature not only restricted to sustainable development discourse is analyzed and compared by ascala developed by the author and operationalized through quantitative analysis. Insights of stakeholders and decisionmakers with regards to demystifying the

antagonism between nature and human beings as well as between conservation and development are realized together with a debate of Turkey's position in existing approaches. The aim of proposing a prototype that is local, female, young, social science-based, active in civil movement to minimize the conflict between developmentalism and nature conservation that is crystallized by freshwater resources management in the four wetlands in Turkey (Bafa, Eğirdir, Uluabat and Salt Lakes) could not be fulfilled since there is no major differentiation of conceptualization of human beings and nature with more ecocentric emphasis within this segment of population in the research. The author believes the thesis serves for a more ecologically sound perspective in sociology discipline. In order to conformate what was captured in the already existing studies into the perceptions of the decision-makers in the four wetlands, an extensive literature study was realized. Accordingly, a questionnaire was formed based on what could be distinguishable in approaching human-nature relationship, mostly fed from Bookchin, Zimmerman, O'Connor and Leopold. Variables (based on Likert scale) were formed which led to an overall score that was added up by the author at the end of each analysis after finding out the general variables that assumed to be dependent (gender /age /status /income /institution /location to the lake). Additionally, participants were asked to place themselves, their perception, ideal and contemporary situation on the relationship scale in order to find out whether there is a differentiation between assumed and measured conceptualization of the relationship based on the general assumption of each environmental ethic. Moreover, open-ended questions were asked in order to find out what people think about sustainable development that shows the positive and negative connotations together with site-specific questions, their approach to management of natural resources participation and their perception on capitalist mode of production. Their perception on capitalism was also tried to be grasped throughout the questionnaire. The questionnaire was disseminated via internet too 600 stakeholders who are involved in decision-making mechanism in local and national level as well as the stakeholders who are partly involved in the decision-making processes as well as face-to-face during field visits and congresses/seminars/ workshops in the four areas. Together with the questionnaires interviews were

realized with thirty four decision-makers both at national and local levels. The interviewees were selected in order reach to a balanced perception from national and local level that the four areas were reflected, gender-balance was realized (since it was not possible to reach gender-balance in the quantitative analysis based on the male dominance in decision-making mechanisms), that stakeholders from sectors other than public institutions were reflected, local knowledge is integrated, a different range of age was grasped and system-oriented and critical conceptualizations were reverberated by bridging the gap of conceptualization - provided by extensive literature review mostly focused on social ecology with operationalization – provided by systematically analyzing the perception of nature-human relationship crystallized in freshwater ecosystems management by quantitative and qualitative analysis that is formed to comprehend, compare, contrast, measure and interpret the data that is inferred from the existing debate on sustainable development, capitalism, technology, governance, management, participation to lead the author to demystify the dualism between developmentalism and conservation.

Basing the argument of this thesis on the results of the quantitative analysis conducted, it is possible to state that there is no significant difference between the institutions in the way of idealizing the relationship between man and nature, and there are no radical assumptions of neither anthropocentric nor ecocentric emphasis (mainly idealizing sustainable development and land ethic), there is no gender aspect, no significant difference between different occupations, between participants who are located in a city that is directly related with the wetland and people living in another city than the location of the wetland, between different age groups and between different income groups. There is a significant difference between institutions and approaching to human-nature relationship, contrary arguments can be found for the public sector and the others. Non-governmental organizations are more contrary to capitalist mode of production, in favor of transformation and critical to the notion of sustainable development whereas there is no definite reaction from public sector, private sector and the academicians interviewed. Most of the participants agree on the fact that natural resources are getting exhausted and

environmental problems shall be solved and conceptualized differently in the developing world and developed world. However, their recommendations of how to solve the ecological crisis differ; the research releases is against the view that the problems are by-products of development and further application of growth will solely solve this comparably 'minor' problems through improved technology. People from other sectors than the public sector mentioned management and more participation whereas the public sector is not passionate in integrating responsible stakeholders and authorities to participate in the decision-making process. The decision-makers that took place in the analysis do not believe that more labor is required if consumption and production is made concerning conservation of natural resources, the financial mechanism for nature conservation can be possible through production increase whereas they follow the "myth" 'production must increase in order to conserve the nature'. There is no consensus on the expenses necessary for nature conservation. Therefore, it is possible to conclude that the decision-makers do not follow a teleological path of evaluating environmentalism and developmentalism.

Acting to reduce ecological deficits in advance preventively is a far more preferred alternative. If we plan reductions by cutting demand for ecological resources, this need not necessarily entails hardship, and may even add growth opportunities to the economy and improve quality of life. On the other hand, as many telling examples from history show when societies that operate with an ecological deficit experience unplanned reductions in resource use and are forced to rely on their own "biocapacity", a decline in quality of life, often severe, generally follows (cited in Sukhdev et al., 2009).

The analysis tried to grasp the discrepancies of conceptualizing human-nature relationship in order to find out which segment of the society would be closer to adopt green values, with the intention of proposing them to be involved in a greater extent to decision-making mechanisms with regards to natural resources management, as well as an attempt to grasp the overall picture in understanding nature-human relationship in Turkey by focusing on wetland management in four

areas. It can be concluded that the decision-makers that took part in the research are in favor of the master status of human beings over nature although they see themselves as more eco-friendly. The results of the quantitative analysis actually presented them as anthropo- and technocentric.

For a sustainable planet, in which people live harmoniously within nature, there is a need to create an economy that can fit on a single planet. This is obviously not capitalism. In order to do so, we must change the way we think about growth and prosperity, to achieve more with less, even achieve less. We need to use less carbon and other materials, create less waste, create more real wealth, and quality of life to a greater population of the world.

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ANNEXES

Doğal Kaynakların Yönetimi ve Kullanımında İnsan-Doğa İlişkisi Analizi

Yaşınız **: ____**
Cinsiyetiniz **:** Kadın___ Erkek___
Doğum Yeriniz **: .....**
Mesleğiniz **: ..... Yaptığınız işi tanımlayınız**.....
(ör: Meslek: Sosyolog / İş: Proje Koordinatörü)

Çalıştığınız kurum **: .....**
Ne kadar zamandır bu kurumda çalışıyorsunuz?
___ 1 yıldan az
___ 1-4 yıl arası
___ 4-7 yıl arası
___ 7 yıldan fazla

Çalışmakta olduğunuz kurumda sorumlu olduğunuz işler:
.....
.....
.....
.....

Ne zamandan beri bu işlerden sorumlusunuz?
___ 1 yıldan az
___ 1-4 yıl arası
___ 4-7 yıl arası
___ 7 yıldan fazla

Kurumunuzun verdiği kararlarda ne kadar etkilisiniz?
___ Hiç etkili değilim
___ Etkili değilim
___ Ne etkiliyim, ne etkili değilim.
___ Etkiliyim
___ Çok etkiliyim

Şu an ikamet ettiğiniz yer **: .....**
Ne zamandan beri burada yaşamaktasınız?
___ 1 yıldan az
___ 1-3 yıl arası
___ 3-5 yıl arası
___ 5 yıldan fazla

Burada yaşamaya başlamadan önce nerede ikame ediyordunuz? (il, ilçe, köy/mahalle olarak).....

Hayatınızın büyük bölümünü nerede geçirdiniz? (il, ilçe, köy/mahalle olarak)
.....

Eğitim Durumunuz:	**Medeni Durumunuz:**	**Gelir Durumunuz:**
___İlkokul	___Evli	___0-500 YTL arası
___Ortaokul	___Bekar	___500-1000 YTL arası
___Lise	___Dul	___1000-1500 YTL arası
___Üniversite	___Boşanmış	___1500-2000 YTL arası
___Yüksek Lisans		___2000-2500 YTL arası
___Doktora		___2500-3000 YTL arası
		___3000 YTL +

Şu an evinizde siz dahil kaç kişi yaşamakta: _____

Aşağıdakilerden hangisi <u>mevcut durumda</u> insanın doğa içerisindeki yerini en iyi tanımlar? (Birden fazla şık işaretlemeyiniz)

__ İnsan, doğaya hükmeder.

__ İnsan doğanın yöneticisidir.

__ İnsan doğayı metalaştırarak ondan en az efor ile maksimum kazancı sağlar.

__ İnsan doğanın bekçisidir, onu korumakla yükümlüdür.

__ İnsan doğayı fethetmiştir.

__ İnsan doğanın sade bir parçasıdır.

__ İnsan, doğanın kusursuz olmasını sağlar.

__ İnsan, doğanın hükmettiği bir varlıktır.

Aşağıdakilerden hangisi <u>ideal durumda</u> insanın doğa içerisindeki yerini en iyi tanımlar? (Birden fazla şık işaretlemeyiniz)

__ İnsan, doğaya hükmeder.

__ İnsan doğanın yöneticisidir.

__ İnsan doğayı metalaştırarak ondan en az efor ile maksimum kazancı sağlar.

__ İnsan doğanın bekçisidir, onu korumakla yükümlüdür.

__ İnsan doğayı fethetmiştir.

__ İnsan doğanın sade bir parçasıdır.

__ İnsan, doğanın kusursuz olmasını sağlar.

__ İnsan, doğanın hükmettiği bir varlıktır.

Aşağıdakilerden hangisi<u>, hayat biçiminizin, tavır ve davranışlarınızın</u> doğa içerisindeki yerini en iyi tanımlar? (Birden fazla şık işaretlemeyiniz)

__ Doğaya hükmeder şekilde yaşıyorum.

__ Doğayı yönetiyorum.

__ Doğa benim için üzerinden kar elde edebileceğim bir mal.

__ Kendimi doğayı korumakla yükümlü hissediyorum.

__ Doğayı fethedecek şekilde yaşıyorum..

__ Doğal düzenin sade bir parçasıyım.

__ Doğanın kusursuz olması için benim (insanın) olması şart.

__ Doğa bana (insana) hükmetmekte, bana kurallarını dikte etmektedir.

Sürdürülebilir kalkınma sizin için ne ifade ediyor?

.....
.....
.....
.....
.....

Lütfen aşağıdaki yargı cümlelerine aşağıdaki kutuda olan seçeneklerden birini işaretleyiniz. (Kesinlikle katılıyorum, katılıyorum, bir fikrim yok, katılmıyorum, kesinlikle katılmıyorum.)

	Kesinlikle katılıyorum	**Katılıyorum**	**Fikrim Yok**	**Katılmıyorum**	**Kesinlikle katılmıyorum**
Dünya insanlığın yaşaması için kullanacağı doğal kaynaktır.					
Doğadaki insan dışındaki canlılar insanlığın kullanımı dışında bir değere (herhangi bir yarar ya da işlevden bağımsız olarak) sahiplerdir.					
Doğa ile uyumlu bir yaşamı tercih ederim.					
Doğa en iyi ve en uygun çözümü kendisi bulacaktır.					
Doğal kaynaklar tükenmektedir.					
İnsan, zekası ve sosyal ilişkileri nedeniyle doğadaki diğer canlı varlıklardan daha özeldir.					
İnsan yaşayan en üstün varlıktır.					
Nesli tehlike altında bulunan bir canlı türü her koşulda korunmalıdır.					
Yeryüzündeki doğal kaynakların besleyebileceği doğal kaynaklar sınırlıdır.					
Ekolojik değerler korundukça ekonomik gelişim sınırlı olacaktır.					
Kalkınmanın sağlanması için doğal kaynakların kullanılması gerekmektedir.					
Doğal kaynaklar kalkınmak kullanılmalıdır.					
Doğayı korumak nüfus artışının kontrolü ile mümkündür.					
Doğayı korumak üretim biçimlerinin değişmesi ile mümkündür.					
Doğayı korumak tüketim biçimlerinin değişmesi ile mümkündür.					
Doğayı korumak, gayri safi milli hasılanın düşmesi ile sonuçlanır.					

	Kesinlikle katılıyorum	**Katılıyorum**	**Fikrim Yok**	**Katılmıyorum**	**Kesinlikle katılmıyorum**
Doğanın korunması için üretimin artması gerekir.					
Doğa koruma için harcaması gereken bedel üretimin artması ile mümkündür.					
Doğanın korunması maliyetlidir.					
Dünyadaki açlıktan ölen insanlar düşünüldüğünde kuşların, fokların, balinaların kurtarılması için yapılan koruma çalışmaları önemsizdir.					
Ekoloji ile ekonomi arasında bir çatışma vardır.					
Ekonomik kalkınmaya önem verildiği takdirde ekolojik dengeyi korumaya verilen önem azalır.					
Ekolojik dengeyi korumaya önem verildiği takdirde ekonomik gelişmeye verilen önem azalır.					
İnsanın kendi çıkarları için doğayı kullanması kendi can güvenliğini tehdit eder bir konuma gelmedikçe sorun yaratmamaktadır.					
Küresel ısınma, ormansızlaşma, çölleşme gibi sorunlar bilim ve teknoloji ile çözülebilir.					
Küresel ısınma insan kaynaklıdır.					
Küresel ısınma, ormansızlaşma, çölleşme gibi sorunlar yönetim ve yürütme mekanizmalarının önceliklerini bu alana vermesi ile çözülebilir.					
Çevre ile ilgili sorunlarda çözümü sağlayacak olan bireylerdir.					
Çevre ile ilgili sorunlarda çözümü sağlayacak olan kamu kuruluşlarının üreteceği ve uygulayacağı politikalardır.					
Çevre ile ilgili sorunlarda çözümü sağlayacak olan özel sektörün uygulamada yapacağı değişikliklerdir.					
Türkiye'de su kaynaklarının yönetimi akılcıdır.					
Sürdürülebilir kalkınma bu süreçte rol alan otoritelerin su ile ilgili politikalarında birlikte hareket etmeleri ile olur.					
Suyun akılcı kullanımı suyu kullananların (ör: tarımsal sulama yapan çiftçi) bilinçlendirilmesi ile gerçekleşebilir.					
Türkiye'deki çevre mevzuatı tatmin edicidir.					

	Kesinlikle katılıyorum	**Katılıyorum**	**Fikrim Yok**	**Katılmıyorum**	**Kesinlikle katılmıyorum**
Gelişmekte olan bir ülkenin uygulayacağı çevre politikaları, gelişmiş ülkelerin çevre politikalarından farklı olmalıdır.					
Günümüzde toprak, su, petrol gibi kısıtlı kaynakları ele geçirmek için savaşların çıkması muhtemeldir.					
Bafa Gölü'nün karşı karşıya olduğu problemler için gerekli önlemler alınmaktadır.					
Bafa Gölü'nün karşı karşıya olduğu problemler çözülebilir niteliktedir.					
Türkiye'deki doğa koruma konusunda çalışan sivil toplum kuruluşları etkindir.					
Mevcut durumda Bafa Gölü'nün karşı karşıya olduğu problemler için Aydın'da faaliyet gösteren sivil toplum kuruluşları etkindir.					

Suyun akılcı kullanımında ve sürdürülebilir kalkınmada aşağıdaki kurum/kuruluş/kişileri önemine göre 1'den 5'e kadar seçerek sıralayınız.

(1 en önemli 5 daha az önemli)
( ) Devlet Su İşleri
( ) Çevre ve Orman Bakanlığı
( ) Tarım ve Köyişleri Bakanlığı
( ) Belediyeler
( ) Valilikler
( ) Kaymakamlıklar
( ) İl Çevre Müdürlükleri
( ) İl Tarım Müdürlükleri
( ) Ticaret Odaları
( ) İlçe Tarım Müdürlükleri
( ) Özel sektör
( ) Yerel Sivil Toplum Kuruluşları
( ) Ulusal Sivil Toplum Kuruluşları
( ) Üniversiteler
( ) Bireyler
( ) Diğer (lütfen belirtiniz _____)

Eviniz Bafa Gölü'ne ne kadar mesafede yer alıyor?
___ Gölün kıyısında
___ Göle 1-5 km uzaklığında
___ Göle 5-10 km uzaklığında
___ Göle 10-15 km uzaklığında
___ Göle 15-20 km uzaklığında
___ Göle 20-25 km uzaklığında
___ Göle 25 km'den daha uzak

Sizce Bafa Gölü'nün en önemli problemi/ problemleri nedir?
1.
2.
3.

Bafa Gölü ile ilginiz nedir?(birden fazla seçenek işaretleyebilirsiniz)
___ Profosyonel olarak (para kazanmak için çalıştığım kurumda sorumlu olduğum işin bir parçası)
___ Gönüllü olarak (ör: sivil toplum kuruluşu)
___ Rekreasyon amaçlı (ör:turistik gezi)
___ Ekonomik amaçlı (ör:tarımsal su kullanımı, balıkçılık)

Bafa Gölü'nün sorunları sizce nasıl çözülebilir?

Anket burada sona ermiştir.
İlginiz, katkınız ve zamanınız için teşekkür ederim.
Ceren Ayas