LOCAL ACTORS AND SUSTAINABILITY IN THE KAZ MOUNTAINS REGION

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I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy.

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ABSTRACT

LOCAL ACTORS AND SUSTAINABILITY
IN THE KAZ MOUNTAINS REGION

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In this thesis, local actors and sustainability in the Kaz Mountains Region are examined from an actor-oriented approach. The prospects for sustainability are contingent on the positions of local actors in the fields such as agriculture, forest villages, the national park, ecotourism, and gold mining as well as on the interactions between local actors and environment in these fields. Thus, it is argued that sustainability is constituted by multiple socio-economic and socio-ecological dynamics taking place on local, national, and global scales. In this sense, multiple agencies of local actors such as public authorities, environmentalists, olive oil producers, tourism entrepreneurs, and villagers are taken into account by referring to these fields.

Ethnographic research methods such as in-depth interviews and participant observation were used in this thesis, and 138 interviews were conducted with local actors between the years 2010-2013. The analysis of sustainability was thereby enriched by introducing the practices, experiences, and knowledge of local actors through voicing them.

This dissertation shows the importance of a critical, holistic, participatory, and bottom-up approach to realize sustainability on a local scale. Attaining sustainability in the Kaz Mountains Region depends on local participation, local

knowledge, sustainable livelihoods, environmental friendly agricultural practices, community-based environmental management, and inclusive ecotourism activities on a local scale. In this way, local actors in the Kaz Mountains could become the agents for sustainability.

Keywords: Kaz Mountains, Actor-Oriented Sustainability Approach, Rural Communities, National Park, Gold Mining

ÖZ

KAZ DAĞLARI BÖLGESİNDEKİ
YEREL AKTÖRLER VE SÜRDÜRÜLEBİLİRLİK

Şakar, Emre
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Bu tezde, Kaz Dağları bölgesindeki yerel aktörler ve sürdürülebilirlik, aktör-yönelimli bir yaklaşımla incelenmektedir. Bölgedeki sürdürülebilirlik ihtimalleri, yerel aktörlerin tarım, orman köyleri, milli park, ekoturizm ve altın madenciliği gibi çeşitli alanlardaki konumlarına bağlı olduğu gibi, bu alanlarda yerel aktörler ve çevre arasındaki etkileşimlere de bağlıdır. Böylece sürdürülebilirliğin yerel, ulusal ve küresel düzeyde gerçekleşen birçok sosyo-ekonomik ve sosyo-ekolojik dinamik tarafından kurulduğu tartışılmaktadır. Bu bağlamda, kamusal otoriteler, çevreciler, zeytinyağı üreticileri, turizm girişimcileri ve köylüler gibi yerel aktörlerin çoklu faillikleri bu alanlara bakılarak değerlendirilmektedir.

Bu tezde derinlemesine mülakat ve katılımcı gözlem gibi etnografik araştırma metotları kullanılmış ve 2010-2013 yılları arasında yerel aktörler ile 138 mülakat gerçekleştirilmiştir. Böylece, sürdürülebilirlik analizi, yerel aktörlerin pratikleri, deneyimleri ve bilgileri dile getirilerek zenginleştirilmiştir.

Bu tez eleştirel, bütüncül, katılımcı ve aşağıdan yukarı bir anlayışın yerel düzeyde sürdürülebilirliği gerçekleştirmek için önemini göstermektedir. Kaz Dağları Bölgesi'nde sürdürülebilirliği sağlamak yerel katılım, yerel bilgi, sürdürülebilir geçim yolları, çevre dostu tarımsal pratikler, topluluk temelli çevre yönetimi ve

kapsayıcı ekoturizm faaliyetlerine bağlıdır. Bu şekilde yerel aktörler sürdürülebilirlik failleri olabilirler.

Anahtar Kelimeler: Kaz Dağları, Aktör-Yönelimli Sürdürülebilirlik Yaklaşımı, Kırsal Topluluklar, Milli Park, Altın Madenciliği

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CHAPTER 1

INTRODUCTION

The discourse on sustainability has been firmly established in social science studies since its inception by the World Commission on Environment Development (WCED) or the Brundtland Commission in 1987. When one looks to the report of the Commission, *Our Common Future*, it is seen that managing and improving technology as well as social organization is rather deemed as a capable way of dealing with environmental problems. In this sense, the report asserts that: "The concept of sustainable development does imply limits –not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities."[1]

Subsequently, the United Nations Conference on Environment and Development (UNCED) or the Earth Summit held in Rio de Janerio in 1992, and the World Summit on Sustainable Development (Rio+10) held in Johannesburg in 2002 institutionalized international environmental governance of sustainable development on a global level. As Bernstein argues, this led to the institutionalization of liberal environmentalism in the recent decades. "Under liberal environmentalism, a liberal international economic order, privatization of global commons, and market norms are not only perceived as compatible with environmental protection, but also necessary for the successful incorporation of concern for the environment in the practices of relevant state and non-state actors."[2]

[1] World Commission on Environment and Development (1987), *Our Common Future*, Oxford: Oxford University Press, 8.

[2] Bernstein, Steve (2001), *The Compromise of Liberal Environmentalism*, New York: Columbia University Press, 213.

Even though there are three pillars of sustainability, namely economic, social, and environmental, the UNCED process by framing sustainable development discourse in terms of liberal environmentalism seems to prioritize economic growth, and underestimates social and environmental pillars. "Several recent commentators have viewed the results of the UNCED process as a reordering of the priorities of *Our Common Future*, with Agenda 21, in particular, portrayed as having tipped the environment-development balance back in an environmental, more market-oriented direction."[3] That is to say, the managed sustainable growth paradigm of the Brundtland report, in Bernstein's terms, proposing "a mix of market forces, redistributive policies, and environmental interventions to promote growth of a sustainable kind"[4] were replaced by "a faith in the market, or in the increased adaptation of human activity to market norms, as the preferred means to solve environmental problems."[5]

Such a view of sustainability differs from the radical greens' in several aspects. First of all, as Dobson argues, the radical greens or the dark-greens, as he calls them, base their sustainability vision on limits to growth thesis. According to him, the dark-greens acknowledge the scarcity of resources, and emphasize the need to reduce material and energy consumption, and to control the population increase in this regard.[6] Second, "greens are forever suspicious of the technological 'fix', if this means paying no attention to the political and economic causes of environmental and other societal stresses."[7] Third, they suggest a fundamental reorganization of

[3] Langhelle, Oluf (1999), "Sustainable Development: Exploring the Ethics of *Our Common Future*," *International Political Science Review*, 20 (2): 146.

[4] Bernstein, *The Compromise of Liberal Environmentalism*, 121.

[5] Ibid., 121.

[6] Dobson, Andrew (2007), *Green Political Thought*, 4th ed., Routledge: London and New York, 53-82.

[7] Ibid., 79.

society as bioregional communities or ecological communes in line with the principles of diversity and decentralization.[8]

Liberal environmentalist approach does not envision a radical change like the dark-greens did. In this sense, it proposes to curb neither production nor consumption. Rather, the adherents of this approach do believe in a technological fix to the environmental problems contrary to the standpoint of the dark-greens. Sustainability is related with corporate social responsibility, economic efficiency, and environmental effectiveness in this regard. Hence, "Applying the principles of sustainable development is really nothing more than applying the principles of sound management to all our resources."[9] In this sense, market mechanisms such as polluter pays principle, "environmentally related taxes ("green" or "ecotaxes") and emissions trading" are considered as "efficient instruments"[10] to deal with environmental problems. As the saying goes, "We can't really be sustainable consumers without sustainable product choices."[11] Yet, Luke discusses convincingly that such a perspective is neither sustainable nor developmental. "While most consumers want to defend their place at the table, there are many centers of private, economically guided action in the economy and society actively pursuing their own national, corporate and personal monetary interests in reproducing this unsustainably non-developmental material culture."[12]

Clearly, neo-liberal transnational production and consumption practices led to the accompanying inequitable distribution patterns as well as growing socio-economic inequalities and socio-ecological distresses on natural resources and communities. As Agyeman and Carmin put forward, "The rise of transnational practices

[8] Ibid., 90-102.

[9] Strange, Tracey, and Anne Bayley (2008), *Sustainable Development: Linking economy, society, environment*, Paris: OECD Publications, 33.

[10] Ibid., 94.

[11] Ibid., 89.

[12] Luke, Timothy W. (2005), "Neither Sustainable nor Development: Reconsidering Sustainability in Development," *Sustainable Development*, 13: 236.

associated with resource depletion and manufacturing and the increasing movement of pollutants and waste across borders have created multiple spaces for new, critical understandings of the relations between a globalized economy, environment, and society."[13] Thus, globalization process made many communities around the world to form environmental justice movements to voice their demands for equality and justice in the socio-ecological terms claiming "just sustainability" in Agyeman's terms.[14]

In this sense, Redclift argues that the original emphasis of the Brundtland Commission was on meeting human needs and there has been a shift of emphasis over time. "Subsequently, the move from an emphasis on 'needs' to that of 'rights' marked a shift from a broadly Keynesian paradigm of international economic relations, in the post-World War Second period, to the neo-liberal [un]certainties of the late 1980s and the 1990s."[15] In fact, inter-generational and intra-generational justice has already been embedded in the sustainability discourse put forward by the WCED. Langhelle thereby discusses that, "Social justice can be seen as equivalent to the satisfaction of human needs, which in turn is what constitutes the primary goal of development in sustainable development."[16] Moreover, he claims, "The proviso of sustainability…is a precondition for social justice between generations."[17] The report also emphasizes intra-generational justice, and puts forward that there is a relationship between poverty and environmental degradation. In this respect, the inequalities between developing countries and industrial nations in terms of resource gap, rule-making, and using of the ecological capital are

[13] Agyeman, Julian and JoAnn Carmin (2011), "Introduction: Environmental Injustice Beyond Borders," in *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices*, JoAnn Carmin and Julian Agyeman (ed.), Cambridge, Massachusetts and London: The MIT Press, 6.

[14] Agyeman, Julian (2005), *Sustainable Communities and the Challenge of Environmental* Justice, New York and London: New York University Press.

[15] Redclift, Michael (2005), "Sustainable Development (1987-2005): An Oxymoron Comes of Age," *Sustainable Development*, 13: 224.

[16] Langhelle, Oluf (1999), "Sustainable Development," 140.

[17] Ibid.

problematized by the Commission. "This inequality is the planet's main 'environmental' problem; it is also its main 'development' problem."[18] According to the Brundtland report, "the case for the conservation of nature should not rest only with development goals. It is part of our moral obligation to other living beings and future generations."[19] Obviously, this concern for social justice as well as biota is appropriate to the normative commitments of sustainability discourse.

As Becker et al. argue, there are analytical, normative, and political implications of sustainability.[20] Analytically, "sustainability claims that societal development can no longer be viewed without considering its natural prerequisites, but must be inseparably coupled with the reproduction of them."[21] Moreover, it also implies the rejection of "the idea that there is one single direction for societal development."[22] Similar to the above discussion, they also put forward that "a call for justice" has been made normatively concerning future generations, and intra-generational social justice. Accordingly, "sustainability implies that economic processes are subordinated to social and ecological constraints."[23] Lastly, there is a political context of sustainability which is related to the renegotiation of future societal development goals. In this sense, they assert that "this task encourages a critical re-evaluation and assessment of existing institutions and institutional arrangements, as well as the identification of possible actors and conflicts among them."[24]

[18] World Commission on Environment and Development, 6-7.

[19] Ibid., 57.

[20] Becker, Egon, Thomas Jahn, and Immanuel Stiess (1999), "Exploring Uncommon Ground: Sustainability and the Social Sciences," in *Sustainability and the Social Sciences*, Egon Becker and Thomas Jahn (ed.), London and New York: Zed Books, 4-6.

[21] Ibid., 5.

[22] Ibid.

[23] Ibid.

[24] Ibid.

The analysis in this thesis also acknowledges that there are analytical, social, and political implications of sustainability. In this sense, sustainability in the Kaz Mountains Region is rather examined from an integrated and holistic perspective taking into account the economic, social, and ecological dimensions. This thesis tries to introduce an alternative conception of sustainability based on local participation, local knowledge, sustainable livelihoods, and community-based environmental management.

The research question of the dissertation is "What is the role of local actors for attaining sustainability in the Kaz Mountains Region?" The prospects for sustainability are contingent on the positions of local actors in the fields such as agriculture, forest villages, the national park, ecotourism, and gold mining as well as on the interactions between different local actors, and on the interactions between these local actors and environment in these fields. It is argued that sustainability is constituted by multiple socio-economic and socio-ecological dynamics taking place on local, national, and global scales. Thus, following Becker et al., I contend that political and institutional arrangements shape the practices, experiences, and perceptions of different local actors in these fields.[25]

From the very beginning, I acknowledge "the need to focus on the interests, characteristics and actions of different types of actors in understanding political-ecological conflicts."[26] The discussion sheds light on the alliances and conflicts among a variety of local actors concerning the above fields. Such an actor-oriented approach examines the prospects for sustainability by introducing the multiple agencies of local actors in these fields which are considered as critical for achieving sustainability in the region. In this respect, the notion of field used in this study is based on Long's definition of (social) field which is further discussed in Chapter 3.

[25] Ibid., 8.

[26] Bryant, Raymond L. And Sinead Bailey (1997), *Third World Political Ecology*, London and New York: Routledge, 23.

The analysis in this thesis takes into account social justice issues in the context of environmental management of resources, as well as environmental degradation and risks. The environmental problems, though experienced in a specific locale, are also related with the international political economy to a great extent. "Thus local 'environmental problems' need to be seen as the product not only of local processes but also of political economy at local, national, and international scales."[27] In this sense, research on local actors and sustainability is not limited only to the local scale, but, at the same time, it tries to establish connections between local, national, and global scales.

In this study, a descriptive as well as an explanatory analysis is made. First, I illustrate that agricultural transformation in the Kaz Mountains is related to broader structural dynamics occurring at national and global scales which promote agro-industrial farming instead of smallholders who are usually considered as constituting the backbone of sustainability by many scholars.[28] I also point out that agroecology and ecotourism are important in terms of sustainable livelihoods. Furthermore, I show that the relationship between ecological initiatives and rural communities occupies a significant place for achieving sustainability. On the national park and conservation policies, I argue that the conflict between the national park agencies and rural communities stems from the exclusion of rural communities, and suggest that conserving biodiversity and promoting rural livelihoods could be mutually supportive. Thus, I emphasize the need to reconsider development projects and environmental management schemes in line with the interests and needs of local people. Lastly, I discuss that environmental campaign against gold mining has been waged by so many diverse actors which have established its strength as well as its weakness. Then, I also reveal the different

[27] Adams, W.M. (2009), *Green Development: Environment and sustainability in a developing world*, 3rd ed., London and New York: Routledge, 205.

[28] See for a critical analysis, Netting, Robert Mc.C. (1993), *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*, Stanford: Standford University Press, 144-145.

valuations of gold mining by local actors on whether gold mining is a challenge to sustainability or not.

In this dissertation, an actor- and problem-oriented approach is used to examine sustainability by introducing the perspectives of multiple agencies. According to Beck et al., such an approach acknowledges the need to "start from an analysis of social conditions and causes of non-sustainability."[29] The analysis in this thesis also demonstrates the situations and practices which are contrary to sustainability. Besides, the research concerns are reformulated through the interaction with social actors. In this sense, Becker et al. point out:

> Actor-orientation of research could entail, in particular, choosing topics for investigation, according to the needs of the key actors, inviting non-scientific users to reformulate research and involving them in various stages of the research process.[30]

According to them, such a perspective would support social negotiation processes. "Science would not claim the authority to define the goals of societal policies, but instead would co-operate with non-scientific actors and assist in a process of negotiation of societal needs and ways of satisfying them."[31] In this respect, the analysis is arranged around several fields such as agriculture, forest villages, ecotourism, the national park, and gold mining that are identified as critical for sustainability in the Kaz Mountains Region. Drawing on such a perspective, multiple agencies of local actors are elaborated in analyzing sustainability in the Kaz Mountains Region. The role of local actors is well-documented in the fieldwork, particularly also in relation to the interactions between local actors and the environment.

Deciding on the research site came out of a casual journey to the region for attending a philosophy seminar in Behramkale in the summer of 2008. After making a touristic visit to a forest village with a friend in one of those days during

[29] Becker, Jahn, and Stiess, "Exploring Uncommon Ground," 10.

[30] Ibid.

[31] Ibid.

our stay, we wandered through the trails of the Kaz Mountains, a diversion to while away a long summer day. That was my first time in the Kaz Mountains, though I had heard of it before. Later that day, we came across a group of villagers making picnic near a fountain. We had conservation with them on the Kaz Mountains. It seemed to me that these locals would not want to be somewhere else. Living at the countryside made these people quite contended, a situation which is unusual for many living in the metropoles. By then, I did not know that this excursion will be just the beginning of numerous fieldwork visits to the region in the following years. Actually, another year had to pass when I decided to make a research concerning the Kaz Mountains Region.

Meanwhile, I was also engaged in the environmental sociology literature which mostly dealt with risk society, nature/society dichotomy, environmental discourses, and social construction of environmental issues. Especially meditating on nature/society dichotomy for some time had increased my curiosity concerning environment and human interaction. At those times, I also came across sustainability discourse, and thought that this could be applied to a research on the Kaz Mountains. At first, I made a comprehensive literature review on sustainability theory. Then, I examined the literature on development and political ecology. Moreover, I also studied the peasant studies in rural sociology in terms of sustainability. Lastly, I also investigated the books, articles, and news on the Kaz Mountains thoroughly.

As Atkinson and Hammersley argue, "It is expected that the initial interests and questions that motivated the research will be refined, and perhaps even transformed, over the course of the research; and that this may take a considerable amount of time."[32] Actually, my research design also changed to a great extent during the fieldwork. In this sense, while I rather considered making a policy-oriented sustainability research in the beginning, I ended up with a different interest later on. After becoming familiar with local actors in the region, this spurred me on to move

[32] Atkinson, Paul and Martyn Hammersley (2007), *Ethnography: Principles in Practice*, London and New York: Routledge, 3.

from this policy-oriented sustainability towards an actor-oriented version of sustainability. In this way, I think that sustainability discourse could offer an alternative vision to the mainstream sustainable development discourse put forward by the liberal environmentalism.

This thesis is based on a case study in which I conducted a field research in the Kaz Mountains. In this respect, the findings cannot easily be used for generalizations. Although forest villages in Edremit became the neighborhoods of Edremit due to the implementation of Metropolitan Municipality Law no. 6360 by March 30, 2014, they will have an interim adaptation process of five years in which the rights, responsibilities, and privileges of forest villages continue.[33] In this sense, they are considered as forest villages throughout this study.

The field research is based on the qualitative research methods of in-depth interviews and participant observation. Planning and preparation of the field research started in the fall of 2009. When I first decided to make a field research on sustainability in the Kaz Mountains Region, there were specific challenges concerning the research. There were physical problems such as transportation and accommodation as I was not a local from the region. More importantly, though I had some knowledge regarding the locality, it also took some time to discern the particularities of the region. In this respect, another difficulty was the extensiveness of the region.

I started the field research in the Kaz Mountains Region in 2010. I first stayed in the region for six months between March 2010 and September 2010. Afterwards, I made regular visits to the region each year. Semi-structured and unstructured interviews were made in each of these visits.[34] The interviewees were selected according to the purposive sampling and snow-ball sampling. I conducted over 138

[33] On Üç İlde Büyükşehir Belediyesi ve Yirmi Altı İlçe Kurulması ile Bazı Kanun ve Kanun Hükmünde Kararnamelerde Değişiklik Yapılmasına Dair Kanun, Kanun No. 6360, Kabul Tarihi: 12/11/2012, See http://www.resmigazete.gov.tr/eskiler/2012/12/20121206-1.htm

[34] For interview studies, see Chapter 8 in Bailey, Kenneth D. (1994), *Methods of Social Research*, 4th ed., New York: The Free Press, 173-213.

interviews with a variety of local actors, but I integrated only 104 interviews through direct citations. 12 of the interviewees are women, and the rest is men. Different age groups are interviewed like the young, the middle aged, and the old. All of the interviews were recorded with a voice recorder. Subsequently, the transcription process took a long time as there were so many interviews. All of the persons' names given in this thesis are pseudonyms in order to protect the confidentiality of the interviewees.

In Chapter 4, the interviewees include olive oil producers, olive oil factory owners, merchants, fruit producers, director of the Edremit Olive Production Center, head of the Edremit District Directorate of Food Agriculture and Livestock, agricultural technicians and engineers from Edremit, Ayvacık, and Bayramiç District Directorates of Food Agriculture and Livestock, heads of TARİŞ Olive Oil Sales Cooperatives in Edremit, Altınoluk, and Küçükkuyu, official from the Edremit Chamber of Agriculture, the head of the Bayramiç Chamber of Agriculture, heads of village agricultural development cooperatives, muhktars, peasants, and environmentalists.

In Chapter 5, the interviewees consist of forest engineers from Edremit and Bayramiç Forest Directorates, muhktars, heads of village agricultural development cooperatives, and villagers from forest villages such as small farmers, forest workers, young people, old folks, women villagers, and members of ecological initiatives who are in-migrants settled down in the region.

In Chapter 6, the interviewees are made up of head of the Kaz Mountain National Park Directorate, head of the Edremit Forest Directorate, forest engineers from Edremit and Bayramiç Forest Directorates, head of the Association of the Kaz Mountain National Park Guides, national park guides, head of the Kaz Mountain Hotelier's Association, mayors, tourism entrepreneurs, in-migrants, muhktars, and villagers.

In Chapter 7, the interviewees consist of district governors, mayor, forest engineers from Edremit and Bayramiç Forest Directorates, environmentalists, grass roots

activists, representative of the gold mining firm, olive oil producers, tourism entrepreneurs, mukhtars, and villagers.[35]

Fortunately, I did not experience any difficulty in terms of access which is usually considered as a challenging problem by some researchers. Disclosing my background and interests, and making an open research did help me enter my field site. I had some contacts from the region before starting the field research. Afterwards, it was also easy to establish conducts in the region when the fieldwork began. As I had contacts with some interviewees beforehand, "they would be able to supply the names of others, so producing a 'snow-ball sample.'"[36] This kind of sampling in addition to purposive sampling turned out to be effective as I interviewed with many people in this way, who are leading actors in the region. But the variety of local actors that I interviewed also made me to handle with different problems in various settings. To give an example, some of the stuff in the public institutions of agriculture directorates or forest directorates was hesitant to make interviews. In this sense, these institutions have gatekeepers who are "authorities from whom permission must be obtained"[37] in order to do interviews with the staff.

I must say, however, that it is not easy to establish a sense of trust between the informant and the researcher. As Neuman asserts, "Trust is not gained once and for all. It is a developmental process built up over time through many social nuances."[38] Thus, one can build rapport with locals as time passed.

> The key point is that, like the participant observer, the interviewer will often need to work at building rapport. When interviewing people with whom one has already established a relationship through participant observation, little further work may be required. But where the research does not have a participant observation component, or where the ethnographer has had little

[35] See Appendix B for a list of the interviewees.

[36] Atkinson and Hammersley, *Ethnography*, 106.

[37] Neuman, Lawrence W. (2006), *Social Research Methods: Qualitative and Quantitative Methods*, 6th ed., London: Pearson Education, 388.

[38] Ibid., 343.

> or no previous contact with the person being interviewed, the task of building rapport is particularly important.[39]

Indeed, after getting along with the locals, it was much easier to make an interview without hesitations. Moreover, some of the interviewees, who were reserved in the very beginning, turned out to be key informants over time. That is to say, I was provided with updated news and information by them. In this sense, "ethnographers [also] encourage informants to keep them updated, hoping that they will initiate contacts to report any news."[40]

Thus, the ethnographic side of this research seems to constitute the strength of the study. Ethnographic research techniques such as participant observation, and oral history were used during the field research. Participant observation is "the principle of living within a community for a substantial period of time –'fieldwork', which might be expected to take one or two years –and immersing oneself in the local culture, work, food and language, while remaining as unobtrusive as possible."[41] The use of ethnographic research methods is more appropriate to actor-oriented approach on sustainability. In this sense, Gardner and Lewis argue that:

> actor-oriented' perspective…provides a valuable entry point and a 'way of seeing'…particularly in rural areas or with specific sections of the community…Combined with this, participant observation, with the direct contact with local people which it involves, might be seen as less 'top-down' than other methods such as the survey or questionnaire.[42]

Undertaking fieldwork in the forest villages with which I was not acquainted at all was also challenging for me. In this sense, I lived in a forest village for a while. After all, I became acquainted with the rural communities over time. This gave me the opportunity to observe the everyday living of the villagers. I also took part in several sociocultural events such as weddings and other celebrations. Moreover, I

[39] Atkinson and Hammersley, *Ethnography*, 109.

[40] Ibid., 104.

[41] Gardner, Katy, and David Lewis (1996), *Anthropology, Development and the Post-modern Challenge*, London and Sterling, Virginia: Pluto Press, 42.

[42] Ibid., 43.

involved with local people in their activities. For instance, I went to the olive groves or olive oil factories at harvest time, visited the forest workers in their huts in the forests, or accompanied the guides in the ecotourism tours to the national park. Besides, I also participated in the activities of the environmental organizations on several occasions.

As Enticott argues, "For sustainability researchers, ethnographic accounts…can tell us about the ways sustainabilities are created, practiced and held to be true. Or they can tell us how the 'ideal' versions of sustainable living fail to take hold in the communities to which they affect."[43] Ethnographic research thereby offers advantages for actor-oriented sustainability researches.

> Ethnographers usually seek to take account of the perspectives of *several* categories or groups of actors involved in the situations they are studying, without treating any as automatically true, and especially without relying on conventional hierarchies of credibility…There is a recognition that there will usually be multiple perspectives, perhaps even in sharp conflict with one another on key points, and that all of these can be a source of insight.[44]

In this respect, I also tried to put forward the perceptions, practices, and experiences of the local actors on sustainability from multiple perspectives as much as possible. Clearly, the analysis on sustainability in the Kaz Mountains Region from an actor-oriented perspective is based on such an exertion to a great extent.

In this dissertation, the argument goes beyond the simple dichotomies of nature versus society, or indigenous communities versus development. Positing such dichotomies results in a sort of essentialism which gives weigh to only one side. Moreover, anti-development position commonly ascribed to indigenous rural communities misleads one easily, since it usually overlooks socio-economic and socio-ecological processes that influence local people.

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[43] Enticott, Gareth (2011), "Ethnographic Practices and the Practices of Biosecurity," in *Researching Sustainability: A Guide to Social Science Methods, Practice and Engagement*, Alex Franklin and Paul Blyton (ed.), London and New York: Earthscan, 39.

[44] Atkinson and Hammersley, *Ethnography*, 231.

This study contributes to sociological studies in several ways. First of all, this study tries to put forward a social trajectory for examining sustainability in the Kaz Mountains Region. Such a perspective is very different from environmental policy studies of sustainability considering social processes "only from the point of view of environmental targets or goals which have been previously defined in non-social terms and to which societal processes are to be adjusted."[45] On the contrary, this study shows the importance of developing new ways, "for studying both the complex interactions between society and nature and the connection between the symbolic and material dimensions of social practices more appropriately."[46]

Second, this study shows the importance of local agency in terms of sustainability. I try to introduce an actor-oriented approach to sustainability research in the Kaz Mountains Region. The perceptions, experiences, and practices of local actors in the analysis of sustainability rarely find part in sociological studies. Thus, this analysis aims to bring on "locality-based studies of people interacting with their environments"[47] which is also usually missed out in sociological studies.

Third, this study tries to make a contribution to rural sociology studies in Turkey in several distinct ways. In this respect, first, it analyzes rural transformation taking place in forest villages in terms of sustainable livelihoods. It also opens up into discussion the relationship between rural communities and ecological initiatives by referring to agroecology and local knowledge. Besides, it also discusses the national park management policies and environmental conflict on gold mining by bringing rural communities onto the scene.

Thus, this dissertation aims to fill the gap in sociological studies in terms of actor- and problem- oriented approach to sustainability by discussing sustainability in the Kaz Mountains Region from the perspective of multiple agencies. Overall, this

[45] Becker, Jahn, and Stiess, "Exploring Uncommon Ground," 9.

[46] Ibid., 11.

[47] Goldman, Michael and Rachel A. Schurman (2000), "Closing the 'Great Divide': New Social Theory on Society and Nature," *Annual Review of Sociology,* 26: 568.

study aims to make a contribution to sociological studies by re-orientating research through the inclusion of local actors, which introduces the self-reflexivity of social actors for a range of problems undertaken in this study.

In Chapter 2, sustainability discourse is reconsidered from a critical point of view. In this sense, a historical account on the emergence of sustainable development is given at first. Sustainable development is examined in terms of international environmental governance regulating the environmental policies of the nation-states. Then, the actor-oriented approach on sustainability is introduced by drawing on Becker et al.'s theorizing, and Long's elaborations on the actor perspective.[48] Overall, sustainability discourse is envisaged by taking into account local participation, local knowledge, sustainable livelihoods, and community-based environmental management which differs from the managerialist approach of liberal environmentalism.

In Chapter 3, development policies in Turkey are explained in detail. First, agricultural policies in Turkey are examined from an historical perspective. This analysis shows the transformation of the agricultural policies in line with international dynamics. The neoliberal transformation of Turkish agriculture is discussed in detail to highlight the position of smallholders. Afterwards, environmental policies in Turkey are examined briefly. In this sense, international environmental conventions, national laws, the latest national development plan, and the strategic plans of the ministries are examined by showing how sustainability discourse has been incorporated into the national environmental policies.

In Chapter 4, agricultural development in the Kaz Mountains is analyzed from the perspective of relevant local actors. The chapter first discusses olive oil production. Then, agricultural production on the northern side of the Kaz Mountains is examined shortly. Lastly, agricultural policies are questioned by focusing on the agricultural diversity, the intensive farming techniques, and the small peasantry.

[48] Becker, Jahn, and Stiess, "Exploring Uncommon Ground," 1-22. Long, Norman (2001), *Development Sociology: Actor Perspectives*, Routledge: London and New York.

This chapter tries to answer the following questions: What are the characteristics of olive oil production? What is the effect of agricultural practices on the agro-ecosystem? In which way do agricultural policies have an effect on the small peasantry in terms of the sustainability of their family farms?

In Chapter 5, rural communities in the Kaz Mountains are analyzed by focusing on the transformation process that these communities went through. In this way, the sustainable livelihoods of rural communities are highlighted to a great extent. The relationship between socio-economic development and ecological changes is also examined briefly. First, a brief historical account of rural communities is given from the oral histories of peasants. Then, the livelihoods of these communities such as forestry, pasturing, and olive oil production are examined by focusing on latest socio-economic developments. In particular, the outcomes of this transformation in terms of sustainability are mapped out. Subsequently, the relationship between ecological initiatives and rural communities is also discussed in terms of agroecology and local knowledge in order to show the prospects for a sustainable living. The chapter answers several questions such as: How did the livelihoods of rural communities change over time? What is the effect of rural transformation on the sustainable livelihoods of the rural communities in the Kaz Mountains Region? What is the role of ecological initiatives for promoting sustainable agriculture among villagers?

In Chapter 6, the national park is examined in order to understand the dynamics of environmental management in the Kaz Mountains. In this sense, the establishment of the national park is first examined by discussing the conservation policies. Then, the impact of national park regulations on rural communities is explored in detail. In this respect, community-based environmental management is also discussed as an alternative. Lastly, the chapter ends with a discussion of ecotourism prospects for rural communities. The ecotourism developments in the region are explicated in order to highlight the question of whether they promote sustainable rural livelihoods in accordance with environmental conservation. In this chapter, several questions are clarified: What is the relationship between national park authorities and rural

communities? How do the national park regulations affect the rural communities? How can the national park management be established in congruence with rural livelihoods? Can ecotourism be considered as a viable alternative ensuring environmental sustainability through integrating rural communities?

In Chapter 7, environmental conflict on gold mining is examined by focusing on the environmental activism and valuations of local actors against gold mining. At first, an outline of gold mining activities worldwide is given shortly. The environmental campaign against gold mining in the Kaz Mountains is then analyzed by exploring the environmental activism of local actors such as environmental organizations, local people, and so on. In this way, the constituents of environmental struggle against gold mining are highlighted to a great extent. Lastly, the challenge of gold mining to sustainability is examined by introducing different valuations of local actors. This chapter tries to give answers to the following questions: What are the dynamics and particularities of the environmental campaign against gold mining in the Kaz Mountains? How is the environmental campaign organized? What are different valuations of gold mining? Does gold mining pose a challenge to sustainability in the region?

CHAPTER 2

A THEORETICAL FRAMEWORK OF SUSTAINABILITY DISCOURSE

2.1. A Historical Account of Sustainability Discourse

Although development discourse emerged in the post-war years, its roots can be traced to the modern idea of progress. In this sense, it is based on the progressive, unilinear, and evolutionary understanding of society, culture, and history.[1] There was a boom of newly founded nation states in the post-war years as a result of decolonization. In the 1950s, development projects, based on the premises of modernization theories, were conducted by development agencies and experts all around the world. "Lewis' 1955 dictum 'First it should be noted that our subject matter is growth, and not distribution', reflects the mainstream emphasis on economic growth which permeated the whole field of development thinking."[2] This was the heyday of development discourse, and economic growth was the motto of many countries.[3]

> The social contract between North and South envisaged that growth and social policy would start a process whereby the disadvantaged countries and peoples would be able to 'catch up' with the rich nations. This was the tacit

[1] For the relationship between development and progress, see Hettne, Björn (2009), *Thinking about Development*, London and New York: Zed Books. For a critical account of development, see So, Alvin (1990), *Social Change and Development: Modernization, Dependency, and World Systems Theory*, London: Sage Publications.

[2] As Esteva points out, influential development thinkers like Arthur Lewis, Paul Baran, and Walter Rostow emphasized economic growth. See Esteva, Gustavo (1996), "Development," in *The Development Dictionary: A Guide to Knowledge as Power*, Wolfgang Sachs (ed.), London and New Jersey: Zed Books, 12.

[3] See for a comprehensive analysis on "critiques of conventional development and developmentalism" Simon, David (1997), "Development Reconsidered: New Directions in Development Thinking," *Geografiska Annaler: Series B, Human Geography*, 79: 4, 183-201.

> assumption behind the United Nations system and bilateral development cooperation.[4]

In this sense, the next two decades were declared as development decades by the United Nations. The first one was between 1960 and 1970, and the second one was between 1970 and 1980.[5] Many countries adopted the technologies of the green revolution in this period. These new technologies of irrigation, fertilizers, and seeds were applied worldwide. However, these attempts to increase agricultural output also brought about a variety of environmental problems.

> The experience of the green revolution, where technologies of agrarian production around the world, led to what even its advocates admit to be extensive environmental problems: exhausted soils, contaminated water, increased pest invasions.[6]

In the 1960s and 1970s, most of the Third World countries aspiring to be one of the developed countries were enthusiastic about incorporating the green revolution technologies. The agricultural production of the Third World was thereby transformed in two distinct ways. First, traditional techniques were gradually replaced by intensive agriculture methods. Second, small communities became increasingly involved in producing cash crops for exports instead of subsistence production for households.

But development agencies could not fulfill most of their promises. Rather than achieving economic growth and social welfare for the underdeveloped regions in Latin America, Africa, and Asia, this approach resulted in the exclusion of local people and cultures throughout the development decades. In this sense, Escobar points out:

> The most important exclusion, however, was and continues to be what development was supposed to be all about: people. Development was –and

[4] Sachs, Wolfgang and Tilman Santarius (ed.) (2007), *Fair Future Resource Conflicts, Security and Global Justice*, Patrick Camiller (trans.), London and New York: Zed Books, 30.

[5] For a discussion of the UN development decades, see Esteva, "Development", 12-17.

[6] Robbins, Paul (2004), *Political Ecology*, Malden, MA and Oxford: Blackwell Publishing, 10.

> continues to be for the most part- a top-down, ethnocentric, and technocratic approach...[7]

Such an approach to development could offer a remedy neither for economic crises nor environmental failures. Environmentalists have realized early on that development processes were harmful to both nature and people.[8] In this respect, they were mostly concerned with the impacts of development on ecosystems.

> The fundamental dynamic of environmentalist concern about development in its broad sense...is the scale of human demands on the biosphere. The scale of human annexation of biological processes has slowly become apparent.[9]

Most importantly, environmentalists in the West were not at ease with the idea of limitless economic growth. That is to say, "a foundation-stone of radical green politics is the belief that our finite Earth places limits on industrial growth."[10] It is clear that these claims were rather based on the finitude of the natural resources. In this sense, the idea that economic growth cannot be finite and will reach to its limits at some point in the future was also asserted by some scientists.[11] Besides, the human impacts on ecosystems such as soil erosion, eutrophication and nitrate pollution, desertification, and deforestation were also recognized as threats in the 1970s.[12] All of these led to a reconsideration of development discourse based on

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[7] Escobar, Arturo (1995), *Encountering Development: The Making and Unmaking of The Third World*, Princeton: Princeton University Press, 44. In this sense, Escobar's discussion about development focuses on Columbia in particular, and on Latin America in general. From his discussion of development, it can be derived that development aid was granted to Third World countries by the Western countries, Western expertise and technics were utilized, development programs were adopted by these countries, and development projects were conducted by the international development agencies. See Ibid.

[8] Rachel Carson's book, *Silent Spring*, is a good exemplary of early environmentalist critiques in the 1960s. See Carson, Rachel (2000), *Silent Spring*, London: Penguin Books.

[9] Adams, W.M. (2009), *Green Development: Environment and sustainability in a developing world*, 3rd ed., London and New York: Routledge, 17.

[10] Dobson, Andrew (2007), *Green Political Thought*, 4th ed., London: Routledge, 53.

[11] See Meadows, Donella H. et al. (1972), *Limits to Growth*, New York: Universe Books.

[12] For a detailed discussion of human impacts on ecosystems see Chapter 10, "Large-scale human impacts on ecosystems," in Dickinson, Gordon and Murphy, Kevin (2007), *Ecosystems*, 2nd ed., London and New York: Routledge, 153-167.

economic growth in the expert circles of international institutions and donor countries. Clearly, a transformation of development discourse was on the way.

> The initial focus was to equate development with economic growth...and the reductionist theory known as *trickle down* was widely believed to work. Once the economy was set in motion...positive effects of growth would percolate to the bottom of the social pyramid. But soon it became necessary to explicate other dimensions of development: social, cultural, political, and after 1972, *environmental* (sustainable).[13]

More importantly, the 1970s also witnessed the emergence of international environmental governance. In this respect, the United Nations Conference on the Human Environment was held in Stockholm in 1972. That was the first one of several events that gave rise to the discourse of sustainable development. The environmental dimension of development was taken into consideration for the first time at this conference.

> At Stockholm, the concerns of conservationists and environmental scientists (primarily from Northern countries) encountered resistance from states more concerned with economic growth and poverty reduction.[14]

According to Bernstein, such a confrontation between Northern and Southern countries created a new perspective which managed "to link environment and development into a single framework under the rubric of 'sustainable development.'"[15] Another outcome of the conference was the establishment of the United Nations Environment Program (UNEP). The conference also "provided the stimulus for the subsequent *World Conservation Strategy*."[16] Thus environmental problems were taken as requiring urgent collective action at an international level.

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[13] Sachs, Ignacy (1999), "Social Sustainability and Whole Development: Exploring the Dimensions of Sustainable Development," in *Sustainability and the Social Sciences*, Egon Becker and Thomas Jahn (ed.), London and New York: Zed Books, 28.

[14] Bernstein, Steve (2001), *The Compromise of Liberal Environmentalism*, New York: Columbia University Press, 29.

[15] Ibid.

[16] See Benton, Ted (1999), "Sustainable Development and the Accumulation of Capital: Reconciling the Irreconcilable?" in *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*, Andrew Dobson (ed.), Oxford: Oxford University Press, 201.

Adam asserts that "the attempt to imbue development with environmental ideas and principles, was often expressed in terms of 'ecodevelopment'."[17] Ecodevelopment was formulated and supported by the UNEP in the 1970s, as "Development at regional and local levels…consistent with the potentials of the area involved, with attention given to the adequate and rational use of the natural resources, and to applications of technological styles..."[18]

> Behind the notion of ecodevelopment lay the awareness of the intrinsic complexity and dynamic properties of ecosystems and the ways they respond to human intervention, and the need to ensure the 'environmental soundness' of development projects.[19]

Such a conceptualization was an attempt to link the notions of ecology and development under the same rubric. Unlike environmentalists, development was no longer repudiated as posing a threat to the biosphere. But, at the same time, human impacts on the environment and the response of the ecosystem were also recognized. In a way, environmental accountability has become one of the important yardsticks for acknowledging the success or failure of development projects.

The publication of the *World Conservation Strategy* in 1980 by the International Union for the Conservation of Nature is another event that contributed to the emergence of the discourse of sustainable development. It was the first document that specifically referred to the notion of sustainable development. In this sense, it further delineates the relationship between ecological processes and human intervention.

> ...the Strategy explicitly linked the maintenance of ecological processes and life-support systems, the first of its three programme priorities, to the

[17] Adams, *Green* Development, 65. Adams also mentions that the term was coined by Maurice Strong, secretary-general of the Stockholm Conference.

[18] UNEP (1975), *The Proposed Programme*, Nairobi, United Nations Environment Programme, quoted in Redclift, Michael (1987), *Sustainable Development: Exploring the Contradictions*, London and New York: Routledge, 34.

[19] Adams, *Green Development*, 66.

> sustainable utilization of resources and the maintenance of genetic diversity, the other two priorities which were advanced in the report.[20]

Thus the sustainable use of resources and the conservation of biodiversity are seen as crucial for maintaining ecological processes and life-support systems. "The key issue in linking biodiversity to ecosystems is that the functioning of ecosystems should lie within the parameters of change that occur as a result of patterns of normal variation…"[21] In order to assure the well-functioning of the ecosystem, natural resources and biodiversity should be kept intact from damaging human intervention. Therefore, the discourse of sustainable development was also introduced in terms of ecological concerns at first. As Redclift points out, "the political and economic forces behind unsustainable practices received very little attention in the World Conservation Strategy documentation."[22]

Afterwards, the World Commission on Environment and Development published its report, *Our Common Future,* in 1987, known as the Brundtland Report. It is usually considered as a watershed because it was the first major document establishing a direct link between the economy, society, and environment. In the Brundtland Report, the definition of sustainable development is stated as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[23]

> It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which priority should be given;

[20] Redclift, *Sustainable Development*, 20.

[21] Dickinson and Murphy, *Ecosystems*, 151.

[22] Redclift, *Sustainable* Development, 21.

[23] World Commission on Environment and Development (1987), *Our Common Future*, Oxford: Oxford University Press, 43. Another popular definition of sustainable development is made by the World Conservation Union, the UN Environment Programme, and the World Wide Fund for Nature as "improving the quality of life while living within the carrying capacity of supporting ecosystems." See *Caring for the Earth* (1991), Gland. Switz., World Conservation Union, UN Environment Programme and World Wide Fund for Nature.

> and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.[24]

It is clear that normative principles such as equity, social justice and participation are main constituents of such a discourse. In this sense, the Brundtland Report endorses public participation in environmental decision making, community management of environmental resources, and local democracy:

> [The common interest] principally needs community knowledge and support, which entails greater public participation in the decisions that affect the environment. This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizen's initiatives, empowering people's organizations, and strengthening local democracy.[25]

Moreover, the report also argues that growth must be revived in Southern countries in order to combat poverty, which is seen as one of the main reasons of environmental stresses.[26] It also emphasizes the need for change in the quality of growth "to make it less material- and energy-intensive and more equitable in its impact."[27] Thus, the Brundtland Report is very critical of the conventional development thinking which approaches development only in terms of economic growth.[28]

> Lending for agriculture, fishing, and energy has usually been made on narrow economic criteria that take little account of environmental effects.

[24] World Commission on Environment and Development, *Our Common Future*, 43.

[25] Ibid., 63.

[26] For a detailed discussion on environmental stresses, see Chapter 1, "A Threatened Future," in Ibid., 27-42.

[27] Ibid., 52.

[28] Lafferty argues that "Though the Brundtland report is generally portrayed as having an anthropocentric bias, there are at least some passages which open for a more biocentric ethic." See Lafferty, William M. (1998), "The Politics of Sustainable Development: Global Norms for National Implementation," in *Debating the Earth: The Environmental Politics Reader*, John S. Dryzek and David Schlosberg (ed.), Oxford: Oxford University Press, 281.

> For instance, development agencies have sometimes promoted chemical-dependent agriculture, rather than sustainable, regenerative agriculture.[29]

The report also addresses to the need that, "At a minimum, sustainable development must not endanger the natural systems that support life on Earth: the atmosphere, the waters, the soils, and the living beings."[30] In this sense, the damaging effects of the development processes should be minimized in order to sustain the ecosystem's integrity.

> Sustainable development requires that the adverse impacts on the quality of air, water, and other natural elements are minimized so as to sustain the ecosystem's overall integrity.[31]

As a result, the environmentalist worldview positing an incompatibility between environmental conservation and economic growth was substituted by the sustainable development discourse put forward by the Brundtland Report which assumes that development policies could be in harmony with environmental conservation goals.

The United Nations Conference on Environment and Development, also known as the Earth Summit or Rio Summit, was held in Rio de Janerio in 1992. The Conference produced the documents of the Rio Declaration on Environment and Development, Agenda 21, and Forest Principles.[32] Moreover, the Framework Convention on Climate Change was agreed at the conference and "came into force in 1994 but it laid no binding commitments to reduce greenhouse-gas emissions on individual countries. This continued to be debated and negotiated at meetings of the Conference of Parties, eventually being agreed at Kyoto in 1997, and coming into force in 2004."[33] The Convention on Biological Diversity was also signed at the

[29] World Commission on Environment and Development, *Our Common Future*, 77.

[30] Ibid., 44-45.

[31] Ibid., 46.

[32] For further information on these documents, see Adams, *Green* Development, 88.

[33] Ibid.

conference, and came into force later on in 1993.[34] This convention was about "to conserve biological diversity, promote the sustainable use of species and ecosystems and the equitable sharing of the benefits of genetic resources."[35]

In Agenda 21, the action plan of the summit, there are three sections, namely "Social and Economic Dimensions," "Conservation and Management of Resources Development," and "Strengthening the Role of Major Groups."[36] In this sense, Sitarz states that, "40 separate sections of concern are addressed and 120 separate action programs are outlined."[37] He thereby group these multiple areas and programs around seven themes, which are "The Quality of Life on Earth," "Efficient Use of the Earth's Natural Resources," "The Protection of Our Global Commons," "The Management of Human Settlements," "Chemicals and the Management of Waste," and "Sustainable Economic Growth."[38] He further argues:

> Achieving a sustainable standard of living for all people requires a bold new approach –an environmentally responsible global approach...A large variety of techniques can be utilized to accomplish this goal. Greater efficiency in the use of the Earth's limited resources, minimization of waste and fundamental changes in production processes are some methods that can be employed.[39]

Indeed, efficiency has become the buzzword of sustainable development discourse after the Earth Summit. Sachs argues that environmental management systems have emerged at various levels since the Rio Summit. "Their goal is to shape production processes in such a way that they make the most economical and efficient use of resources and waste products."[40] But these environmental management systems

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[34] Ibid.

[35] Ibid.

[36] Agenda 21, https://sustainabledevelopment.un.org/content/ documents/Agenda21.pdf

[37] Sitarz, Daniel (ed.) (1994), *Agenda 21: The Earth Summit Strategy To Save Our Planet*, Boulder, Colorado: EarthPress, 8.

[38] Ibid., 1-23.

[39] Ibid., 31-32.

[40] Sachs and Santarius (ed.), *Fair Future*, 219.

mostly leave out the social dimension. "Up to now there are scarcely any management systems which focus on social improvements."[41] Consequently, the Rio Summit posited a new kind of environmental governance which is based on integrating market values to the environmental agenda.

> By 1992 a shift in norms of environmental governance had occurred, characterized by a general acceptance of liberalization in trade and finance as consistent with, and even necessary for, international environmental protection.[42]

Agenda 21 also incorporated public participation in its programs and activities. In the document, it is stated that "One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making."[43] Thus, social groups are considered as having importance for the implementation of Agenda 21. These social groups includes women, children and youth, indigenous people and their communities, non-governmental organizations, local authorities, workers and trade unions, business and industry, and scientific and technological community, and farmers.[44] It is clear that the Rio Summit adopted rhetoric of participation, empowerment, and partnership of these groups.

> [NGOs' efforts] at Rio was to ensure that a new language of 'empowerment', 'citizen participation' and 'multi-stakeholder partnership' became integrated into Agenda 21 the action plan for sustainable development adopted by world governments.[45]

Agenda 21 also favors market-oriented approach in terms of the management of resources. That is to say, integrating environment and development in decision-making is one of the priorities of Agenda 21. In Agenda 21, it is asserted that, "During the past several years, many Governments…have been making increasing

[41] Ibid., 220.

[42] Bernstein, *The Compromise of Liberal Environmentalism*, 29.

[43] See 23.2 in Chapter 23 of Agenda 21, https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf, 270.

[44] See Section 3 of Agenda 21, https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf

[45] Macnaghten, Phil and John Urry (1998), *Contested Natures*, London: Sage Publications, 216.

use of economic approaches, including those that are market -oriented. Examples include the polluter-pays principle and the more recent natural-resource-user-pays concept."[46] Moreover, as Bernstein puts forward, the precautionary principle of the Rio Declaration addresses that "lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[47] Thus, he contends that "The endorsement of 'cost-effective' measures implies that PPP [Polluter Pays Principle] and precautionary approach should be applied together."[48] Overall, Agenda 21 clearly reflects the approach of the conference which institutionalized the liberal environmentalist norms.[49]

The World Summit on Sustainable Development (Rio+10) took place in Johannesburg in 2002. In this summit, the aims and decisions taken at the Rio Summit, and multiple programs and activities put forward in Agenda 21 were reviewed. "The aim of the summit was to complete a ten-year review of implementation of the 1992 United Nations Conference on Environment and Development...and to 'reinvigorate' global commitment to sustainable development.[50] In this sense, Death puts forward that neo-liberal rationality took precedence over any other consideration in the Johannesburg Summit. Hence, he reaches the following conclusion:

> [S]ustainable development has become firmly implicated within forms of advanced liberal government, and is dominated by a neo-liberal rationality which prioritizes voluntary partnerships and the ordering power of the market. Summits like Johannesburg work as moments of exemplary

[46] See 8.28 in Chapter 8 of Agenda 21, https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf

[47] Bernstein, *The Compromise of Liberal Environmentalism*, 106.

[48] Ibid., 106. Polluter-pays principle is **"**the principle that, if pollution occurs, the person or company responsible should be required to pay for the consequences of the pollution and for avoiding it in future." See Collin, P. H. (2004), *Dictionary of Environment & Ecology*, 5th ed., London: Bloomsbury, 166-167.

[49] Bernstein, *The Compromise of Liberal Environmentalism*, 70-121.

[50] Strachan, Janet R. et al., (2005), *The Plain Language Guide to the World Summit on Sustainable Development*, London and Sterling, VA: Earthscan, xviii.

> government in which responsible businesses, NGOs and states communicate the proper conduct required for sustainable development to a global audience.[51]

Finally, the United Nations Conference on Sustainable Development, or the so-called Rio+20 took place in Rio de Janeiro in 2012. The conference reaffirmed the principles of the Rio Declaration, and past action plans. It focused on two themes. The first theme was green economy in the context of sustainable development and poverty eradication, and the second theme was the institutional framework for sustainable development.[52]

In this sense, Bernstein argues that three accomplishments of the conference were important in terms of an institutional change. First, the UNEP was reformed functionally. Second, a decision was taken to support negotiation of sustainable development goals (SDGs). Third, governments agreed on a decision to create a High-Level Political Forum (HLPF) on Sustainable Development replacing the Commission on Sustainable Development which was founded after the Rio Summit.[53]

Yet, he rather criticizes Rio+20 on the grounds that it did not present a transformative vision at all.[54] In this sense, he discusses that the green economy notion "could not succeed when the underlying normative compromises that had held together since the 1992 Rio Earth Summit were off limits."[55]

> [The green economy concept] potentially challenges the norm of 'common but differentiated responsibilities and respective capabilities' (the 1992 Rio

[51] Death, Carl (2010), *Governing Sustainable Development: Partnerships, protests and power at the World Summit*, London and New York: Routledge, 163.

[52] United Nations (2012), *Report of the United Nations Conference on Sustainable Development*, New York, http://www.uncsd2012.org/ content/documents/ 814UNCSD%20REPORT%20final% 20 revs.pdf

[53] Bernstein, Steven (2013), "Rio+20: Sustainable Development in a Time of Multilateral Decline," *Global Environmental Politics*, 13 (4): 17-18.

[54] Ibid., 13.

[55] Ibid.

> Declaration's Principle 7) because it suggests *all* countries should participate in the green economy and adopt policies and practices consistent with it.[56]

Moreover, he also argues that the concept of green economy suggests limits to the compatibility of free trade and liberal economy with environmental protection.[57] In this sense, he points out that governments of the developed countries as well as many governments in the South were skeptical on the concept which was rather seen as favoring interventions in the liberal economy by the former and as a kind of green protectionism by the latter.[58] Accordingly, he contends that the disinclination of governments to endorse the green economy is reflected in the outcome documents:

> The Rio+20 outcome documents's tepid endorsement of the green economy, its adamant linkage of it to "the context of sustainable development and poverty eradication" instead of framing the green economy as an economy-wide concept that is part of sustainable development, and its rejection of the idea of a roadmap with indicators to measure progress together indicate continued suspicion of the concept.[59]

All these events signified the emergence of sustainable development discourse. As Jacobs asserts, there are several 'core ideas' embedded in the discourse of sustainable development. These are environment-economy integration, futurity, environmental protection, equity, quality of life, and participation.[60] What differentiates sustainability discourse from conventional development thinking is that it aims to find out solutions to the existing socio-economic and environmental problems by integrating the economic dimension with social and ecological dimensions. Thus, adopting an integrative approach has become one of the distinguishing constituents of sustainability discourse.

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[56] Ibid.

[57] Ibid., 14.

[58] Ibid.

[59] Ibid., 14-15.

[60] Jacobs, Michael, "Sustainable Development as a Contested Concept," in Dobson, 26-27.

Although there emerged global environmental governance as a result of the international conferences and summits, this was not the result of the harmonious concerted action of participating countries. On the contrary, there have been many conflicting issues on the international environmental agenda particularly between Northern and Southern countries. As the United Nations Climate Change Conference in Copenhagen in 2009 has also shown, it is difficult to reach a consensus on environmental problems. While discussing the conference, Richard Peet et al. assert that:

> The need for rapid policy change, coupled with the demands for far reaching transformative action at the sub-national level, and for a meaningful degree of international co-operation and consensus globally, render the failures at Copenhagen all the more debilitating.[61]

This contested nature of environmental governance is also reflected in the ambiguities of sustainability discourse. First and foremost, sustainability discourse does not have a fixed connotation. Its emphases and priorities have changed over time. Particularly, there is a great deal of ambiguity concerning the term sustainable development. As Sachs argues,

> By linking 'sustainable' to 'development', however, a terrain of semantic ambiguity was created. The new concept subtly shifted the locus of sustainability from nature to development...[62]

Redclift also argues in a similar vein:

> The term 'sustainable development' was an oxymoron, which prompted a number of discursive interpretations of the weight to be attached to both 'development' and 'sustainability'.[63]

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[61] Peet, Richard, Paul Robbins, and Michael Watts (2011), "Global Nature," in *Global Political Ecology*, Richard Peet, Paul Robbins, and Michael Watts (ed.), London and New York: Routledge, 41.

[62] Sachs, Wolfgang (1999), "Sustainable Development and the Crisis of Nature: On the Political Anatomy of an Oxymoron," in *Living with Nature: Environmental Politics as Cultural Discourse*, Frank Fischer and Maarten A. Hajer (ed.), Oxford: Oxford University Press, 33.

[63] Redclift, Michael (2005), "Sustainable Development (1987-2005): An Oxymoron Comes of Age," *Sustainable Development*, 13: 225.

The definition of sustainability also reflects this ambiguity. It is defined in two distinct ways either as strong sustainability or weak sustainability. While strong sustainability "looks beyond any particular project and seeks to preserve the ecosystem forever,"[64] weak sustainability "allows for some natural resources to be run down as long as adequate compensation is provided by increases in other resources, perhaps even in the form of man-made capital."[65] As Jacobs argues, what differentiates the weak version from the strong one is about the question of how to maintain the total capital stock. "The question is whether this means maintaining just the 'natural' capital stock ('strong sustainability') or the 'total' capital stock, including human-made capital ('weak sustainability')."[66] Therefore, the former rejects trading off natural capital for human-made capital, and the latter accepts the substitutability of natural capital by human-made capital.

While the *World Conservation Strategy* advocated a strong version of sustainability, the Brundtland Report rather adopted a weak version of sustainability. However, some of the passages in the Brundtland Report can be interpreted as promoting strong sustainability:

> At the beginning, sustainability was interpreted as a requirement to preserve intact the environment as we find it today in all its forms. The Brundtland report, for example, stated that 'The loss of plant and animal species can greatly limit the options of future generations; so sustainable development requires the conservation of plant and animal species'.[67]

In this sense, Agenda 21 also adopted a weak sustainability as "[e]nvironmental problems in the South were framed as the result of insufficient capital, outdated technology, lack of expertise, and slackening economic growth."[68] Thus, the lack of capital, technology, and expertise in Southern countries could be compensated by

[64] Boylan, Michael (ed.) (2001), *Environmental Ethics*, Upper Saddle River, NJ: Prentice Hall, 375.

[65] Beckerman, Wilfred, "'Sustainable Development': Is It a Useful Concept?" in Boylan, 380.

[66] Jacobs, "Sustainable Development as a Contested Concept," 32.

[67] Beckerman, "'Sustainable Development'," 380.

[68] Sachs, "Sustainable Development and the Crisis of Nature," 34.

Northern countries, which would provide solutions to environmental problems. That is to say, "the North has to increase its investments in the South, to provide technology transfer, to bring competence in eco-engineering, and to act as a locomotive of growth for the South."[69] Therefore, the emphasis of global environmental governance shifted from a strong definition of sustainability to a weak one.

The main thrust of discussions on sustainability has also moved from the discipline of environmental economics with its focus on needs to that of the social sciences with an emphasis on rights.[70] In this sense, Redclift contends that, "The emphasis on both human and non-human rights, in turn, drew the discussion of sustainability towards other more 'orthodox' concerns of the social sciences: questions of power, of distribution and of equity."[71]

Although rhetoric of empowerment and participation was incorporated at several meetings and conferences, sustainable development discourse is much more committed to the principles of economic growth and efficiency rather than to community participation and local livelihoods. Bernstein calls this process liberal environmentalism:

> [T]he criteria upon which environmental institutions are evaluated has turned more toward economic efficiency and sustaining the liberal economic order than pollution abatement or environmental quality, and alternative options are not being adequately explored.[72]

In this sense, the favoring of market-based policies excludes other possible alternative options for enhancing sustainability at community and grassroots levels. Besides, the integration of national and local economies to the global market as a result of globalization process brings about conditions which do not favor rural

[69] Ibid.

[70] Redclift, "Sustainable Development (1987-2005)," 218.

[71] Ibid.

[72] Bernstein, *The Compromise of Liberal Environmentalism*, 232.

communities and rural livelihoods. Unless a more participatory and bottom-up, and actor-oriented approach is adopted, prospects for sustainability seem to be limited.

2.2. Envisaging Local Sustainability from an Actor-Oriented Approach

It is clear that global economic, political, and environmental dynamics create tensions in terms of sustainability between Northern and Southern countries.[73] In this sense, Northern and Southern countries take different standpoints in terms of sustainability. According to Becker et al., sustainability is a contested discursive field emerging from the articulation of discrepancies between Northern and Southern countries:

> Rather than a well-defined concept, sustainable development might best be characterized as a contested discursive field which allows for the articulation of political and economic differences between North and South and introduces to environmental issues a concern with social justice and political participation.[74]

In this respect, Whitehead also points out that there are different implications of sustainability discourse:

> Critical analysis has…shown that while in principle sustainability reflects a desire to develop policy that simultaneously addresses pervading forms of social and environmental injustice, sustainability has, too often, been used as a basis for justifying the relative unreformed, expansionist ideology of the global market place and neoliberalism.[75]

If one takes a closer look at the following questions Hayward puts forward, the complexity of the matter can be better understood. "The aim of sustainable

[73] In this sense, Harvey argues, "control over resources of others in the name of planetary health [and] sustainability...is never too far from the surface of many western proposals for global environmental management". See Harvey, David (1993), "The Nature of Environment", *Socialist Register*, London: Merlin, 25, quoted in Watts, Michael and Richard Peet (2004), "Liberating Political Ecology," in *Liberation Ecologies: Environment, Development, Social Movements*, Richard Peet and Michael Watts (ed.), 2nd ed., London and New York: Routledge, 14.

[74] Becker, Egon, Thomas Jahn, and Immanuel Stiess, "Exploring Uncommon Ground: Sustainability and the Social Sciences," in Becker and Jahn, 1.

[75] Whitehead, Mark (2014), "Sustainability," in *Critical Environmental Politics*, Carl Death (ed.), London and New York: Routledge, 266.

development involves considerations both aggregative and distributive. That is, on the one hand, there are questions as to what the good life or good society is; on the other, there are questions as to who is entitled to share in it, how, and how much."[76] There are no taken for granted answers for both types of questions. In this sense, sustainable development discourse, which adopts a managerialist approach to environmental problems, can be considered as neglecting this complexity. "A managerialist approach...shifts environmentalism from a critique of lifestyles and consumption patterns to a question of devising better managerial strategies and more effective and efficient institutional control over the environment."[77] Yet, how managerial strategies will actually work out is not clear at all.[78] In sum, it can be asserted that the managerialist approach does not take into account these considerations at all.

Adams argues that an alternative development agenda came to the scene after the 1970s. This approach is called as 'development from below' in order to distinguish it from the conventional development model, which is 'development 'from above':

> 'Top-down', 'technocratic', 'blueprint' approaches to development came under increasing scrutiny as they failed to deliver the economic growth and social benefits that had been promised…It began to be widely argued that development goals could be achieved only by 'bottom-up planning', 'decentralisation' and 'participation' and 'community development.'[79]

Thus, he contends that this approach "suggested that, for success, developments must be not only innovative and research based, but locally conceived and initiated, flexible, participatory and based on a clear understanding of local economics and

[76] Hayward, Tim (1995), *Ecological Thought: An Introduction*, Cambridge: Polity Press, 97-98.

[77] Baker, Susan (2006), *Sustainable Development*, London and New York: Routledge, 76.

[78] Managerial strategies have also been criticized by different perspectives of social ecology, deep ecology, and post-structuralism. For social ecology, see Biehl, Janet and Murray Bookchin (1998), *The Politics of Social Ecology: Libertarian Municipalism*, Montreal: Black Rose Books. For deep ecology, see Naess, Arne (1989), *Ecology, Community and Lifestyle*, David Rothenberg (trans. and ed.), Cambridge: Cambridge University Press. For post-structuralist critiques, see Darier, Eric (ed.) (1999), *Discourses of the Environment*, Oxford: Blackwell.

[79] Adams, *Green Development*, 328.

politics."[80] Such a development designed in accordance with sustainability is "characterised by small-scale activities, improved technology, local control of resources, widespread economic and social participation and environmental conservation."[81]

If multiple agencies of actors are taken into account on a local level, a more participatory, bottom-up, and inclusive approach to sustainability can be adopted instead of managerial strategies. As Becker et al. argue, an actor-oriented approach "would investigate how the interactions of social actors with the environment are shaped and mediated by institutional arrangements."[82] In this sense, they further put forward:

> Analysing the variety of socio-economic conditions as well as that of political and institutional arrangements that shape the relations of social actors with the biophysical environment in different places, such studies [adopting problem- and actor-oriented approach] can strengthen a local perspective in sustainability-related research.[83]

Moreover, the implications of such an approach are significant for developing alternative ways of research for studying sustainability from a social trajectory perspective. In this respect, they discuss one of the important implications as follows: "Rather than devising tools and instruments as solutions for pre-defined problems of environmental management, this approach would prefer a more participatory and process-oriented procedure."[84] Likewise, according to Long's actor-oriented approach,

> The approach begins with actor-defined issues or problematic situations, whether defined by policy-makers, researchers, intervening private or public

[80] Ibid.

[81] Ghai and Vivian, "Introduction," in D. Ghai and J. M. Vivian, *Grassroots Environmental Action: people's participation in sustainable development*, London: Routledge, 15, quoted in Adams, *Green Development*, 328.

[82] Becker, Jahn, and Stiess, "Exploring Uncommon Ground,"8.

[83] Ibid.

[84] Ibid., 10.

> agents or local actors, and whatever the spatial, cultural, institutional and power domains, arenas and fields implicated.[85]

In this sense, this thesis takes into account the perceptions, experiences, and practices of local people in several fields, and acknowledges that there are valuable insights of local actors that can be utilized in sustainability research. Thus, Long's actor oriented approach is also relevant to the research concerns of this study:

> A main task for analysis, then, is to identify and characterise differing actor practices, strategies and rationales, the conditions under which they arise, how they interlock, their viability or effectiveness for solving specific problems, and their wider social ramifications.[86]

Long actually refers to a broader conceptualization of the field by Bourdieu. He thereby defines the social field as follows:

> The notion of social field conjures up a picture of open spaces: an irregular landscape with ill-defined limits, composed of distributions of different elements – resources, information, technological capacities, fragments of discourse, institutional components, individuals, groups and physical structures – and where no single ordering principle frames the whole scene. Whatever configurations of elements and relationships make up the field, these are essentially the product of human and non-human interventions, both local and global, as well as the result of both cooperative and competitive processes.[87]

Moreover, he also illustrates the composition of a social field as he states in the same paragraph:

> Depending on the analytical focus, the composition of a social field can be depicted in terms of the distributional patterns of natural resources, types of production and economic enterprise, demography, politico-administrative institutions, transport and communication flows, marketplaces, infrastructural features, and cultural and ethnic groupings, etc., and further specified by reference to the prevailing sets

[85] Long, Norman (2001), *Development Sociology: Actor Perspectives*, London and New York: Routledge, 50.

[86] Ibid., 20.

[87] Ibid., 57-58.

> of interests and activities characteristic of the field (e.g. political, educational, environmental or agricultural concerns).[88]

In this sense, only the relevant economic, social, and environmental aspects of a field are examined in this thesis. Practices, experiences, interests, and activities of local actors in social fields are analyzed at length in the following chapters on the case study by taking into account several fields such as agriculture, the national park, ecotourism, and gold mining. In other words, such a conceptualization of field enables to examine a variety of issues such as agricultural practices and policies, rural livelihoods, environmental management, and environmental conflict by referring to the "broader implications of the concepts of lived experience, livelihoods and everyday social practices of actor-oriented analysis."[89]

In the recent decades, the importance of local communities and livelihoods for sustainability has also been acknowledged more or less by many scholars.[90] Today, "even conventional views confirm that eradicating poverty through enhancing and protecting livelihood strategies is as much an environmental sustainability issue...as it is a "simple" asset or resource endowment question."[91] In other words, the relationship between rural communities' livelihoods and environmental issues has become one of the distinguishing characteristics of sustainability studies. In this sense, the definition of sustainable livelihoods made by Chambers and Conways is employed in this study:

> A livelihood comprises the capabilities, assets (including both material and social resources) and activities for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks,

[88] Ibid., 58.

[89] Ibid., 15.

[90] See Bebbington, Anthony (2004), "Movements and Modernizations, Markets and Municipalities: Indigenous federations in Rural Ecuador" in Peet and Watts, 394-417. Also see, Sachs and Santarius (ed.), *Fair Future*, 130-134.

[91] Watts and Peet, "Liberating Political Ecology," 5.

> maintain or enhance its capabilities and assets, while not undermining the natural resource base.[92]

Thus, such a definition of sustainable livelihoods considers the practices of local actors, which they deploy to make a living, not only from an economical or technical dimension but also from a socio-ecological one stressing that a livelihood should not undermine the natural resource base while maintaining its assets.

In this respect, local participation is one of the important mechanisms to provide sustainable livelihoods. However, local participation has also become a buzzword like efficiency used by development agencies, international institutions, and non-governmental organizations worldwide. In this sense, Long is critical on such an adoption of local participation which does not promote alternative development or development from below, albeit claiming to do so. In this sense, he asserts that:

> Although such neo-populist measures emphasise 'listening to the people', understanding the 'reasoning behind local knowledge', strengthening 'local organizational capacity' and promoting 'alternative development strategies', they nevertheless carry with them the connotation of power being injected from outside in order to shift the balance of forces towards forms of local self-determination. In other words, they imply the idea of empowering people through strategic intervention by 'enlightened experts' who make use of 'people's science' (Richard 1985) and 'local intermediate organisations' (Esman and Uphoff 1984; Korten 1987) to promote development 'from below'. While acknowledging the need to take serious account of local people's solutions to the problems they face, the issues are often presented as involving the substitution of 'blueprint' by 'learning' approaches to the planning and management of projects (Korten 1987) or in terms of 'new' for 'old' style professionalism geared to promoting participatory management and participatory research and evaluation methods (Chambers 1993).[93]

Local participation proposed in this thesis acknowledges these reservations put forward by Long. That is to say, local participation is not considered as empowering local actors through intervening experts by means of the implementation of projects which appropriate local knowledge. Thus, it is suggested that local participation can be reconstituted in such novel ways that it could turn local people to the real agents

[92] Scoones, Ian (2009), "Livelihood perspectives and rural development," *The Journal of Peasant Studies*, 36 (1): 175.

[93] Long, Norman, *Development Sociology*, 88-89.

of sustainability. In other words, local participation can pave the way for the emergence of situations in which people will have the opportunities to define their own problematics, and will offer solutions based on local knowledge and experiences. Participating to decision-making processes in the selected fields is thereby one of the significant constituents of local participation. In this respect, local participation is defined by Fawaz-Yissi et al. as follows:

> 'participating' implies influencing decision-making in institutions, programmes and actions affecting the interests of the individuals involved. Participation must therefore include a link between the citizen and both government structures and processes and local interests, whether community or private.[94]

Local knowledge occupies an important place for the livelihoods of rural households because it is traditionally based, established through experiences, and practical. Hence, many villagers still recourse to local knowledge in a world where technical and expert knowledge seem to take hold more and more. In fact, peasants are accustomed to solve their problems in this way in their daily livings. Besides, local knowledge is also an integral element of rural development for many households at the countryside. In this sense, Berkes argues the following:

> Local and traditional knowledge is relevant to economic development in part because it confers certain comparative advantages to indigenous groups in initiatives that require specialized knowledge of species, varieties and ecological processes…These initiatives may include conservation projects, ecological rehabilitation, ecotourism, and the cultivation of medicinal plants and genetically valuable crop varieties.[95]

Diawara sees local knowledge in a dynamic and sociocultural way, and asserts that local knowledge is crucial for the success of any project.[96] In this sense, he also states the following:

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[94] Fawaz-Yissi, María Julia, Rosana Vallejos-Cartes, Alfredo Tolón-Becerra and Xavier Lastra-Bravo (2012), "Redefining local participation in sustainable rural development in Chile: the case of small farmers in Ñuble Province," *International Development Planning Review*, 34 (13): 296.

[95] Berkes, Fikret (2012), *Sacred Ecology*, 3rd ed., New York and London: Routledge, 271.

[96] Diawara, Mamadou, "Globalization, Development Politics and Local Knowledge," Maria Arnason (trans.), *International Sociology*, 15 (2): 370.

> Such local knowledge encompasses both practical and theoretical knowledge, and it includes cultural representations and social practices in relation to technical knowledge. This local knowledge is not distributed evenly over the whole society but varies with social group, status, ethnicity and gender.[97]

More or less, the significance of local knowledge has been acknowledged by almost anyone ranging from development experts to field researchers. Although, until recently, many of them have tried "to impose their agendas and viewpoints on indigenous people,"[98] lately environmental organizations have also changed their standpoints on local communities to a great extent. However, the question of how local knowledge could be incorporated into the existing environmental management arrangements does not have a clear-cut answer, and depends on the genuine economic, social, and environmental conditions of each region.

Besides, there are still ongoing conflicts between local communities and environmental agencies of nation states or environmentalists. In particular, one of the most controversial issues has been national parks or conservation reserves in the Third World countries, which mostly produced tensions with local rural communities living in those areas.[99]

> This has been very much the case with the issue of 'biodiversity loss'…where, until relatively recently, environmentalists from abroad were committed to establishing biosphere reserves and other protected areas, usually at the expense of local people.[100]

That is to say, local communities pursuing rural livelihoods were deprived of their traditional means of subsistence due to the establishment of national parks and conservation reserves. In fact, rural livelihoods can enhance environmental sustainability in many cases. Thus, environmental management policies of national

[97] Ibid., 368.

[98] Hannigan, John (2014), *Environmental Sociology*, 3rd ed., London and New York: Routledge, 95-96.

[99] For a discussion of local communities and the Serengeti National Park see Robbins, Paul (2004), *Political Ecology*, 3-5.

[100] Hannigan, *Environmental Sociology*, 96.

parks which exclude local people have been contested lately by participatory approaches. Moreover, conservation strategies followed in the national parks are also questioned by some scholars. For instance, while discussing Yellowstone National Park, Robbins states:

> The banning of fire from the park, a dominant policy for many years...gave way to management where natural fires were allowed to burn. The long suppression, followed by a dry season, led to the summer of fires in 1988 that still stands as a hallmark for "nature's wrath" in the popular press.[101]

In the recent decades, alternative voices were also heard at international meetings on national parks and protected areas. The impacts of protected areas on local people were acknowledged in the former World Congresses on National Parks and Protected Areas held in Bali in 1982, and in Caracas in 1992.[102]

> The World Parks Congress in Durban in 2003 took as its theme 'benefit beyond boundaries' and one theme was 'communities, equity, and protected areas'…Issues of social exclusion from lands declared as protected for biodiversity, and marginalization from policy decisions about conservation, were widely aired and fiercely debated.[103]

Alternative approaches to improve the situation of local people are much more prevalent in the sustainability discourse than the past. Environmental organizations also pay more attention to issues of social justice and local participation. In this sense, attempts to integrate conservation and development efforts into a single framework have also been favored by several environmental organizations.

> During the 1990s, external funding for integrated conservation and development programs (ICDPs) has grown as organizations like The Nature Conservancy, Conservation International, and the Worldwide Fund for Nature, working through different counterpart NGOs in each developing country, have increased the number of projects that they finance...[104]

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[101] Robbins, *Political Ecology*, xv-xvi.

[102] Adams, *Green Development*, 285.

[103] Ibid., 285-286.

[104] Rudel, Thomas K. (2002), "Sociologists in the Service of Sustainable Development?: NGOs and Environment-Society Studies in the Developing World," *Society and Natural Resources*, 15: 267.

In this sense, Steelman also asserts that community-based efforts proliferated in the recent decades which deal with biodiversity conservation and other environmental problems.[105] According to him, considering the interests of local people through community-based environmental management is essential to accomplish sustainability:

> The strength of community-based efforts is that they can take into account the complexity of interests reflected in a community in a sincere attempt to reach a locally sustainable solution. If habitat and species protection are to be sustainable in the long run, then the interests of the local stewards of the land must be considered.[106]

Kapoor argues that participation in community-based environmental management or participatory environmental management "is aimed at making environmental decision-making socially inclusive and environmentally sustainable."[107] However, he also puts forward that there are some constraints such as the institutional concerns, quality of participation, communities, and power relations.[108] First, institutions -state agencies or NGOs- could be unwilling to commit their time and resources to projects. In addition, he adds that institutions could also have "institutional reticence."[109] Moreover, "the question 'Who participates and how?' is vital to determining the type and the impact of participatory EM [Environmental Management]."[110] As to questions of power, he points out, "Communities participate in programmes without being empowered to change, dismantle or even criticize power structures."[111] Lastly, he notices that, "communities would need to have a record of being actively involved in conservation or else they may be

[105] Steelman, Toddi A. (2002), "Community-based involvement in bio-diversity protection in the United States," in O'Riordan and Stoll-Kleemann, 146.

[106] Ibid., 142.

[107] Kapoor, Ilan (2001), "Towards participatory environmental management," *Journal of Environmental Management*, 63: 269.

[108] Ibid., 273-276.

[109] Ibid., 273.

[110] Ibid., 274.

[111] Ibid.

inexperienced in, or unable to practice, 'traditional' conservation methods (Furze *et al*., 1996; Agrawal and Gibson, 1999: 633ff.).[112] Accordingly, he contends:

> The task for participatory EM lies in institutionally embodying the many facets of participation and social ecology. New and plural institutional forms are being (or need to be) developed that link nature and society, tie the local to the global, facilitate information and knowledge exchange, and enable critical analysis and re-negotiation of social relationships.[113]

In this sense, he gives two examples one from Canada and one from Nepal which shows "the main features and benefits of this approach."[114] The Makalu-Barun national park and conservation area project in Nepal which was started in 1988 is illustrated as a successful example of community-based environmental management:

> The project gives local communities a direct stake in biodiversity protection, and integrates this activity with a broader community development approach that includes: the development of poverty mitigation projects, the provision of skills and training to local people (in sustainable agricultural techniques, wildlife and park management, eco-tourism and eco-trekking, marketing, small retail, development of linkages with outside markets for local products, etc.), and the creation of socially-relevant institutions and programmes (improvement of schools and drinking water facilities, development of women's microcredit institutions, etc.).[115]

He further states that involvement of local communities and their institutions were provided in the project through village institutions:

> Local communities and institutions are involved in all aspects of project design, development and implementation, with interactive planning meetings (organized by the local *panchayats* or village governments) taking place regularly throughout the region to encourage community dialogue.[116]

In this sense, "participatory biodiversity" as suggested by O'Riordan and Stoll-Kleemann also pays attention to the livelihoods of local people:

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[112] Ibid., 275.

[113] Ibid., 276.

[114] Ibid., 278.

[115] Ibid.

[116] Ibid.

> To bring people in may better be done by engaging them through their current activities and patterns of interests. A strategy for biodiversity may be built up from various component activities in agriculture, rural farming, entrepreneurship, forestry, leisure, wildlife conservation, as well as social justice. It is the essence of what makes associations work that must form the basis of people's inclusion. Through familiarity and identity, people can then learn to have confidence in the more coupled relationships and issues that full-hearted biodiversity management will inevitably throw up.[117]

Thus, lately, a more inclusive and participatory approach to sustainability have been adopted in several places around the world. Interweaving environmental problems with issues of local participation, sustainable livelihoods, and community-based environmental management can offer sustainability at a local scale. This also helps us to understand "the conditions under which [local] knowledges and practices become part of alternative development strategies."[118] Therefore, such a perspective does not consider local practices and knowledge as inferior to technological-scientific knowledge.[119]

In this respect, local knowledge has been increasingly recognized by different actors such as environmental organizations, public authorities, and development agencies. Grassroots activists have also realized the potential of local knowledge, particularly in Southern countries, where they "have emphasised the importance of 'ordinary knowledge' that depends more on keen observation and common sense than on professional techniques."[120] Even development planners have acknowledged the importance of local knowledge recently. In this context, the everyday life experiences of peasants and indigenous people constitute a significant part of local knowledge concerning the environment. "Practical knowledge about the

[117] O'Riordan, Tim and Susanne Stoll-Kleemann (2002), "Deliberative democracy and participatory biodiversity," in *Biodiversity, Sustainability and Human Communities: Protecting beyond the Protected*, Tim O'Riordan and Susanne Stoll-Kleemann (ed.), Cambridge: Cambridge University Press, 98.

[118] Watts and Peet, "Liberating Political Ecology," 15.

[119] However, "[some] official and scientific managers continue to dismiss local environmental knowledge as politically interested, not objective, and poorly informed, even and especially in the first world," Ibid., 120.

[120] Ibid., 68.

environment often originates from the everyday experience of villagers, small farmers and others in Southern societies."[121] As such discussions indicate, local knowledge, experiences, and practices have been much more incorporated into sustainability projects than the past.

Therefore, rural communities are not closed entities at all. They are in a dynamic relationship with other actors such as environmentalists, activists, scientists, or managers. The significance of rural communities and local environmental organizations for sustainability cannot be firmly grasped unless one acknowledges that "environmental knowledge is locally produced and deeply contextualized."[122] Rural communities, together with ecological initiatives, are important actors who can create alternatives for sustainable living. It is clear that sustainability discourse can have diverse implications for different actors and organizations. In this sense, Merchant discusses the following:

> The sustainability movement encompasses mainstream and grassroots environmental organizations, scientists and political activists, and First and Third World concerns and peoples. It has the imprimateur of the United Nations at the top of the global hierarchy and the *compesino* to *compesino* movement at the bottom. It has characteristics at one extreme of maintaining the *status quo* and at the other of radical, structural, social and environmental change.[123]

As a result, sustainability discourse can be considered as having alternative prospects for economic, social, and environmental issues. However, this is possible only if it elaborates the idea that "less a problem of poor management, inappropriate technology, or overpopulation, environmental problems were *social* in origin and

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[121] Hannigan, *Environmental Sociology*, 57. Hannigan further argues that organic agriculture was originally based on the ideas of peasants in India. "Sir Albert Howard, often regarded as the originator of organic agriculture, derived many of his ideas from consulting with peasant cultivators in India whom he called his 'professors'." See Ibid.

[122] Turner, Matthew D. (2011), "Conclusion," in *Knowing Nature: Conversations at the Intersection of Political Ecology and Science Studies*, Mara J. Goldman, Paul Nadasdy, and Matthew D. Turner (ed.), Chicago and London: The University of Chicago Press, 297.

[123] Merchant, Carolyn (1992), *Radical Ecology: The Search for a Livable World*, New York and London: Routledge, 232. The Campesino a Campesino movement (farmer-to-farmer movement) is further elaborated in Chapter 5.

definition."[124] A social reframing of environmental problems can also create new visions for enhancing solidaristic relations between environmentalists and local communities which are vital to achieve sustainability at a local level. In this sense, sustainability discourse can offer viable alternatives insofar as it takes into account the actor-oriented approach in the context of social justice, local participation, sustainable livelihoods, and community-based environmental management.

[124] Ibid., 7.

CHAPTER 3

RECONSIDERING SUSTAINABILITY IN TURKEY

3.1. Development Policies and Agriculture in Turkey

The successive wars, which lasted more than a decade before the collapse of the Ottoman Empire, had interrupted commercial agriculture done with the European countries since the 19th century. Yet, commercial ties with the world market were restored to a great extent shortly after the establishment of the Republic of Turkey. As Keyder argues, there had been a recovery of agricultural production and exports levels, which went on until the beginning of the world depression. "The conjuncture of the 1920s reestablished the weaken lines of communication with the world economy, and increased the pace of transition to market-oriented agriculture."[1] Thus market-oriented agricultural production depending on export crops such as cotton, tobacco, olives, figs, raisins, and hazelnuts grew considerably in this period.[2] Agricultural exports were considered as an indispensable element of the terms of trade in those years. In this sense, it was stated in the preamble of the Agriculture Congress held in İstanbul in 1931 as follows:

> The burden of exports is on *agriculture*. The deficit in balance of trade may be covered on the one hand through the encouragement and protection of manufactures capable of being developed in the country and thereby reducing imports, and on the other hand through increasing the *exports*, which face an ever-increasing *competition* in world markets. Therefore increasing our exports requires an increase in our competitive ability in *world* markets.[3]

[1] Keyder, Çağlar (1981), *The Definition of a Peripheral Economy: Turkey 1923-1929*, Cambridge: Cambridge University Press, 41.

[2] Ibid., 38-42.

[3] Quoted in Keyder, *The Definition of a Peripheral* Economy, 42.

In the 1930s, Turkey started to follow etatist policies which aimed to achieve industrialization through public investments and state economic enterprises. That is to say, state required the agricultural exports to finance the industrial projects. However, the international trade in agricultural exports had decreased drastically after the beginning of the Great Depression in 1929. Thus the protectionist measures were taken in order to prevent the decline of agricultural production. In this sense, Ahmad suggests that these interventionist measures supported Turkish agriculture, and increased the amount of the cultivated land during the 1930s although some small and middle farmers had lost their land during the crisis due to their lack of surplus.[4]

> The farmers benefited when the state intervened in 1932 to rescue them from plummeting world prices; the price index for wheat, one of Turkey's principal exports, fell from 100 in 1929 to 32 in 1931. Growing wheat no longer made economic sense to farmers and there was a fear that Turkish agriculture would collapse. Therefore, the government introduced a price support programme and purchased crops at prices higher than the market.[5]

These measures seem to be necessary to sustain cereal crop production at the countryside, which had decreased drastically because of the internationally declining market prices. The intervention of state by making purchases of large amounts of wheat from the producers through the Agricultural Bank was thereby started in 1932.[6] Besides, the drastic decrease in cotton production made for the world market was also offset by the advances in textiles.[7] As a result, the sustenance of the agricultural production was largely achieved in this period. When the prices of agricultural products recovered in 1936, the state had already become the main purchaser of agricultural produce.

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[4] Ahmad, Feroz (1993), *The Making of Modern Turkey*, London and New York: Routledge, 100.

[5] Ibid. 99.

[6] The TMO (Toprak Mahsulleri Ofisi/The Soils Products Office) started to support the wheat production after it was established in 1938. See Günaydın, Gökhan (2010), *Tarım ve Kırsallıkta Dönüşüm: Politika Transferi Süreci/ AB ve Türkiye*, Ankara: Tan Kitabevi Yayınları, 168.

[7] Akad, Mehmet Tanju (2013), "Türkiye'de Kırsal Kesime Müdahaleler: 1960-1980 Dönemi," in *Türkiye'de Tarımın Ekonomi-Politiği 1923-2013*, Necdet Oral (ed.), TMMOB Ziraat Mühendisleri Odası Bursa Şubesi & NotaBene Yayınları, 93.

> But with the recovery of world prices in 1936, the government, now the principal buyer of agricultural produce, was able to buy at prices below those established by the market. As a result, it made huge profits which were used to finance its industrial projects…By the time war broke out in 1939 the Turkish economy had made great progress though it was still far from 'take-off' to self-sustained growth.[8]

As Keyder argues, the accumulation model followed in Turkey in the 1930s was based on the control of accumulation processes by the state. In this sense, he puts forward that, "A new state form (the range of state functions and the nature of the relationship between the political power and the economy) together with the set of measures originally formulated to combat the crisis, resulted in a regime which represented the culmination of bureaucratic reformism.[9] Thus, there was an overwhelming regulation of the economy by the political power up until the end of the World War Second.[10]

The 1950s and the 1960s were the development decades worldwide. Development policies taken from the developed countries were enthusiastically adopted by the developing or less developed countries in order to catch up with the Western world. In this sense, the beginning of this era was marked by the famous speech of the United States President Henry Truman in 1949:

> We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas…The old imperialism –exploitation for foreign profit- has no place in our plans…Greater production is the key to prosperity and peace. And to key to greater production is a wider and more vigorous application of modern scientific and technical knowledge.[11]

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[8] Ahmad, *The Making of Modern Turkey*, 100.

[9] Keyder, Çağlar (1987), *State and Class in Turkey: A Study in Capitalist Development*, London: Verso, 97.

[10] Ibid., 95-110.

[11] Truman, Henry (1949), Inaugural Adress, Washington DC, quoted in Ullrich, Otto (1996), "Technology," in *The Development Dictionary: A Guide to Knowledge as Power*, Wolfgang Sachs (ed.), London and New Jersey: Zed Books, 275.

Turkey also became one of the beneficiaries of the American development aid as it was "included in the Truman Doctrine of 1947 and the Marshall Plan, designed to hasten the economic recovery of Europe."[12] Obviously, utilizing this foreign aid for the modernization of agriculture increased the agricultural production of export crops in Turkey throughout the 1950s, and the integration of Turkish agriculture to the world economy was hastened in the long run.

At first, the Turkish agriculture was mechanized rapidly. The number of tractors increased from 1,750 in 1948 to 43,747 in 1962, and harvesters from 994 to 6,072 over the same period.[13] As a result, a great amount of land was opened to cultivation, and the cultivated land grew from 13,900,000 hectares in 1948 to 22,940,000 hectares in 1959.[14] "This explains the sharp increase in food production which enabled Turkey to become a grain exporter in the early 1950s."[15] Thus mechanization enabled Turkey to become an agricultural exporter of cash crops after the 1950s. However, as Aresvik asserts, until the early 1970s "tractors [were] mainly used in cotton and commercial wheat production areas, where relatively large operational land units exist."[16]

Moreover, the use of fertilizers, and chemicals for plant protection such as pesticides or herbicides were also promoted by the public agencies in this period. Yet, "[t]he consumption of fertilizer increased rather slowly during the 1950s and the early 1960s."[17] Similarly, the use of chemicals were limited too, and mostly the industrial crops, fruits, grapes, and olives received protection by applying chemicals

[12] Ahmad, Feroz (2003), *Turkey: The Quest for Identity*, Oxford: Oneworld Publications, 106.

[13] Ahmad, *The Making of Modern Turkey*, 116.

[14] Ibid.

[15] Ibid.

[16] Aresvik, Oddvar (1975), *The Agricultural Development of Turkey*, New York: Praeger Publications, 79.

[17] Ibid., 63.

up to the early 1960s.[18] Clearly, fertilizers and chemicals for plant protection began to be used in large amounts by the small farmers starting with the 1980s. According to Escobar,

> [Development] discourse privileged the promotion of cash crops (to secure foreign exchange, according to capital and technological imperatives) and not food crops; centralized planning (to satisfy economic and knowledge requirements) but not participatory and decentralized approaches; agricultural development based on large mechanized farms and the use of chemical inputs but not alternative agricultural systems, based on smaller farms, ecological considerations, and integrated cropping and pest management; rapid economic growth but not the articulation of internal markets to satisfy the needs of the majority of people; and capital-intensive but not labor-intensive solutions.[19]

The Green Revolution was also applied extensively in Turkey after the 1960s. "The testing of the Mexican varieties started relatively early in Turkey, two to three years earlier than it started in the Indian subcontinent."[20] In this sense, the Mexican varieties of high-yielding wheat were first planted for trial by government in 1960. Some farmers in the Çukurova Region also planted these seeds successively in 1965 and 1966. However, these varieties began to be cultivated extensively throughout Turkey in 1967.[21] In that year, an American extension team came to Turkey "to promote not only the new Mexican wheat varieties, but better seed bed preparation, a substantial reduction in the seeding period, the use of grain drills instead of broadcasting methods, higher rates of fertilizer application at the proper times, and weed control."[22] As Aresvik discusses, fertilizers were made available to the farmers through imports, and were distributed by the Agricultural Supply Organization and the agricultural credit cooperatives. Farmers were also given credits by the Agricultural Bank in order to purchase these crop varieties and

[18] Ibid., 75.

[19] Escobar, Arturo (1995), *Encountering Development: The Making and Unmaking of The Third World*, Princeton: Princeton University Press, 43.

[20] Ibid., 154.

[21] Ibid.

[22] Ibid., 162.

fertilizers. He asserts that the Mexican wheat cultivated area multiplied from 165,000 hectares in the 1967-1968 season to 770,000 hectares in the 1968-1969 season, while the farmers cultivating these varieties increased from 60,000 to more than 200,000 in the same period. Thus, the program seems to have worked well, as these modified wheat varieties were planted in all provinces except six, shortly after its inception.[23]

As Redclift argues, "the Green Revolution in Asia was a dramatic example of the way that the production of food grains could be increased through improved seed varieties and heavy dependence on chemical fertilizers and pesticides."[24] Most importantly, the Green Revolution oriented farmers towards producing cash crops instead of food crops. Thus, "most of the technical assistance…has been directed at producing cash crops for the international market. The Green Revolution has mixes effects, but it was at least targeted at food crops."[25]

There are several consequences of the Green Revolution which had an enormous impact on the livelihoods of the rural communities. First of all, rural communities as the recipients of the technical assistance became dependent both on expert knowledge and on chemical inputs, and thereby became incorporated into the development agencies as well as the agrochemical industry. "Cash crops have also contributed to the monetization of local economies." Thus, local economies gradually lost their subsistence feature as they were restructured according to the needs of the market. Moreover, "the system of production and distribution that local people manage themselves"[26] has been transformed drastically in Southern countries, which proved to be unsustainable in the long run. To a great extent, the Green Revolution had similar effects in Turkey by promoting export crops and

[23] Ibid., 161-166.

[24] Redclift, Michael (1987), *Sustainable Development: Exploring the Contradictions*, London and New York: Routledge, 64.

[25] Ibid.

[26] Ibid., 65.

intensive agricultural practices among Turkish farmers. Therefore, it increased the transformation of subsistence economies of peasants who were integrated with national and global markets in the end.

After the 1960s, a comprehensive agricultural support system was established in order to subsidize increasing agricultural output through various agencies. "The import-substituting industrialization of the 1960s and 1970s definitely necessitated a highly commercialized agriculture that could alleviate the foreign currency crisis of the industrial sector."[27] State economic enterprises became important actors concerning the regulation of agricultural sector in this regard. TZDK (Turkish Agricultural Supply Organization) as a state fertilizer manufacturing and supply firm procured fertilizers and other equipment for the producers. The export crops like wheat, sugar beet, tobacco, and tea produced by the farmers were also subsidized and bought up by the state agricultural monopolies of TMO (The Soils Products Office), TŞFAŞ (Turkish Sugar Factories), TEKEL (State Monopoly of Cigarettes and Beverages) and ÇAYKUR (State Tea Administration). Besides, a bunch of agricultural sales cooperatives unions also gave support prices to the producers to enhance the cultivation of specific crops regionally. In this sense, TARİŞ supported olive oil, cotton, fig, and raisin production in the Aegean Region, Çukobirlik supported cotton production in Çukurova, Antbirlik supported cotton production in Antalya, Fiskobirlik supported hazelnut production in the Blacksea Region, Trakyabirlik supported sunflower production in the Thrace Region, and Marmara Birlik supported olive oil production in the Marmara Region. These agricultural sales cooperatives were significant actors that regulated the agricultural production of these crops in their regions. Thus, Turkish agriculture was oriented towards producing cash crops instead of food crops in this period.

> The agricultural support policy has basically aimed to increase the market orientation of farmers and to encourage the production of certain crops for both the internal and external markets. At times, the desire to increase

[27] Aydın, Zülküf (1993), "The World Bank and the Transformation of Turkish Agriculture," in *The Political and Socioeconomic Transformation of Turkey*, Atila Eralp, Muharrem Tünay, and Birol Yeşilada (ed.), Westport, Connecticut and London: Praeger Publishers, 122-123.

> production of certain crops has led to the assignment of high prices for these crops and the provision of inputs at subsidized prices.[28]

Besides, the agricultural reform took priority over the land reform attempts after the 1950s. The agricultural reform was regarded as the most appropriate way to increase agricultural output and productivity through "more intensive use of capital inputs, change in organization, improvements in the level of technology, and opening of the agricultural sector to the market economy."[29] In a way, the agricultural reform enabled some of the big landowners -especially engaged in cotton production in the Çukurova region- to become future industrialists as the accumulation gathered at the countryside was used to finance manufacturing enterprises over time.[30] Thus, there has been a considerable revenue transfer from the agricultural sector to the non-agricultural sector in contrast to the agricultural support policies in the developed countries which transferred a substantial amount of revenue to agriculture.[31]

In the 1960s and the 1970s, the land reform was overlooked by the policy makers to a great extent. The unequal distribution of the land especially in the Mediterranean, the Mid-Anatolia, and the Southeastern Anatolia regions lasted as a comprehensive land reform was not made after all.[32] Small farms producing industrial crops for the agricultural sales cooperatives were mostly seen in the Marmara, the Aegean, and the Black Sea regions. Although the associates of the agricultural sales cooperatives largely consisted of small peasants, the predominance of people such as big landowners or merchants in the administration, who were farmers seemingly, but rather got most of their income from commerce, manufacturing, and self-

[28] Ibid., 122.

[29] Ibid., 208.

[30] Keyder, Çağlar (2004), *Memalik-i Osmaniye'den Avrupa Birliği'ne*, 2nd ed., İstanbul: İletişim Yayınları, 172.

[31] Köymen, Oya (2012), *Kapitalizm ve Köylülük: Ağalar, Üretenler ve Patronlar*, 2nd ed., İstanbul: Yordam Kitap, 145.

[32] Parvin, Manoucher and Mukerrem Hıc (1984), "Land Reform versus Agricultural Reform: Turkish Miracle or Catastrophe Delayed?" *International Journal of Middle East Studies*, 16 (2): 225.

employment actually, has turned these sales cooperatives against the interests of the small farmers.[33] In this sense, big farmers most benefited from agricultural support policies, whereas remaining rural households experienced an income loss in reality.[34] However, the integration of Turkish agriculture into the national and world markets by subsidizing the export crops and adopting intensive farming did not bring about the disappearance of the small peasants in the long run.[35]

The economy was restructured and deregulated at a macro level under the neo-liberal principles adopted by the successive governments after the 1980s. Structural adjustment programs formulated by the IMF and the World Bank shaped the macroeconomic policies in this period. Most importantly, the import-substituting industrialization was abandoned, and the export-oriented industrialization was adopted instead by the policy makers. In accordance with this neo-liberal approach, the free market and the private enterprise were deemed to pave the way for economic growth. Overall, the structural adjustment policies adopted in the 1980s were designed to achieve full integration with the world economy.

> The relegation of 'development' and 'social justice' as objectives of the state policy was in line with the new right's objective of putting an end to the practice of the state as an 'enterprise association'. Even the functioning of the planning would be belittled as no more than being conducive to the establishment of a 'free market system'.[36]

Throughout the 1980s, the prices of the agricultural products declined gradually, and the subsidies were restricted too. "The drop in the number of crops receiving support prices from 30 in the 1970s to 24 in 1980, and to even fewer between 1980

[33] For example, the average farm size of the associates of the İzmir TARİŞ Cotton Agricultural Sales Cooperatives did not exceed 25 decares. Similarly, 47,4 % of the associates of Çukobirlik had farms whose size varied between 0-10 decares, and % 76,6 of its associates did have farms not exceeding 25 decares. See Soral, Erdoğan (1981), *Türkiye'de Tarım Satış Kooperatifleri ve Birlikleri Sorunu*, Ankara: A.İ.T.İ.A. Gazetecilik ve Halkla İlişkiler Yüksekokulu Basımevi, 244-246.

[34] Köymen, *Kapitalizm ve Köylülük*, 145.

[35] Akşit, Bahattin (1988), "Kırsal Dönüşüm ve Köy Araştırmaları (1960-1980)," in *Türkiye'de Tarımsal Yapılar*, Şevket Pamuk and Zafer Toprak (ed.), Ankara: Yurt Yayınları, 179-195.

[36] Yalman, Galip (2009), *Transition to Neo-Liberalism: The Case of Turkey in the 1980s*, İstanbul: Bilgi University Press, 348.

and 1988, delivered a severe blow to agriculture in terms of incomes."[37] The agricultural sector was especially "hit hard…through soaring production costs and deteriorating terms of trade"[38] in the late 1980s.

The indigenous dynamics of petty commodity production seem to help farmers adapt to these changes in the Turkish agriculture. According to Boratav, peasants react to the declining prices of agricultural commodities by following several strategies. First and foremost, they attempt to increase the efficiency of labor and the land, and the amount of the output sold in the market by utilizing their resources within the family economy and enterprise. However, as long as the peasantry achieves to increase the agricultural commodity supply despite the relatively decreasing prices of agricultural commodities, this strengthens the terms of domestic trade against agriculture. He puts forward that this paradox of the peasant economy was definitely seen in the 1980s in Turkey.[39]

After the 1994 economic crisis, the restructuring of the agricultural sector gained momentum. In this sense, the number of crops that were subsidized by the state was decreased to 9 crops. The agricultural sales cooperatives were removed from the classical supporting model, and the limitations were put on the agricultural inputs supports.[40] Besides, the privatization of some of the agricultural state economic enterprises, which were started in the 1980s, also took place in this period.[41] However, neo-liberal policies in agriculture could not be implemented smoothly in

[37] Aydın, Zülküf (2010), "Neoliberal Transformation of Turkish Agriculture," *Journal of Agrarian Change*, 10 (2): 158.

[38] Waterbury, John (1992), "Export-Led Growth and the Center-Right Coalition in Turkey," in *Economics and Politics of Turkish Liberalization*, Tevfik F. Nas and Mehmet Odekon (ed.), London and Toronto: Associated University Presses, 67.

[39] Boratav, Korkut (2005), *1980'li Yıllarda Türkiye'de Sosyal Sınıflar ve Bölüşüm*, 2nd edition, Ankara: İmge Kitabevi, 135-136.

[40] Oyan, Oğuz, "Tarımda IMF-DB Gözetiminde 2000'li yıllar" in Oral, 115.

[41] Günaydın, *Tarım ve Kırsallıkta Dönüşüm*, 164.

the 1980s and the 1990s as the successive governments resorted to subsidizing policies due to political expediency.[42]

> Despite the displeasures of the IMF and the World Bank, the governments interfered in price formation and re-introduced subsidies and support prices for some agricultural crops on and off throughout the 1980s and 1990s.[43]

The restructuring of the agricultural sector has continued unremittingly in the 2000s. The Agricultural Reform Implementation Project (ARIP) proposed by the World Bank in 2001 was a turning point in this regard. As Keyder and Yenal argues:

> The main objectives of the ARIP agreement were the withdrawal of price and input subsidies and in their stead the introduction of direct income supports, the elimination of subsidized agricultural credit, privatization of state economic enterprises in agricultural industry and the restructuring of sales co-operatives. The implementation of this project had the impact of shifting power and responsibility in marketing and quality management of agricultural products from public bodies to private institutions. [44]

Obviously, the deregulation of agriculture was accelerated after the implementation of the ARIP. In this sense, the privatization of the remaining agricultural state economic enterprises was almost completed in this period. The agricultural sales cooperatives also became autonomous, and lost their power to determine the crop prices entirely.[45] Besides, the price and input supports as wells as the preferential public credits given to the farmers were abolished to a great extent, and direct income supports and private credit sources were introduced instead. "Direct Income Support (DIS), introduced as an interim measure to alleviate the poverty-increasing

[42] Aydın, "Neoliberal Transformation of Turkish Agriculture", 156.

[43] Ibid.

[44] Keyder, Çağdar and Zafer Yenal (2011), "Agrarian Change under Globalization: Markets and Insecurity in Turkish Agriculture," *Journal of Agrarian Change*, 11 (1): 64-65.

[45] Oral, Necdet, "Tarım Satış Kooperatif ve Birliklerinin İşlevsizleştirilmesi," in Oral, 325-336.

impact of agricultural liberalization, has in fact been designed to speed up the process of abolishing all the existing support and subsidies for agriculture."[46]

Eventually, the abolition of subsidies in agricultural commodities and the introduction of direct income supports have been unfavorable for the small producers. Small farmers without receiving any considerable supports and subsidies have found themselves in an entirely competitive environment with rising production costs and declining crop prices. Thus the direct income support scheme impoverished small peasant farmers to a great extent. Moreover, the position of smallholders against agribusiness has also been jeopardized considerably by the agricultural reforms. After all, these reforms paved the way for agribusiness investments to further penetrate into the countryside.

> Small farmers in Turkey are becoming more and more helpless as a result of the concentration of agricultural commodity chains in the hands of TNCs which are capable of pushing large numbers of small farmers out of agriculture. Not being able to compete with the monopolistic prices set by the TNCs, farmers have been slowly abandoning agriculture *en masse*. Food producers have been hit particularly hard by the increasing costs and decreasing crop prices.[47]

The European Union (EU) accession mechanisms have also played an important role concerning agricultural policies in the recent decade. The former Ministry of Agriculture and Rural Affairs' *The Rural Development Plan 2010-2013* is a clear-cut example in this regard. This plan was depicted as "a multi-sectoral, dynamic action plan prepared for assuring rural society to reach at the sustainable employment and life conditions."[48] Attaining the goal of sustainable development was related with the Common Agricultural Policy (CAP) of the EU in this program.

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[46] Aydın, Zülküf (2009), "De-agrarianization and de-peasantization: Dilemmas of neo-liberal restructuring in Turkish Agriculture," in *Turkey and the Global Economy: Neo-liberal restructuring and integration in the post-crisis era*, Ziya Öniş and Fikret Şenses (ed.), London and New York: Routledge, 235.

[47] Aydın, Zülküf (2005), *The Political Economy of Turkey*, London and Ann Harbor, MI: Pluto Press, 177.

[48] Ministry of Agriculture and Rural Affairs (2010), *Rural Development Plan*, Draft, Ankara, 1.

> In accordance with the aims of the Common Agricultural Policy of the European Union, through the modernization of the agricultural and food business enterprises and the diversification of non-agricultural activities, achievement of sustainable development in the rural areas will be another contribution of the plan.[49]

It is clear that the harmonization of the national agricultural policies with the CAP has become one of the objectives of the rural development policies recently.[50] In the *National Rural Development Strategy* prepared by the former State Planning Organization, it was suggested that a similar program like SAPARD is expected to be applied in terms of the Rural Development Component[51] which make up one of the five constituents of the "Instrument for Pre-accession (IPA), which is anticipated to constitute a framework for Turkey-EU financial cooperation in the period of 2007-2013."[52]

> In the context of regional development and cross-border cooperation projects carried out under MEDA and pNDP (2004-2006) within the framework of financial cooperation with EU, priority is given to diversifying the income sources of farmers, rehabilitating grasslands and pastures and controlling grazing, supporting of SMEs in the agriculture sector in terms of new business establishment, improving existing capacity, marketing development, and projects will be prioritized which able to improve agricultural techniques and stimulate internal potential for alternative revenue-generating agricultural activities.[53]

However, it is hard to evaluate the success of these programs on enhancing the livelihoods of rural communities since most of the small peasants are not included in these projects at all. Moreover, the agricultural policies formulated by the

[49] Ibid.

[50] In this sense, this objective is also stated in the *National Development Strategy*. See State Planning Organization (2006), *National Rural Development Strategy*, Ankara, 27.

[51] SAPARD is the Pre-Accession Agricultural and Rural Development Fund for Candidate Central and East European Countries. It was a mechanism extensively applied to the candidate countries of the Central and East European for improving rural sustainable development before their access to the EU. Ibid.

[52] Ibid.

[53] Ibid., 39-40.

relevant institutions for entry into the CAP also seem to increase the socioeconomic divergences at the countryside.

> As Ankara prepares for entry into the Common Agricultural Policy…this combination of greater domestic competition, increasing compliance standardisation, reduced subsidies and 'imperfect market access' is widely expected 'to merge divided landholdings', 'push many [more] small farms out of the market' and accelerate the commercialization of production.[54]

Although the number of people employed in the agricultural sector has increased 1,230,000 between the years 2007 and 2012, the rural population has decreased from 20,838,397 corresponding to 29.5 % of the total population in 2007 to 17,178,953 corresponding to 22.7 % of the total population in 2012.[55]

At the end of the day, these developments drive away small peasants from the land more and more. Yet, they can still persist in farming as long as they could develop survival strategies in order to cope with these changes. In this sense, Aydın draws attention to several survival strategies followed by the peasants in the Tuzburgazı Village in Söke, and in the Kınık Village in Sivrihisar. These are namely income-generating, borrowing, and cost-cutting strategies.[56] First, as income generating activities, cotton producing small and marginal farmers in the Tuzburgazı Village rent-out or sharecrop their land with rich farmers who are better equipped.[57] Migration has also become another significant means of income generation for the peasants. In this sense, small peasants in the Tuzburgazı Village migrate semi-permanently only if there are long-term employment opportunities in towns or cities as they can work as agricultural workers in the labor-intensive cotton production in

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[54] Jacoby, Tim (2008), "The Development of Turkish Agriculture: Debates, Legacies, and Dynamics," *The Journal of Peasant Studies*, 35 (2): 259.

[55] T.C. Gıda Tarım ve Hayvancılık Bakanlığı (2013), *Stratejik Plan 2013-2017*, Ankara, http://www.tarim.gov.tr/SGB/Belgeler/Stratejik%20Plan%202013-2017.pdf, 33.

[56] Aydın, Zülküf (2002), "The New Right, Structural Adjustment and Turkish Agriculture: Rural Responses and Survival Strategies," *The European Journal of Development Research*, 14 (2): 195-203.

[57] Ibid., 197.

the region.[58] On the other hand, the wheat growing small and marginal farmers in the Kınık Village have slack periods in which they could migrate seasonally, while medium and large farmers come to the village at peak periods since they mostly reside in Sivrihisar where they are engaged in commercial activities.[59] Second, small peasants become indebted more and more in order to manage their farms in an environment where the Agricultural Bank or agricultural credit cooperatives do not give preferential credits to the farmers any longer. "Financial difficulties and storage problems faced by the parastatal procurement officers and sales co-operatives and their unions have forced farmers to seek credits from private sources in order to maintain production."[60] Third, small peasant families decrease their consumption levels considerably when they face with declining incomes. "One of the most common strategies is to drastically cut back household expenditure by buying cheap, inferior quality goods and services and even attempt to produce some of the goods and services previously purchased in the market."[61] Accordingly, peasants adapt to the changing circumstances by developing different strategies to maintain the sustenance of their households.

Therefore, the neo-liberal reforms in the agricultural sector did not facilitate the livelihoods of the small farmers at all. The withdrawal of state from the agricultural sector had important implications for the small producers. The elimination of price and input supports, and the abolishment of preferential credits made small producers vulnerable to the fluctuations of the market. The growing number of peasants has become either indebted farmer in the countryside or wage laborer in the urban areas. Small farmers who could not carry on production sell their lands and retreat from agricultural activities at an increasing pace in the recent decades. Thus, the transformation of Turkish agriculture rather seems to accelerate the disintegration of the small farmers in the long run.

[58] Ibid., 197-198.

[59] Ibid., 198.

[60] Ibid., 200.

[61] Ibid., 200-201.

There have been major transformations in the agricultural sector in the recent decades. The commodification of agricultural products has been taking place at an accelerating pace. The gradual decay of pasturing, the abandonment of poultry, and producing of the dairy products by the agribusiness firms are just a few to mention. All of these developments signify that agro-industry has been extending into the countryside relentlessly. It is clear that agricultural policies in Turkey give priority to the agro-industrial model:

> This sets a precedent upon reducing the costs and prices of primary products through the continued adoption of technological advancements, corresponding reductions in production costs and continued scale enlargement to reach economies of scale. Large areas of rural space are unable to compete in this 'race to the bottom' scenario and, hence, are forced to rely upon the state for more and more support...[62]

However, the strategic plan 2013-2017 of the Ministry of Food Agriculture and Livestock seems to overlook the effect of agro-industrial model on small farmers. In this sense, rural development is understood from an economical perspective stressing efficiency:

> Rural development is to improve living conditions and to increase welfare of individuals and communities who live at the countryside, and who earn their living from agricultural sector or other rural income sources.
>
> For sustainable rural development, integrated rural development understanding with measures increasing efficiency has become important.[63]

Similar to Escobar's discussion on the integrated rural development programs in Columbia, policy makers in Turkey by asserting integrated rural development understanding in the plan also considers that "Capital, technology, training, and infrastructure [have been] the missing factors accounting for the backwardness of small-peasant production."[64] However, no comprehensive integrated rural

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[62] Marsden, Terry (2006), "The road towards sustainable rural development: issues of theory, policy and practice in a European context," in *Handbook of Rural Studies*, Paul Cloke, Terry Marsden and Patrick Mooney (ed.), London: Sage Publications, 202.

[63] T.C. Gıda Tarım ve Hayvancılık Bakanlığı, *Stratejik Plan 2013-2017*, 31.

[64] Escobar, Arturo (1995), *Encountering Development: The Making and Unmaking of The Third World*, Princeton: Princeton University Press, 137.

development programs have been implemented in Turkey in the recent decades. Rather, rural development seems to be relegated to regional development agencies which support rural development projects which are seen as innovative, efficient, and effective. As small farmers are considered as devoid of these qualities, these agencies are rather occupied with enhancing the productivity of medium and big farmers through giving financial incentives to agribusinesses in the countryside.

In this respect, the model proposed by the Ministry of Food Agriculture and Livestock is based on promoting agribusinesses. For example, it is stated that "not being able to protect the largeness of economical farm business threatens sustainable agriculture and weaken the competitive power of businesses."[65] Moreover, it is claimed in the strategic plan:

> The protection of natural resources is a necessity for sustainable agriculture. With this aim, systems decreasing chemical agricultural inputs, providing soil improvement and water conservation are developed and presented to using.[66]

Positing such a goal seems to be necessary when one thinks of the damaging ecological effects of the Green Revolution which have become apparent worldwide today. Especially, the increase of productivity by using fertilizers and pesticides has created a bunch of ecological problems in the long run.

> However, the ecological effects of this Revolution are being counted today…They include the salinization of irrigation water, the polluting effects of chemical sprays and the increasing resistance of pest species to insecticides. The total environmental cost is even greater, and account should be taken of the narrowing of popular diets, the increased vulnerability of small farmers to indebtedness…[67]

The scope of the Green Revolution is thereby far reaching in terms of its effects. Not surprisingly, similar environmental problems also emerged in Turkey in the recent decades, since development agencies promoted intensive farming all over the

[65] T.C. Gıda Tarım ve Hayvancılık Bakanlığı, *Stratejik Plan 2013-2017*, 32.

[66] Ibid., 20.

[67] Redclift, *Sustainable Development*, 64.

country for a long time. In this sense, not only agribusinesses but also small farms adopted intensive agricultural farming techniques to a great extent.

As Dundon argues, "Sustainable agriculture systems are defined qualitatively as ecologically sound, economically viable, socially just, culturally appropriate, and based on holistic scientific approaches, including indigenous and community-based knowledge systems."[68] It is clear that the strategic plan does not propose an agroecosystems approach which is vital for achieving sustainable agriculture. As Merchant discusses, "each change in the transition from high chemical inputs to natural methods needs to be evaluated in the context of the whole agroecosystem, rather than a reductionist single component approach."[69] It is plain that the plan rather adopts a reductionist approach to sustainable agriculture. In this sense, Douglass identifies the principles of sustainable agriculture as follows:

1. The optimization of farm output over a much longer time period than is usual in industrial farming activities.
2. The promotion and maintenance of diversified agroecosystems whose living components perform complementary functions.
3. The building up of soil fertility with organic matter and the protection of nutrients from leaching.
4. The promotion of continuous cover and the extensive use of legume-based rotations, cover crops, and green manures.
5. The limiting of imported fertilizer applications and pesticide uses.[70]

Then, sustainable agriculture as formulated by this plan is far from a holistic understanding of agriculture. Such a model also ignores the multifunctionality of agriculture, which is significant for sustainability. In this sense, Buttel asserts that agriculture has also non-commodity outputs:

> [A]griculture has a number of *other*, *mostly non-commodity*, *outputs*. Agriculture's non-commodity outputs include environmental protection, flood

[68] Dundon, Stanislaus J. (2009), "Sustainable Agriculture," in *Encyclopedia of Environmental Ethics and Philosophy*, J. Baird Callicott and Robert Frodeman (ed.), Detroit: Gale, Cengage Learning, 291.

[69] Merchant, Carolyn (1992), *Radical Ecology: The Search for a Livable World*, New York and London: Routledge, 214.

[70] Gordon K. Douglass, (1985), "Sustainability of What? For Whom?" in *Sustainability of California Agriculture: A Symposium*, Davis: U.C. Sustainability of California Agriculture Research and Education Program, quoted in Merchant, *Radical Ecology*, 213-214.

> control, ecosystem services, maintenance of landscape or habitat, rural development, maintenance of agricultural heritage or culture, and so on.[71]

Instead of an agribusiness model, an agroecological perspective acknowledging the local farmers' knowledge systems, collective forms of social action, ecological and cultural diversity should be given precedence in order to achieve sustainability at the countryside.[72] As Sevilla Guzman and Woodgate argues:

> Sustainable societies can only be constructed on the basis of sustainable, locally relevant agricultures…implying a complete rejection of the homogenizing tendencies of the neo-liberal, global modernization project and the re-direction of co-evolution towards more sustainable ways of living that are based upon the endogenous potential of an indefinite diversity of locally relevant agro-ecosystems.[73]

In Chapters 4 and 5, sustainable agriculture is discussed at length by taking into account agricultural practices of local farmers and ecological initiatives in the Kaz Mountains Region. Such a discussion will also try to elaborate the prospects for agroecological development in the Kaz Mountains Region by taking into account agricultural policies.

3.2. Environmental Policies and Sustainability in Turkey

Environmental problems came on the scene in Turkey by the increasing perception of environmental risks by the public in the 1970s.[74] Especially, air pollution had become a serious problem for the urban centers at that time. The first use of the term environment in the government programs can be dated back to 1974. Four

[71] Buttel, Frederick H., "Sustaining the unsustainable: agro-food systems and environment in the modern world," in Cloke, Marsden and Mooney, 224.

[72] Ibid., 205-206.

[73] Sevilla, Guzman E. and G. Woodgate (1999), *From Farming Systems Research to Agroecology. Technical and Social Systems Approaches for Sustainable Rural Development*. European Commission, Report 45/98, quoted in Marsden, "The road towards sustainable rural development", 207.

[74] For a detailed discussion of the perception of the environmental problems as risk, see Aygün, Banu (2007), "Küresel ve Yerel Çevre Sorunlarının Risk Olarak Algılanması Üzerine Bir Araştırma," in *Çevre ve Politika Başka Bir Dünya Özlemi*, Ayşegül Mengi (ed.), Ankara: İmge Kitabevi Yayınları, 223-237.

years later in 1978, the Prime Ministry Environmental Undersecretary was founded.[75] In this sense, the Protocol of Conservation of the Surface Water Resources against Pollution enacted in 1976 can be considered as the first serious attempt in terms of environmental conservation.[76] The contamination of the marine environment near the industrialized areas also emerged as a significant environmental threat in the 1980s. As economic growth led to environmental contamination in the industrialized urban areas in those years, environmental policies in Turkey were initially based on the conservation approach.

However, "during the 1970s…the environment [was treated] like any other new policy area, rather than recognizing the interdependency of the relationships between ecosystems and political, economic, social and cultural systems."[77] Thus, solutions to environmental problems were not considered from an integrated standpoint. The measures were rather piecemeal and tactical, and there were no national plans setting out a comprehensive and strategic approach to the environmental problems.[78] In this sense, Carther further criticizes this approach by discussing environmental policies on pollution control:

> Pollution control, for example, typically involved the use of single-medium regulations to control industrial releases, whilst separate agencies dealt with discharges to air, water and land. End-of-pipe solutions were usually seen as adequate; policymakers preferred to deal with symptoms rather than causes. Administrative regulation was the policy instrument of choice.[79]

In this sense, environmental policies in the late 1970s and the 1980s were rather limited in scope. The pollution problem was rather considered in a

[75] Erim, Refet (2000), "Çevre ile İlgili Hukuksal Düzenlemeler," in *Türkiye'de Çevrenin ve Çevre Korumanın Tarihi Sempozyumu*, Zeynep Boratav (ed.), İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 186-187.

[76] Ibid.

[77] Carter, Neil (2007), *The Politics of the Environment: Ideas, Activism, Policy*, 2nd ed., Cambridge: Cambridge University Press, 181.

[78] Ibid.

[79] Ibid.

compartmentalized way. In other words, the ecological footprint of human societies was taken into consideration at all when formulating environmental policies.[80]

This has changed to some extent as Turkey became a party to several international environmental treaties after 1990. Obviously, these international environmental conventions are legally binding for the signatory states, and certain responsibilities are laid on the public agencies. Thus environmental policies in Turkey more or less became associated with international environmental governance in the recent decades.

In this sense, two of these international environmental treaties are worth to mention here. First, the Biogenetic Diversity Agreement, which emerged as a result of the United Nations Conference on Environment and Development (UNCED) or the Rio Earth Summit, was ratified by Turkey in 1996. The in-situ and ex-situ protection measures were taken in the biogenetically rich sites in Turkey with the ratification of this treaty. In this sense, the Kaz Mountains are one of those sites where such a biodiversity project was applied in the 1990s.

Second, the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) is prepared by the UNEP/AEWA Secretariat, and came into force in 2008. According to the agreement, an action plan and conservation guidelines will be formulated concerning the following issues: species conservation, habitat conservation, management of human activities, research and monitoring, education and information, and implementation.[81] In this context, conservation measures are taken into account under the principle of sustainable use:

> These conservation guidelines shall aim at introducing the principle of sustainable use. They shall cover, *inter alia*:

[80] Ecological footprint is "an area of the Earth that supplies the ecosystem resources for an organism to exist. *Ecological footprints enable people to visualise the impact of their consumption patterns and activities on ecosystems. You can alter the size of your ecological footprint by modifying your actions.*" See, Collin, P. H. (2004), *Dictionary of Environment & Ecology*, 5th ed., London: Bloomsbury, 68.

[81] United Nations Environment Programme (2008), *Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) Agreement Text and Action Plan*, Bonn: UNEP/AEWA Secretariat, 7.

> (a) single species action plans; (b) emergency measures; (c) preparation of site inventories and habitat management methods; (d) hunting practices; (e) trade in waterbirds; (f) tourism; (g) reducing crop damage; and (h) a waterbird monitoring protocol.[82]

Under the heading of the habitat conservation, it is stated that parties "ensure, where practicable, that adequate statutory controls are in place, relating to the use of agricultural chemicals, pest control procedures and the disposal of waste water" in order to "to avoid degradation and loss of habitats that support populations."[83] What is important here is that the connection is explicitly made between the agro-ecosystems and the habitats of migratory waterbirds. It reveals the impacts of the intensive farming practices –based on fertilizers, pesticides, and herbicides- on the habitats of migratory waterbirds. Thus, the intensive use of these agro-chemicals, which became the prevalent feature of the agro-ecosystems after the 1950s, thereby, makes habitats lost its biodiversity on the one hand, and agricultural productivity on the other hand.

Turkey's environmental policy has also undergone some legal changes under the premises of sustainable development. In this context, the changes that were introduced to the Environmental Law No. 2872 are significant. This law was amended in 2006 so that the notion of sustainable development became the basic constituent of this law. According to the Article 1, the goal of the law is stated as "the protection of the environment which is a common entity of all living creatures under the direction of the principles of sustainable environment and sustainable development."[84]

However, the environmental laws are not appropriately enforced in Turkey. Despite the rhetoric of the protection of the environment under the guidance of sustainable development, there are not considerable improvements regarding environmental

[82] Ibid., 35.

[83] Ibid., 31.

[84] Çevre Kanunu, Kanun Numarası 2872, Kabul Tarihi: 9/8/1983, Yayımlandığı Resmi Gazete: Tarih 11/8/1983 Sayı: 18132, Madde 1- (Değişik: 26/4/2006- 5491/1 md.)

sustainability. On the contrary, the appropriation of natural environment is rather justified by laws. In this context, Keleş and Ertan argue that the establishment of a thermoelectric power plant in the Gökova Bay was ratified by the administrative jurisdiction on the basis of the Environmental Law No. 2872.[85]

Turkish environmental policy clearly rests on sustainable development approach as the state institutions adopt the precautionary principle, the polluter pays principle, environmental impact assessment method, and the integrated management approach which were formulated at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, and at the Word Summit on Sustainable Development in Johannesburg in 2002. In this respect, İzci argues that studies on sustainable development in Turkey present "a list of priorities": "Environmental awareness, environmental education, water supply networks, coastal management and marine environment, urbanization, treatment of waste, protection of ecosystems, energy policy, emissions of pollutants, the environment, and health are at the top of this list."[86]

Agyeman mentions that certain policies concerning sustainable development are implemented by different states around the world. In this sense, he categorizes these policies under four headings:

> *Eco taxes*, which shift the tax burden from good things like employment, to bad things, like pollution and resource use.
>
> *Elimination of agricultural and energy subsidies*, which are environmentally damaging through their encouragement to overuse energy, fertilizer, pesticides, and irrigation water. Sustainable agriculture relies on recycling of nutrients, natural pest control, labor intensity, and less use of artificial products.
>
> *Recycling and renewables* would be given greater prominence. The study of industrial ecology is showing how industrial systems can be made to mimic

[85] Keleş, Ruşen and Birol Ertan (2002), *Çevre Hukukuna Giriş*, Ankara: İmge Kitabevi Yayınları, 193-194.

[86] İzci, Rana (2005), "The Impact of the European Union on Environmental Policy," in *Environmentalism in Turkey: Between Democracy and Development?*, Fikret Adaman and Murat Arsel (ed.), Aldershot: Ashgate, 94.

> the closed cycle patterns of natural systems with *materials reuse* and minimal or *zero waste.*
>
> *Efficient transportation systems,* which replace energy intensive automobile transport with high-speed trains, public transit, greater use of bikes and walking, redesign of cities and suburbs through smart growth and New Urbanism projects to minimize transportation needs through mixed-use developments.[87]

Although some separate measures are taken on those issues, it is hard to see any comprehensive policies concerning the above areas. These issues are rather taken separately, and a broader assessment of the relationship between environment and development is not considered in most cases. As Aydın elaborates, "Environmental issues in Turkey have not been subject to critical examination in their relationship to the development process…the long-term environmental consequences of development policies are either simply ignored or not given much attention."[88]

For present purposes, examining the law concerning the organization and duties of the former Ministry of Environment and Forest can throw light on the approach of the state to the sustainable development.[89] In this sense, the Article 1 of the law states that:

> The purpose of this law is arranging the bases concerning the establishment, organization, and duties of Ministry of Environment and Forestry for the conservation and improvement of the environment; the most appropriate and efficient use and conservation of land and natural resources in the urban and rural areas; conservation, development of the country's natural flora and fauna, and natural wealth; and prevention of any kind of environmental pollution; conservation, development and extending of the forest areas; development of the peasants living inside and adjacent to the forests, and

[87] Agyeman, Julian (2003), "Sustainable Development," in *Encyclopedia of Human Ecology Vol 1: A-H*, Julia R. Miller (ed.), Santa Barba, California: ABC-Clio, 676.

[88] Aydın, Zülküf, "The State, Civil Society, and Environmentalism," in Adaman and Arsel, 64.

[89] Recently in 2013, the Ministry of Environment and Forest was transformed into two ministries: the Ministry of Environment and Urban Affairs and the Ministry of Forest and Water Affairs.

> taking sufficient measures for this; meeting the need for the forest products and development of the forest products industry.[90]

In the Article 2, one of the duties of the former Ministry of Environment and Forest is stated as follows:

> In the framework of the sustainable development principle, to provide doing of environmental impact assessment and strategic environmental evaluation work and to check and to follow these works, which will realize the evalution of costs and benefits, environmental facts in a common framework for any kind of plans, programs, and projects that can have a negative effect on the environment.[91]

In this law, the scope of sustainable development is not extended beyond environmental impact assessments and strategic environmental evaluation, and both of these methods are limited to the cost and benefit analysis in practice. In this sense, they can be considered as making environmental conservation methods compliant with the economic standards.

Although development policies led to an industrialization of the economy in general, and the modernization of agriculture in particular, they mostly overlooked the environmental issues until the 1980s. In this sense, achieving economic growth by increasing industrialization, agricultural production, and tourism developments had deteriorated the natural environment to some extent. The State Planning Organization which had successively prepared development plans for five years periods since the 1960s also overemphasized economic growth in most of these plans. When sustainable development came on the agenda after the 1990s, a narrow view of sustainable development focusing on economic growth were rather adopted in the later plans.

To give an example, in the 10th Development Plan 2014-2018, which is prepared by the Ministry of Development, it is stated that, "In this framework, Tenth

[90] Çevre ve Orman Bakanlığı Teşkilat ve Görevleri Hakkında Kanun, Kanun Numarası 4856, Kabul Tarihi: 1/5/2003, Resmi Gazete: Tarih 8/5/2003 Sayı: 25102, 1.

[91] Ibid., 1-2.

Development Plan is prepared by an approach which takes into center stage sustainability of development."[92] Evidently, a reductionist understanding of sustainability was proposed by this plan. That is to say, an integrated approach of sustainable development taking into account the social and environmental pillars of sustainable development was not advocated. Both developing energy efficiency and effective using of water resources in agriculture were proclaimed as the prioritized transformation programs. In this respect, though the plan tries to adopt the green economy notion of Rio+20, it rather advocates green growth in terms of clean production and eco-efficiency which will provide both the protection of nature and increasing of competitiveness.[93] It is clear that it adopts a weak sustainability by referring to the sustainable use of natural resources.

According to the strategic plan 2013-2017 of the Ministry of Forest and Water Affairs, four strategic objectives are stated which are in line with *The Future We Want* report of Rio+20:

- Developing national and international policies on forest, water, biodiversity, and meteorology issues, and providing the effective implementation of them
- Effective struggling with desertification and erosion,
- Providing the protection, improvement, and sustainable management of water resources
- Providing the effective protection and sustainable management of biodiversity[94]

Sustainable forest management as well as water basin management is especially emphasized by the strategic plan by referring to sustainability discourse. Most importantly, it is plain that this strategic plan 2013-2017 of the Ministry of Forest and Water Affairs adopts a managerialist approach by emphasizing effective management of forest, water, and biodiversity.

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[92] T.C. Kalkınma Bakanlığı (2013), *Onuncu Kalkınma Planı 2014-2018*, Ankara, http://www.kalkinma.gov.tr/Pages/KalkinmaPlanlari.aspx, 2.

[93] Ibid., 13.

[94] T.C. Orman ve Su İşleri Bakanlığı (2013), *Stratejik Plan 2013-2017*, http://www.sp.gov.tr/tr/stratejik-plan/s/389/Orman+ve+Su+Isleri+Bakanligi+2013-2017, 28.

Moreover, the strategic plan of the Forest General Directorate of the Ministry of Forest and Water Affairs also introduces four strategic objectives as the protection of forests, developing and increasing forest areas, utilization from forest resources, and improving institutional capacity.[95] Besides, the basic strategies concerning forest villages are also outlined by the strategic plan of the Forest General Directorate as follows:

- Ensuring the participation of forest villages in the management decisions of the forest resources in their locales
- Increasing utilities/income opportunities obtained from the forest resources, improving the utilization of people from these opportunities who are poor and dependent on forest resources, and live inside and around forest
- Strengthening the utilization capacities of forest villages and their organizations concerning forest products and services, supporting income increasing activities
- Employment of forest villagers in timber works and other forestry works
- Promotion of village development plans implemented in forest villages
- Constituting political will and support in order to decrease poverty and to strengthen integrated rural development activities in forest villages
- Reinforcement of cooperation with other public institutions and non-governmental organizations to strengthen their participation and involvement in poverty combating works in forest villages[96]

In fact, these strategic objectives seem to realize the support instruments that are suggested by the 10th Development Plan 2014-2018. The development plan also acknowledges the development problems of forest villages from a general perspective. Moreover, it asserts that development of forest villages inside or near the national parks will be promoted:

> Support instruments based on production and income will be developed in order to decrease the development problems that originate from the

[95] T.C. Orman ve Su İşleri Bakanlığı Orman Genel Müdürlüğü (2012), *Stratejik Plan 2013-2017*, http://www.ogm.gov.tr/ekutuphane/StratejikPlan/Forms/AllItems.aspx

[96] Ibid., 51.

> disadvantaged positions of forest villages, of villages established inside and around nature reserves like national parks, and of mountain villages.[97]

Although the rhetoric of participation has been incorporated in the strategic plan of the Forest General Directorate, any action plans, measures, or other mechanisms to establish the participation of forest villagers into the decision-making process has not been put forward in the plan.

It is futile to expect that these plans will bring on local participation and community-based environmental management as discussed at length in Chapter 3. Thus, instead of setting forth a holistic and integrated sustainability approach, development concerns are still taken into account rather separate from the social and ecological issues in all of these plans.

Clearly, sustainability is rather a new concern for the public in Turkey. The emergence of the discussions on sustainable development goes back to the early 1980s in the Western countries, whereas sustainability debate in Turkey emerged only in the 1990s. However, from that time onwards, Turkey could not transform its policy making towards sustainability encompassing three pillars of economic, social, and ecological. In this sense, the adoption of environmental sustainability in Turkey is especially underestimated due to economic concerns. Most importantly, the predominance of the conventional mode of development thinking has been widespread among the policy makers, the planners, the business circles, and the labor organizations. Thus development discourse has been advocated by almost all of these agents irrespective of their different political stances, and worldviews. In such a mood, sustainable development was reduced to economic growth. Alternative projections on the local or grassroots level were rather overlooked by the ministries or development agencies almost in an exclusive way. In addition, environmental organizations were not involved in such projects. That is to say, this has certainly been one of the serious problems against the flourishing of the sustainability agenda in Turkey.

[97] Ibid., 136.

It is obvious that policy makers in Turkey have rather been preoccupied with economic development. Although the notion of sustainable development has been set forth in many documents by the ministries or other agencies since the 1990s, there have not been substantial improvements in practice. After all, sustainability was mostly considered within the framework of economic development or economic growth. In terms of participatory politics, a comprehensive sustainability agenda on the national, regional and local levels was not set through the inclusion of multiple actors.

In this sense, "promoting foreign investments in general, and gold mining in particular has been part of the neo-liberal policies pursued in Turkey since the 1980s, to attract capital inflow regarded as an effective device for economic growth and societal welfare.[98] The mining sector is regarded as more important than the agricultural sector by the policy makers in almost any cases. In this sense, the Ministry of Forestry and Water Affairs even passed a new statute in April 2014 which enables to do industrial establishment and construction within the forest areas if it is out of necessity and for the public interest.[99] Besides, the national parks were also opened the construction of hydroelectricity plants with an amendment to the statute of the national parks in March 2014.[100] Yet, this amendment was cancelled later by the Council of State in October 2014. Moreover, another illuminating example is the attempt to change the Law No. 4086 concerning olive trees. This law, which prohibits any industrial establishment other than the ones related to olive oil producing, around 3 kilometers of the olive fields, has been tried to be changed several times since 2006. Lately, the Ministry of Energy and Natural Resources prepared a draft law, according to which olive fields less than 25 decares were

[98] Çoban, Can (2004), "Community-based Ecological Resistance: The Bergama Movement in Turkey," *Environmental Politics*, 13 (2): 446.

[99] *Cumhuriyet*, "Ormanlar şimdi yandı!" April 19, 2014.

[100] *Radikal*, "Milli Parklar Elden Gidiyor," March 19, 2014, http://www.radikal.com.tr/cevre/milli _ parklar_da_elden_gidiyor-1181994

considered out of olive areas.[101] However, this draft was also cancelled later on with the lobbying of the olive oil producers.

The enacting of the international environmental treaties enabled sustainability discourse to be embedded in the national development plans, programs, and projects. Yet, this did not bring about any substantial transformation of development policies. Moreover, environmental policies are far from being full-fledged as they are mostly limited to the old-fashioned conservation approach in most cases. Even the conservationist measures were also adopted as a result of the international environmental governance, it also seems to be underestimated to a great extent recently. As long as policy makers are keen on following a narrow understanding of sustainable development, the ascendancy of economic dimension over social and environmental ones seems to persist. Actually, conservationist measures are not taken into consideration in most cases when investments related to energy and mining sectors such as small scale hydroelectricity plants, thermoelectric power plants, and mining sites are planned mostly in the forest areas or the agricultural land. Therefore, environmental policies are neither effective for solving environmental problems nor capable of offering alternative sustainability visions.

[101] *Birgün*, "Tarım Bakanlığı'na Baskı Yapılıyor," July 8, 2014.

CHAPTER 4

AGRICULTURAL PRACTICES AND POLICIES IN THE KAZ MOUNTAINS REGION

4.1. Kaz Mountains Region

Before examining agricultural practices and policies from a critical perspective in the next section, preliminary information on the geography, the climate, and the socio-economic and ecological conditions of the research site is given at first. To begin with, the Kaz Mountains are located in the west of Turkey.[1] It ascends along the shoreline across the Edremit Gulf at the south of the Biga Peninsula. Geographically, its southern slopes belong to the Aegean region, and its northern slopes to the Marmara Region. In this sense, the Kaz Mountains are considered as a frontier zone separating the Aegean Region from the Marmara Region. The mountain range extends over the west/south-west and east/north-east direction for 60 kilometers.[2] The highest peaks of the Kaz Mountains, which are located in the national park, are Karataş, Babadağ, and Sarıkız peaks. These are 1774, 1766, and 1726 metres respectively.

The climate of the Kaz Mountains is the mild Mediterreanean climate on the southern side, and the Mediterreanean transition climate on the northern side, which is more humid and cooler. While the yearly average temperature is 14-15ºC along the coast in the Edremit Gulf, it decreases to 8ºC at the higher zones.[3] The average

[1] It is between 39° 30'- 39° 50' northern latitudes and 26° 15'- 26° 35' eastern longitudes. See Appendix C for maps of the Kaz Mountains Region.

[2] Özhatay, Neriman (2012), "Kazdağları'nın Endemik ve Tıbbi Bitkileri," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 80.

[3] Atalay, İbrahim (2012), "Kazdağları ve Çevresinin Ekolojik Özellikleri," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 12.

rainfall in a year is 600-800 mm at the slopes of the Kaz Mountains, and more than 800 mm at the higher altitudes.[4] Especially, it rains maximum in winter, while it is rainless in summer. The average humidity rate is around 63 % in the south, and % 69 in the north.[5] The prevailing wind is the northeaster. The southeaster comes second, and the southwester comes third.[6]

There are many settlements of towns or villages in the Kaz Mountains Region. The towns such as Edremit and Ayvacık in the south, and Bayramiç and Yenice in the north are founded in the fertile plains of the region.[7] There are also touristic sites such as Küçükkuyu, Altınoluk, Güre, and Akçay along the coastal strip on the southern side. Besides, there are many forest villages in the Kaz Mountains. In the southern side, the population of Edremit has increased steadily over time. Its population increased from 93,351 in 2000 to 129,104 in 2013. In this sense, there is an ever increasing migration to the southern side of the Kaz Mountains. Newcomers settle down either in the coastal touristic sites or in some of the forest villages. Thus, the populations of Edremit, Akçay, Altınoluk, Zeytinli, and Kadıköy have also been increasing constantly. On the other hand, the migration from the countryside to the urban areas has also continued at the same time. In this sense, the total populations of the districts such as Bayramiç, Çan, and Yenice have decreased constantly, and the total population of the Ayvacık district has almost stayed the same during the same period. Furthermore, there is also an intra-regional migration as peasants migrate from the villages to the nearby local towns more and more. In this sense, the population living in the villages has also been decreasing in Edremit, Ayvacık, and Bayramiç except a few villages such as Yeşilyurt, Kızılkeçili, and

[4] Ibid., 13.

[5] Cürebal, İsa, Recep Efe, Süleyman Sönmez, Abdullah Soykan (2012), "Kazdağları Ekosistemi ve Ekolojisi," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 99-100.

[6] Ibid., 100-101.

[7] The area of the Kaz Mountains administratively belongs to different districts, which are Edremit, Ayvacık, Bayramiç, and Yenice districts. The Edremit district is in the Balıkesir province while the rest are in the Çanakkale province.

Çamlıbel, where the inmigrants prefer to settle down, and Bostancı and Çıkrıkçı which are rather integrated with Edremit.[8]

The former research made by the State Planning Organization (*Devlet Planlama Teşkilatı* in Turkish) on the socio-economic development of the districts in Turkey gives useful statistics on Edremit, Ayvacık, Bayramiç, Çan, and Yenice.[9] In this sense, Edremit and Çan seem to be the most urbanized districts. The population growth rate of Edremit is very high, whereas the population growth rate is either negative or very low in the other districts. This indicates that while there is an inmigration to Edremit in particular, there is an outmigration from the countryside to the urban areas in general. The population dependence rates are also high in each district, which show that children, the young and the elders constitute a significant amount of the total population in the region. The figures on the employees' rate in the agricultural, industrial, and service sectors differ in each district. In this sense, in Edremit, the rate of people employed in the agricultural sector is slightly more than the ones employed in the service sector, which reflects the importance of both olive oil production and tourism facilities. In Ayvacık, agriculture is the primary sector for employees, although working in the service sector in relation to tourism is also developed to some extent. On the other hand, the corresponding statistics on Bayramiç and Yenice indicate that agricultural production and livestock raising in both districts are practiced predominantly. The rate of workers employed in the industrial sector is generally low in all districts except Çan where it comes second after the agricultural sector, which can be attributed to the ceramic factories and the thermic power plant operating there. The service sector seems to be most important in Edremit and Çan, which are the most advanced districts in terms of tourism and industry respectively. Accordingly, it can be asserted that the agricultural sector still occupies the most important place in all of these districts. The share of agricultural products in Turkey is also at highest in Bayramiç, and at lowest in Edremit. The

[8] See the Appendix E for the population of towns and villages.

[9] State Planning Organization (2004), *Socio-Economic Development Ordering Research of the Districts*, Ankara, http://www.sabek.com.tr/SUNU/2004%20ilcelerin%20Gelismislik%20 Siralamasi .pdf . See Appendix F for the socio-economic indicators of the districts.

share of tax incomes in Turkey clearly show that Edremit and Çan are the most developed districts economically, whereas the others are less developed in comparison to them. Overall, the research on the socio-economic development of districts shows that the quality of rural life in these districts is above the country average.

Although the strip of the land along the shoreline is narrow, the coastal plain is one of the most fertile lands in the region. The altitude of the strip between the sea and the mountain range changes between 10 and 220 meters approximately. It is where the olive oil production can be practiced in the mild Mediterranean climate of the southern side. Actually, the climate of the Kaz Mountains is suitable for producing a variety of agricultural products on the southern side such as fig, tangerine, tomato, and wheat. On the other hand, the fresh fruits of apple, nectarine, and cherry are mostly produced on the northern side. The livelihoods of the local people in the region still depend on agriculture and pasturing to a great extent although tourism has become supplementary to agriculture in the southern part of the Kaz Mountains.

The region is also one of the important touristic areas in Turkey. The small towns such as Küçükkuyu, Altınoluk, Güre, and Akçay are lined up along the coastal strip on the southern side of the Kaz Mountains. The actual population of these small towns reaches however peaks in the summer months when they became overcrowded by tourists. This can be seen as a result of investments in the tourism sector, most importantly to be mentioned are here the construction of summer residences, hotels, and pensions after the 1980s. Today, there are countless summer houses scattered alongside the seashore, which extend towards the mountain range. There is also thermal tourism and ecotourism in the region.[10] Besides, the Kaz Mountains offers much in terms of ecotourism, and ecotourism activities have become much more prevalent in the region recently.

[10] There are several thermal hotels in Güre and Altınoluk, and the new ones are being established currently. Moreover, the thermal energy is also used for heating the residences in Güre. There are approximately 3000 houses that benefited from the thermal energy for heating.

There is a rich biodiversity of fauna and flora in the Kaz Mountains. There are more than 900 taxa belonging to 101 familia in the Kaz Mountains. There are approximately 80 species endemic to Turkey, and 35 species are endemic to the Kaz Mountains out of these.[11] There are forests of red pines, black pines, firs, beeches, and oaks in the Kaz Mountains. In this sense, the Kaz Mountain fir (*Abies nordmanniana subsp. Equitrojani*), which is an endemic species to the Kaz Mountains, is rather widespread in the northern part of the Kaz Mountains.[12] Besides, there are many species of mammals and birds like brown bears, roe deer, wood pigeon and wild goose. At first, a Nature Protection Area of the Kaz Mountain Fir was established covering 258 hectares in 1988. Afterwards, the Kaz Mountain National Park covering an area of 21,452 hectares was established in 1993 in order to protect the fauna and flora.[13] Besides, a biogenetic diversity project was implemented in the Kaz Mountains in order to establish in-situ conservation in the 1990s.

Therefore, the Kaz Mountains Region can be considered as one of the unique locales in Turkey having distinct economic, sociocultural, and ecological characteristics. The area called as the Kaz Mountains (*Kaz Dağları* in Turkish) refers to the whole region, whereas the mountain mass called as the Kaz Mountain (*Kaz Dağı* in Turkish) refers to a smaller part on the southern side. Although most of the locals differentiate between the two usages, both of them are usually used interchangeably. This thesis mostly focuses on the southern part of the Kaz

[11] Ekim, Tuna (2012), "Kazdağları'nın Fitocoğrafyası," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 73.

[12] There are two fir species native to Turkey, namely the Cilician fir –*Abies cilicica*- and the Caucasian fir –*Abies nordmanniana*. The Kazdagi Fir –*Abies nordmanniana subsp. Equitrojani*- is a subspecies of the Caucasian fir –*Abies nordmanniana*. Global Environmental Facility (1993), "Part Two: Technical Annexes" in *Republic of Turkey In-Situ Conservation of Genetic Diversity*, Report No. 11295-TU, Project Document, 6, http://gefonline.org/projectDetailsSQL.cfm?projID=71

[13] In the website of Nature Protection and National Parks General Directorate, it is stated that the Kaz Dağı National Park covers an area of 20,935 hectares. Thus, it seems that there have been a minor change of the national park boundaries over the years. Besides, it is also stated that it was declared as a national park on April 17, 1994. See the website, http://www.milliparklar.gov.tr/mp/kazdagi/index.htm

Mountains, but the northern part is not overlooked completely. That is to say, the research also includes the northern part to some extent. Especially, the discussion on the environmental conflict on gold mining takes into account the northern part as it is where gold mining explorations were made lately.

4.2. Local Practices and Experiences on Olive Oil Production

Olive oil production in the region goes on from the ancient times up to now. In the times of the Roman and the Byzantine Empires, olive oil had been produced extensively in the fertile plains around the Edremit Gulf. In the Ottoman Empire too, olive oil production had been one of the primary economic activities in addition to forestry. In this sense, some olive fields in the region had been assigned as the property of the foundations in this period.[14] Olive oil production was mostly done by the Greek community before the population exchange. After the expelling of the Greeks, *muhacirs* coming from the Greek mainland, and the Aegean islands like Crete and Lesbos had successfully kept on producing olive and olive oil, as they had already practiced olive oil production for generations. Efe et al. argue that an industry of olive oil and olive related products had emerged after the population exchange in the founding years of the republic. They also assert that the sales center for olive oil had been in İstanbul and İzmir, and olive oil had been shipped to these cities from the olive oil factories along the coast in the 1920s and 1930s.[15] As the statistics of the olive oil production in the 1930s show, the Edremit Gulf region – including Ayvalık, Edremit, and Burhaniye- had produced a considerable amount of olive oil in total. While the national production was 19,000 tons in 1933, 31,000

[14] Efe, Recep, Abdullah Soykan, İsa Cürebal, Süleyman Sönmez (2011), *Dünyada, Türkiye'de, Edremit Körfezi Çevresinde Zeytin ve Zeytinyağı*, Edremit Belediyesi Kültür Yayınları, İzmir: Meta Basım Matbaacılık Hizmetleri, 29.

[15] Efe, Recep, Abdullah Soykan, İsa Cürebal, Süleyman Sönmez (2012), "Kazdağları Çevresinde Zeytin ve Zeytinyağı Kültürü," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 179-181.

tons in 1934, and 13,000 tons in 1935, in the Edremit Gulf region, it was 6,700 tons, 17,000 tons, and 5,100 tons respectively.[16]

Today, the pre-eminent agricultural activity in the southern part of the Kaz Mountains Region is olive oil production. In the Edremit district, 84 % of the agricultural area is olive groves. Vegetables, fruits, and fodders are cultivated in the remaining 16 %. There are 3,012,000 olive trees in Edremit, and 1,814,610 olive trees in Ayvacık. There are totally 70,800 hectares of agricultural areas in Edremit. The culture fields make up 47,000 hectares, and the olive groves make up 19,900 hectares.[17]

In Appendix H, there are statistical data for olive and olive oil production capacity of Edremit and Ayvacık. Out of the total 3,012,000 olive trees, 25,000 trees did not produce fruit in Edremit in 2013/2014 season. In the same season, 4,150 trees did not produce fruit from the total 1,814,610 olive trees in Ayvacık. Since 2006, we see a slight increase in the number of fruit producing olive trees in Edremit, whereas there is a considerable increase in the number of fruit producing olive trees in Ayvacık, corresponding to 62,960 olive trees. Moreover, the percentage of olive reserved for oil in Edremit is 82 % in 2006/2007 season, 80 % in 2007/2008 season, 89.5 % in 2012/2013 season, and % 80 in 2013/2014 season. On the other hand, the percentage of olive reserved for oil in Ayvacık corresponds to 78 %, 85 %, 94.3 %, and 95 % in the respective seasons.

From Table 1 and Table 3, it can be asserted that the olive production in Edremit and Ayvacık for table oil, and oil made a peak in 2012/2013 season, and declined drastically in the following season of 2013/2014. In Edremit, there was a harvest loss of 63.5 %, and in Ayvacık, there was a harvest loss of 83.5 % in comparison to the former season. There are several reasons behind this. First, it is related to the difference between the presence year (*var yılı* in Turkish), and absence year (*yok*

[16] İnan, Afet (Önsöz) (1973), *Türkiye Cumhuriyeti'nin İkinci Sanayi Planı 1936*, Ankara: Türk Tarih Kurumu Basımevi, 146.

[17] The statistics are taken from the Edremit District Directorate of Food Agriculture and Livestock.

yılı in Turkish) which originates from the genetic feature of the olive tree to some extent. Moreover, after the end of the application of the aerial pesticide in Edremit in 2012, olive leaf spot disease has become widespread, and this also decreased the total yield considerably in the 2013/2014 season. In this sense, the Edremit Chamber of Agriculture declared that this disease increased so much because it rained extraordinarily in the spring and fall seasons in 2013, and local producers did not apply pesticides at appropriate times.[18] According to the report of the National Olive and Olive Oil Council[19] (UZZK thereafter), there are several factors for such a loss in Edremit in 2013/2014 season such as the high yield of the past season, getting longer of the ripening time due to the local climate conditions, olive leaf spot disease, and wrong pruning.[20]

Thus, the following conclusions can simply be asserted from these figures. First, olive yield and olive oil yield change drastically every season. Second, most of the olive is reserved for producing olive oil. Third, only a slight proportion of the olive trees do not give fruit. And finally, most of the total olive fields in Edremit and Ayvacık are used for olive oil production.

Olive oil production in the region is made by the smallholders to a great extent. Most of the farms are smaller than 10 decares. There are also a considerable amount of farms between 10 and 20 decares. The farms over 100 decares are not prevalent in the region. According to Nazım, the officer from the Edremit Chamber of Agriculture, the olive groves less than 10 decares compose 40 %, the olive groves between 10 and 20 decares are 20 %, and the ones between 20 and 40 decares are % 10. He also asserts that there are totally 250-300 olive oil producers who have olive groves bigger than 100 decares.

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[18] "Olumsuz Hava Şartları Zeytinde Rekolteyi Düşürdü", 4 November 2013, http://www.haberler.com/ ozel-haber-olumsuz-hava-sartlari-zeytinde-5258802-haberi/

[19] Ulusal Zeytin ve Zeytinyağı Konseyi in Turkish.

[20] National Olive and Olive Oil Council (2014) 2013-2014 Sezonu Ege-Marmara Bölgesi Zeytin ve Zeytinyağı Rekoltesi Tahmin Heyeti Raporu, 2, http://uzzk.org/Belgeler/UZZK_ 2013_2014_ REKOLTE_RAPORU.pdf

A general feature of land use in Turkey is that agricultural fields are much divided as a result of inheritances. This is a common problem in the Kaz Mountains Region too. So such a division of agricultural areas makes the producers more vulnerable to fluctuations in the olive oil market. According to Rıfat, an in-migrant making olive oil producing in Küçükkuyu, this problem can be solved by reorganizing cooperatives.

> Now how to consolidate olive production? The plots are much segmented. First of all it is already a most important issue of Turkish agriculture, the issue of preventing that segmentation of plots. It is fragmented but how are we to consolidate it now? I mean, it seems to me like we cannot fully organize olive farming here without having cooperatives again.

TARİŞ –the Union of İzmir Olive Oil Sales Cooperatives- is the biggest union of agricultural sales cooperatives in the region concerning olive and olive oil. It was founded as early as the 1940s. Today, it has branches in Edremit, Altınoluk, and Küçükkuyu, and olive oil factories in Edremit and Altınoluk.[21] The majority of its members in the region are small producers from villages. In the 2012-2013 season, there were 995 members in Edremit, 510 members in Altınoluk, and 965 members in Küçükkuyu. Among them, the number of producers who sold their olive oil to TARİŞ in the same season is listed as 599, 319, and 496 respectively.[22] Such a low rate shows that some of its members sell their products to the local merchants rather than handing them over to the TARİŞ branches. The main reason behind this is that TARİŞ makes payments to its members later on, whereas producers are paid in cash in their transactions with merchants. In this sense, more and more producers, who are in need of cash, prefer to make transaction with the local merchants these days. However, TARİŞ still has a significant place in the olive oil market. Thus, the mukhtar of Tahtakuşlar argues:

> It is up to the cooperatives to advance olive farming in this region. As producers we only apply pesticides and take care of the olive trees. We collect our olive and get it pressed at the factory. We take some oil home,

[21] See Appendix I for the statistics of the Edremit, Altınoluk, and Küçükkuyu TARİŞ cooperatives.

[22] S.S. TARİŞ Zeytin ve Zeytinyağı Tarım Satış Kooperatifleri Birliği (2013), 2012-2013 İş Yılı Olağan Genel Kurul Toplantısı, İzmir, 11.

> enough to cook with. The rest of the olives—we have a cooperative TARİŞ—we give it to TARİŞ. TARİŞ sells it, processes it; makes olives. Then there are the big olive companies. We sell our olives to them, green, black whatever. They take it and process it, I mean the producing companies. It is of no use to us. We only harvest. We send it to the factory and get it pressed for a fee. We go and sell it to the producer, the merchant. We drop it at our cooperative, get that money, that's it.

There are different views of local producers concerning TARİŞ. First, some of the locals see it as an organization interfering in market processes, which needs to be radically transformed. This neo-liberal standpoint is usually adopted by some of the factory owners. For instance, Harun, an olive oil factory owner from Edremit, comparing TARİŞ with the olive oil cooperatives in Spain, criticizes it as an unwieldy organization acting like a state economic enterprise. According to him, TARİŞ should be replaced by a more local cooperative functioning in accordance with the regulations of the market.

> Actually I think if there was a more liberal cooperative system, geared more toward buying and selling oil, I mean rather than producing service, aiming to buy and sell the goods of the producer, it would become a much more productive, market regulating model that would benefit the producer… There is the Spain model for instance. We see that cooperatives are very prevalent there, but the cooperatives there are cooperatives that work more locally. I mean appealing to one region, not tens of thousands or so. But there are also those that do that. Well, not as big, huge as Tariş and the cooperatives there work much more professionally. They work more in market conditions… For this many partners, more local, like if it is only an Edremit Tariş, a Tariş for only those from Edremit… We should be in such a model. But now unfortunately our Tariş works like a state institution and unfortunately it has to write off.

The adherents of the second view, though acknowledging the need to reorient the policies of TARİŞ towards marketing, rather consider it as an essential organization for the functioning of the olive oil market. Thus Kemal, who is another factory owner, while asserting that TARİŞ should be a market regulator, and much more concentrate on marketing the product of its members rather than opening new factories, also considers that it is a cooperative that should be sustained. In this way, it could play a role in the market as favoring small farmers against merchants:

> Tariş is a farmer organization founded in the region with a very large base. It is an organization that should be sustained…. Tariş's objective is to be the

> market regulator. Tariş's objective is to control the market, the issue of appraising the producers' goods. But what does Tariş do? It opens factories everywhere, every year. Rather than that, let them press it wherever they get it pressed, monitor that, get it marketed… It has to be the market regulator. I think it should be an actor for bringing the farmers' products to the consumer. I mean it has to have a policy between the trader and the farmer geared toward preventing the exploitation of the farmer by the trader.

Besides, local producers mostly comprising of villagers usually criticize TARİŞ on the grounds that it does not support its members any more. For instance, the mukhtar of the Yeşilyurt Village states that it does not squeeze the olives of its members cheaper than the private factories:

> I am a partner of TARİŞ. And TARİŞ is a cooperative. We take all our produce there and get it pressed. Which cooperative has ever paid 5 cents to a partner, tell me? Then a civilian, a citizen opens a factory over here and presses it for cheaper than that cooperative. These create problems both for the public and the members of the cooperative.

In this respect, one of the common objections is that it abandoned redistributing profits to its members. The mukhtar of Çamcı thereby argues:

> Here now, see, the combine of Edremit for instance processes 80,000 - 90,000 sacks of olives per season. There is the foot-press, there is the olive pomace, and then the collection fee. You get the oil yourself also, no questions asked. It is up to you to get it acidified. You know the fellow citizen cannot ask whether you paid the money or not. How is this a cooperative then? Actually the cooperative belongs to all TARİŞ partners. I mean they should be the ones calling this to account. I mean they should demand their rights. They used to in the past. Our ancestors used to talk about it 20-25 years ago, saying "TARİŞ distributed the profit". They did not have greater means at their disposal then. And now if they would only distribute the income generated by the processing of the combines, that would be enough.

There were no subsidizing or minimum price policies set by the state for olive oil when TARİŞ was first established.[23] It has become an effective player in the olive oil market only after implementing these policies later in the 1960s. However, as a result of restructuring policies pursued in the agricultural sector, agricultural sales cooperatives were reorganized to a great extent after the 1990s. This led to a

[23] Soral, Erdoğan (1981), *Türkiye'de Tarım Satış Kooperatifleri ve Birlikleri Sorunu*, Ankara: A.İ.T.İ.A. Gazetecilik ve Halkla İlişkiler Yüksek Okulu Basımevi.

situation in which small farmers are not favored by the cooperative any more.[24] As TARİŞ did not give its members the opportunity to have shares in the profits, and lost its capability to determine olive oil prices in the market, most of its members seem to have no confidence in the cooperative.

Edremit, Zeytinli, Güre, and Altınoluk are the liveliest places during olive harvests because olives harvested from the olive fields are processed in the olive oil factories in these towns. The cold press factories were opened as early as the early 1920s and 1930s. In this sense, such a factory owner from Zeytinli states:

> We continue our grandfather's business, the workplace transferred from the grandfather to the father, from the father to the uncles, from the uncle to us. We do stone press production with water. We crush the olive with old school granite stones and press it in old bags. So it is completely natural… We were founded in 1930s. We are among the firsts. My grandfather is the first person to produce scratched green olives. He is the first person to sell it to the İstanbul market. We have been doing this for generations.

After the 1990s, most of the old olive oil factories were replaced by the new ones in the region. There are currently a few factories producing olive oil by using cold press machines. These cold press factories are in Küçükkuyu, Güre, Zeytinli, Mehmetalan, and Pelitköy. There are approximately 50 factories in Edremit, and 21 factories in Ayvacık, which use the continuous centrifugation system for producing olive oil. TARİŞ has four such olive oil factories, three in Edremit, and one in Küçükkuyu. There are certain differences between the new system and the old one. Kemal, a local producer and an olive oil factory owner from Kızılkeçili, explains the differences between the two systems as follows:

> First of all there is the technology difference. Then there is the production cost difference. Third there is the hygiene difference. These are the advantages. In stone press, 11 people are needed to make this system work and it makes 10 presses, processes 60 sacks of product. I mean 11 people process 60 sacks of product. Here three people or two people process 200 sacks of product.

[24] This point is discussed at length in Chapter 3. For a critical account on agricultural sales cooperatives, see Oral, Necdet (2013), "Tarım Satış Kooperatif ve Birliklerinin İşlevsizleştirilmesi," in *Türkiye'de Tarımın Ekonomi-Politiği 1923-2013*, Necdet Oral (ed.), Ankara: TMMOB Ziraat Mühendisleri Odası Bursa Şubesi & NotaBene Yayınları, 325-336.

Engin, who is an in-migrant from Adatepe making olive producing, and running a cold press factory with his partners in Küçükkuyu, explains the disadvantages of the cold press as such:

> Olive oil production with traditional methods is a very cumbersome procedure. I mean therefore, when you put it side by side with the continuous process that's a disadvantage. The yield for instance. We can get 15, 16 liters of olive oil from 100 kilos of olives. But in a continuous system, a modern system, it can go up to 25 liters. I mean the yield can go much higher. Therefore our losses are great.

Furthermore, a considerable amount of waste water of olive are produced after processing olive at factories. Olive oil factories either pour it to the streams, or collect it in pits or tanks. In this sense, Selim asserts the following:

> Well wastewater is the water inside the olive fruit. On the one hand, entirely organic. Of course with high acidity. If you pour it in large quantities somewhere it might create problems. This is now either poured into streams and goes to the sea or well factories prepare holes themselves, collect that water in those holes. It can also be used to irrigate olive gardens. Well of course not in the form I"t comes out of the olive. I mean diluted four, five times… It is possible to collect it in lagoons, vaporize it, and use its sludge, that is to say its dry material as fertilizer, but I mean because the technologies are expensive it is not a solution yet.

For instance, Kemal says that he gives the waste water back to the olive trees after collecting it in tanks:

> Look there is a 200 square meter space under my facility… We collect it again in tanks in that basement. With a tanker, we have a pool in Zeytinli, we get it transferred to that pool. And in the summer with the drip irrigation method we dilute it and give it back to the tree. We dispose of it… We say it came from the tree let it go back to the tree.

The waste water of olive oil factories has been a contested issue in the region. Especially, environmentalists consider it as an environmentally degrading substance. On the contrary, factory owners and local producers emphasize that it is not a substance produced by chemical reactions, but rather it is the natural water of olive. Thus, Kemal asserts the following in this regard:

> The only industry here is olive oil factories. And they have wastewater. Now these environmentalist individuals, I mean those citizens who deem themselves environmentalist and attack people right and left, at some point

> they took up this wastewater issue, and pulled at it o this way and that way. Man, think about it! What is the difference between the wastewater in the Gulf 60 years ago and the wastewater today? Now for many long years, here, mayors included, people sat and thought what is this waste water, where can it be thrown, what is wastewater, can we refine it? You can't refine it bro. It is not refined in other parts of the world either… Now for damage there must be concentration … I mean for 60 years, there, that tree dried out because of wastewater, there, those fish died because of wastewater; do tell has such a thing happened?

In the past the olive oil factories were established nearby the sea, and the waste water was poured into the sea directly. In this sense, Aykut, a young local producer from Kızılkeçili, who is also a member of the board of directors of the Edremit Chamber of Agriculture, emphasize that, back in the early 1980s, they were swimming and fishing where waste water was given to the sea.

> It used to flow to the sea in the past. It used to flow next to the dock in Altınoluk. And we used to go swimming there for years. And we fished well too. My grandfather used to reel sea bass rods, kipes, right where the wastewater was flowing, everyday we'd collect fish from there.

Naci, who is fifty-three years old, also says that waste water does not give any harm to the marine environment.

> And for years also when we were kids, the fish that went to the foot of the bagasse, to the foot of the oil factory used to come there. When we cast a rod we cast it from there I mean. Look today you can see no lack of living creatures where wastewater is poured… This is not a product that is generated by chemical methods… But they made up something, the sea water is being poisoned. I mean I can't make sense of it either…. There is no difference between the old waste and the waste now. Then, olive water is harmful, wastewater is harmful. Oh dear, all hell breaks loose.

Ayvalık olive variety is grown in Edremit and Ayvacık around the Edremit Gulf. "This cultivar is locally known as Edremit, Edremit Yağlık, Şakran, Midilli, and Ada Zeytini."[25] In this sense, Nazım tells the reason why this cultivar is called as *Ayvalık* in the following:

[25] Dıraman, Harun, Hülya Saygı, Yaşar Hışıl (2011), "Geographical Classification of Turkish Virgin Olive Oils from the Aegean Region for Two Harvest Years Based on Their Fatty Acid Profiles,", *J Am Oil Chem Soc*, 88: 1906.

> Now the variety here is what we call Edremit or what they call the Ayvalık olive for oil production. Many years ago there is no port in Edremit. There are ports in Ayvalık. I mean ships are coming and are loaded in Ayvalık. Thus where is the merchant? He is where the ships are. In other places purchases have all been made. Now actually this region's variety is Edremit. But because the trade of this business is in Ayvalık, because the ships are loaded in Ayvalık, what does is get to be called? Ayvalık olive for oil production.

This cultivar is well-known for producing qualified olive oil. It is suitable for mechanical harvesting, and tolerant of olive fly.[26] According to the International Olive Oil Council's country profile of Turkey, "The fruit has a high oil content (24%). Owing to the quality of the oil, which is aromatic and has distinctive chemical characteristics, it is considered to be the most promising of Turkey's oil cultivars."[27] Most of the olive oil producers that I interviewed also emphasized the quality of the specific variety of *Edremit Yağlık*. The climate of the Kaz Mountains is one of the main reasons behind the quality of the olive oil. In this sense, Naci asserts:

> Ayvalık promoted itself well. Meanwhile, it is this region that is the biggest supplier of Ayvalık. That is Edremit and its surroundings. Look, some wonderful oil is procured in the region extending from Dereli Village of Kazdağları [Kaz Mountains] facing the sea to Narlı. Surely the olive tree can live at up to a certain altitude. Below that altitude, in a corridor wedged between this mountain and the sea, if the oil extracted from the belt is harvested properly, and conserved well, incredibly wonderful oil is obtained. That is a quality unique to that place.

Although local producers mostly point out that the best olive oil is produced in the Kaz Mountains Region compared to any other place in Turkey, they could not sell their products at the international and national markets except a few producers. After all, the quality of the olive oil does make no difference to most of the smallholders. They get barely enough money from the sale of olive or olive oil to compensate their production costs. As these small farmers could hardly make ends meets from olive oil producing, they usually meet the needs of their households either by means of off-farm jobs or pensions.

[26] International Olive Oil Council, (2012), *The Country Profiles: Turkey*, 6, http:// www.internationaloliveoil.org/estaticos/view/136-country-profiles

[27] Ibid.

At first glance, the main problem can be seen as marketing. Marketing based on the specificity of the locality has been made successfully neither by the public nor private institutions. But this is only one side of the issue. There are also other important factors effecting olive oil producing. In this sense, one should also examine the general characteristics of olive oil production in the region to grasp the full picture. First of all, the climatic conditions such as temperature, rain, and wind are important determinants in terms of quality of the olive oil. Thus the changes in the climate can have an adverse effect on olive oil producing in certain seasons. In this sense, Kazım, who is the head of the Avcılar Development Cooperative, tells:

> Look I got olives pressed on the 15th, 20th of March, I mean from the last olives, and I looked at the yield, 15%. In the past years, come March, the oil retained would be as much as 35-40%. It would easily reach 30%. Because it is late it is completely ripe. That's how olive takes its oil. This past year rain was late and the weather was warm. Olives constantly got water. They constantly got larger. Olive retrieves its water when it finds cold weather, northeast winds. The tree retrieves it from its fruit, the olives shrivel. Last year it didn't shrivel at all, it just swelled. And that's because of a constantly moderate weather and lots of precipitation.

In this sense, Selim also argues that changes in the local climate produce diseases or marketing problems for the olive oil producers:

> I mean especially in the last five, six years, each year we are living a different climate here. I mean some years for instance it is very arid. Generally there is precipitation around here in winters. But then the winter season is arid. There is lots of precipitation in the spring or the fall. But some years there is no rain from April to October… And of course we see the negative effects of these on the trees. For instance fungal diseases in the olive groves, I mean very serious diseases occurred due to humidity. Some years it's extremely cold. We saw olive trees were getting affected from the cold. I mean trees died because of the cold. For instance, in the last two years there was a very mild climate in the fall season. The climate is very moderate until December and we see trees growing shoots until December. There has to be a certain degree of cold for the olive to turn black on its branch. The olives turn black very late for example. Obviously it decreases our market opportunity. It decreases the value of our product.

Apart from climatic conditions, there are also socio-economic factors restraining the capabilities of local producers to have free play in the market. Olive oil is one of the cash crops adjusted to the price fluctuations in the international stock exchange. In the past, there were considerable government subsidies in order to keep prices of

products at a higher level than the market prices, but local producers have become much more vulnerable as a result of the gradual abolition of price supports since the 1990s. Most of local producers in the region are thereby critical of the subsidizing policies pursued by the state. In this sense, Naci emphasizes that there are huge differences between the price supports given to the olive oil producers in Turkey and in the Mediterranean countries.

> There is the matter of subsidy, the issue of subsidizing olive oil. The biggest consumers of olive oil are the EU countries that are among the Mediterranean basin countries. Italy, Spain, Greece, Portugal and so on. The support there, the support given to the producer there reaches up to 1.5 Euros per kilo. The subsidy we have here is around 0.20 Euro cents.

Accordingly, subventions are low compared to the other olive oil producing Mediterranean countries. Moreover, the production costs of producers in the region are higher than their counterparts in those countries. That is to say, many villagers cannot handle their olive fields properly as they do not have the sufficient resources. Thus, Kemal remarks:

> It is not people who grow the olive. It is the tree that grows the olive. If it were people who planted olives they would not have planted this olive. I mean if the tree grows it then people go pick it. And the tree sometimes grows it and sometimes does not.

Indeed, an increasing number of olive farmers do not apply any pesticides or fertilizers to their fields since they cannot cover the costs. Thus, Selim, the director of the Edremit Olive Production Center, argues:

> Our olive production here is anyway almost organic. I mean our use of fertilizers is at ridiculous amounts. I mean in name we use fertilizers but for example we use one twentieth, one twenty fifth of the fertilizer the Europeans use. I mean it's not even a kilo per decare.

The aerial pesticide was applied all over the region in the past. It was first abolished in Küçükkuyu in the beginning of the 2000s, and then in Edremit in 2012. Today, producers who could afford pesticides apply them to their own fields individually. Some also use eco-traps to a lesser extent. However, local producers in Küçükkuyu say that the pesticides and herbicides increased after the annulment of the aerial

pesticide. In this sense, Hayri, a small producer from Bahçedere in Küçükkuyu, says:

> Where is the olive's problem? Previously our pesticide spraying was done by planes. Planes took off from this Burhaniye. They sprayed the Gulf I mean. Now Burhaniye stopped pesticide spraying, stopped aerial spraying, our olives got infected. They have moths. They have cankers. They have this and that. I mean even if it makes olives it sheds them. It sheds the crop.

In the recent decade, the production costs have increased disproportionately, whereas the price of the olive oil has not increased substantially, so that the sale of olive oil does hardly compensate the rising production costs such as labor prices, chemical inputs, and diesel oil. To give an example, at the harvest, some villagers do not even hire women laborers to hand pick the small olives scattered on the field. Instead they simply leave them on the ground because the sale of olive oil obtained from such olives does not afford the daily wage of women laborers any more. According to Selim, wrong agricultural practices of peasants also affect the high production costs. In this sense, he argues that the production costs can be minimized with appropriate agricultural practices in terms of fertilization, pruning, and so on.

> I honestly think our costs are high… There are certain mistakes we make in production…redundant fertilizing, redundant pesticides, well the redundant soil cultivation, redundant pruning. I mean these are things that are done improperly. All of these increase our expenses. They decrease our efficiency.

As Kemal asserts mechanization could also decrease the production costs of olive farmers considerably in addition to increasing the next year's harvest.

> Now in terms of harvest cost the use of machine creates a serious difference. You harvest it for cheaper for one. Two, during automated harvest the shoots of the olive do not break. It breaks less. I mean the olive tree gives fruit again the next year through the shoots from this year… When it breaks it doesn't give fruit.

Naturally, olive trees give lesser amount of olive oil in the next year's harvest. As mentioned above, villagers call it presence year, and absence year. The former means a rich harvest year, and the latter means a poor harvest year. That is to say, producers get a plentiful amount of olive oil in one year in contrast to the scanty

amount in the successive year. These years usually follow each other cyclically.[28] However, there are huge differences between these two successive years in Turkey when one compares it with other olive oil producing Mediterranean countries. Such a sharp decrease in the following season is also seen in the Kaz Mountains Region, and it is rather related to the use of poles for harvesting by most of the local producers. This definitely harms the next year's sprouts, and so it brings about a significant amount of production decrease in the following year. In this sense, Nazım argues:

> For instance, here for years they hit the olives with poles. They had harvested with poles. This harvest done with poles is a tremendous loss for the region, it is very, very horrible and a colossal loss. What have we done? Here is the olive, here it is both giving us produce and also sprouting the buds of the next year on its branches. And what do we do? We take the sticks, we take the poles. There, in order to shake down the olives we hit the tree. We break all the sprouts that would bear fruit the next year. Therefore we topple the olives, we harvest that year, but the tree is done for in the following year because all its sprouts are fallen. Therefore though we had olives that year, the following year we see that the olive tree does not yield any crops for us. So then what comes into play? Periodicity comes into play. There are olives one year and none the next.

Actually, these differences are not so much in the Mediterranean countries like Italy and Spain where olive oil harvesting is made in a more mechanized way. In this sense, Taner from the Edremit District Directorate of Food Agriculture and Livestock makes a comparison between Turkish and Spanish olive trees as follows:

> We couldn't give up the pole model. Of course it does a lot of harm. It is the thing that causes olive branch cancer… Our trees are too tall. Since the necessary pruning was not done in the past, the tree has rambled and overgrown. They have grown stunted olive trees. I mean it is at a height where they can pick the olives without the need to climb, to set up a ladder. We have such olives that they have become like poplars. They're not trimmed, they're not pruned. I mean they thought it would give more olives when it grew taller.

Obviously, mechanization is not prevalent in olive oil producing in the region, though the use of machines instead of manual labor force have already took place to some extent. Machines are mostly used for pruning olive trees, or gathering olives

[28] In some years, there can be exceptions to this cycle. Then, the difference between the harvest years is insignificant.

at the harvest. In this sense, the Edremit Chamber of Agriculture sells olive picking and harvesting machines to increase the mechanization in olive oil producing. 700-800 producers from 6400 members of the Edremit Chamber of Agriculture have olive harvesting machines, and it is estimated that 15 % of the producers in the region use these machines. Yet, harvesting with machines has not been common among local producers. Many peasants still prefer conventional harvesting method of hitting olive tree with a pole. While some consider that it is not worth harvesting with these machines, others cannot afford it at all. As mechanization has not become widespread among local producers, this also increases their production costs than their counterparts in other countries to some extent. In this sense, Naci argues the following:

> Well, there is a product cost. We harvest manually, we don't have much automated harvesting. Machines are not used much during harvest. And this has a significant cost. The price of our aforementioned product in our export here, because our costs are expensive and there is little subsidy, it does not amount to much. That is, in export we cannot, we fall short because we produce at high costs. Therefore it has not been possible to export to the European Union over the last couple of years. It is because the prices over there are low. We mostly try to, strive to sell olive oil to countries like Japan, the States, Russia, but as their prices are low, we experience very serious difficulties in export.

Tractors are also not widespread on the southern side because a great amount of olive groves are on the mountainside. Thus, they can neither be used for tillering nor applying pesticide in most of the forest villages due to the topography. Using of tractors is mostly limited to transporting the olive sacks from the olive groves to the factories.

Another factor having an effect on the yield of the olive fields is the irrigation facilities. As most of the olive fields in the forest villages are located on the slopes of the mountain, the irrigation is rather limited to the olive fields at the levels. In this sense, Nazım asserts:

> I mean, what we have here is olive cultivation both on flat planes and on terraced slopes. Irrigation zones have been placed in very narrow areas. About this, for instance, in Avcılar there is a set of irrigation canals, a certain section is being irrigated. Some places in Kızılkeçili Village are being

> irrigated and also there in Zeytinli certain places are being irrigated. I mean, let me put it this way, it is about 30% that can be irrigated.

The Zeytinli-Mehmetalan Irrigation Cooperative is one of the rare irrigation cooperatives in the region. Some of the olive groves in Zeytinli and the Mehmetalan Village are irrigated via a water channel established by the irrigation cooperative. The mukhtar of Mehmetalan explains irrigation facilities in their village as follows:

> Zeytinli-Mehmetalan Irrigation Cooperative has a dike where the Hızır Camp is located. From there through the canal, water is retrieved to irrigate the olive plots; via the canal it goes to the olive fields.

As the irrigation facilities are very limited, most of the villagers do not apply for the funds given to the dripping irrigation projects by the Ministry of Food Agriculture and Livestock. According to the Edremit Chamber of Agriculture, 10 % percent of the local producers applied to such projects in the past. Currently, a small amount of olive groves are irrigated in the region. Even though olive oil production can be done without irrigation, irrigated olive groves produce more harvest than the non-irrigated ones. In this sense, Selim suggests that dripping irrigation method could be adopted in the region.

> Well now olive groves are usually planted on very inclined lots. Of course irrigation is not easy in such places. But of course there is a system called drip irrigation. With this system it is possible to irrigate all these olive groves around here. Kazdağları is one of the most important catchment basins of the world. I mean there is no such thing as there is no water in Kazdağları. There is an abundant amount of water in Kazdağları. If this water could be organized, all the olive trees on its skirts—with the condition that not even a single one is left dry—can be watered with drip irrigation. Of course irrigation would increase the yield considerably.

Moreover, irrigation is also vital for the plant health. Even though olive tree is one of the dry-resistant plants, it also needs water during summer seasons as Taner points out:

> I mean even though it is an area that periodically gets rain during the summer it doesn't anymore due to climate change. In these periods the plants have a serious need for water. We even saw at times the olives shrivel on the trees as if you have held them to a heat fire. This is due to lack of water. I mean those irrigation projects should be developed in the region.

Finally, the situation of organic olive oil production will be examined shortly. Organic olive oil production was started in Ayvacık in the early 2000s. The Küçükkuyu locale in the Ayvacık district was declared as the organic agriculture zone by the then Ministry of Agriculture and Rural Affairs. In this sense, TARİŞ has been the leading organization supporting organic olive oil production in the region. At the beginning, it bought organic olive oil from its members at a much higher price than the inorganic olive oil in order to promote organic production among producers. Until 2007, organic olive oil production was subsidized well by the state. For example, in the 2005-2006 season, the price of extra virgin inorganic olive oil was between 6-6.5 TL, and the price of extra virgin organic olive oil was 10 TL. There were 181 small farmers in various villages of Küçükkuyu who made organic farming in that season. However, this number decreased considerably in the following years. In the 2013-2014 season, there were only 89 members who practice organic farming in TARİŞ Küçükkuyu, and these producers were mostly from the villages of Ahmetçe, Arıklı, and Nusratlı.[29] Obviously, the economic incentives with respect to olive oil did not spur organic producing in the region, as TARİŞ did not proceed with such a price policy in the long run. Besides, local producers did not receive any tax reliefs at all. In this sense, Burhan, an in-migrant who produces olive oil in the Adatepe Village argues:

> Organic farming has a certain difficulty. Here while buying this organically produced crop from the villager you must give a higher price. Then—I think it was done in the Netherlands—the state imposes a different amount of tax on organic farming and inorganic farming. Here a different amount of tax should be introduced, and the price should be raised so that it is supported and people can say "So, it is lucrative" and continue doing it.

Moreover, getting an organic production certification from the private certification firms based in the metropoles costs too much money for small farmers, and many peasants cannot afford it at all. In this sense, Jane, an environmentalist living in Havran from the environmental organization Emanetçiler, tells her experience in the following passage:

[29] The statistics are taken from the TARİŞ Küçükkuyu in December 2013.

> The disadvantages are the certification system is expensive. So that means that the small farmer doesn't have much chance yeah. We worked with a group in Balya. It was a group of villagers…And there was enough collective organization among them that they made a decision: "We wanna go for agri-organic as a village." However, in order to get a loan from Ziraat Bankası…to get the certificate …they ultimately needed to show real estate in Balıkesir to be able to do this. And, I mean, if you are a small farmer, you're not gonna have real estate in Balıkesir, you know. So it was almost like the system is not designed, but it's structurally very difficult for a small farmer to get certification.

In Edremit, the pesticide struggle was made aerially until 2012. As all the olive groves were directly exposed to the chemicals in this way, the fields were not suitable for any organic farming at all. Thus farmers could not do organic farming in Edremit until recently. In this sense, even producers in Küçükkuyu where aerial applying of pesticide was given up almost a decade before could face with pesticide problem. Rıfat says the following in this regard:

> Now we cannot do fully organic farming, let me say that from the start. Even if we did organic farming anyways we cannot get certification because we are surrounded by loads of things that ruin the organic system. Either someone has used pesticides 300 meters down there, or a housing complex has done who knows what over on that side. I mean definitely in such a structure unless you go to a remote mountain top, in such an environment it is not possible to get an organic certification.

In this sense, Jane also remarks similarly:

> Let's say you wanna have an organic farm, a traditional production, the chemicals will come on to your land. It's very hard to control that. You can't control that.

However, it is wrong to conclude that all producers struggle with pests. To give an example, Tolga, who is an environmentalist from Buğday making organic olive oil producing in Küçükkuyu, did not experience any pest problem although he did not use any ecological apparatuses against olive fly.

> We are not struggling right now… there are also ecological apparatuses against the olive fly. You know the sticky things, you hang it and the fly sticks on it, etc. Plus it's not like no pesticide is used in ecological or organic farming. You know there are natural pesticides. I mean if need be we can use those. You know the things that the certification institution gives us. But for instance so far we have not used it at all… We don't have any neighbors around us, etc. You know the odds of contracting a disease are low.

Thus the location and surroundings of an olive grove is very important in terms of organic olive oil producing. In most cases, producers are in need of applying organic methods for struggling against pests. In this sense, Taner from the Edremit District Directorate of Food Agriculture and Livestock mentions some of these methods against olive fly as follows:

> They anyway set natural traps. There is the Spanish trap for instance. They have developed it in their own way. They put ammonium sulfide in it. Put an attractant. The fly comes, falls inside it, cannot get out. There are eco-traps. They put Deltamethrin on it, lures the olive fly. When the olive fly comes, when it flies there, it is caught.

But these organic methods for struggling against olive fly or other pests are not adopted by most of the producers. Neither the agricultural directorates nor TARİŞ promote such methods among farmers too. According to Rıfat, organic olive oil production is understood as doing nothing by villagers.

> Now look, they used to claim it was organic in the Ahmetçe area, whatchamacallit, that Sazlı, Kozlu around those parts. As a matter of fact there was not much disinfecting in the past three four years. And it suited the villager fine. The product does not bring in money. You don't disinfect so you are free of the medicine cost. But ecological or organic production does not mean abandoning the crops, the tree to nature. There are interventions, protections, if need be organic disinfectants to be used as well. But since such things, that information has not been given to the villager as a foundation. "Do organic farming!" What does that mean? Go sit at the coffeehouse… Therefore, here the villager has abandoned the job calling it organic farming.

As long as villagers do not work on the organic olive fields, this results in a bad harvest in most cases. That is to say, practicing organic farming brings about a sharp decrease in the total amount of olive oil. Clearly, the ingredients of the soil are also important for good harvest. In this sense, Rıfat points out that one can easily discern differences between the organic olive fields and the inorganic ones:

> There are one or two fields that do organic farming for TARİŞ, they are on the way up to Bahçedere to the right. "We do organic." You look at the entire mountain, the trees over there are yellow, the others dark green. There is a shade difference. Why? Because there is something missing in that soil.

With regard to this issue, Naci asserts that olive trees need to be supported with extra elements as the soil is lacking these elements:

> There is nitrogen, phosphor, potassium in the crop it yields. I am talking about the contents of an olive fruit. If you don't give it what will it do? …This is a cycle I mean you can't do anything about it. You will give it from the bottom so that it will give you its fruit from the top.

As he states in the following, the trees which are get used to fertilizers could lose their fertility drastically when chemical fertilizers are not given at all.

> The trees here got used to the fertilizer. I mean without that chemical fertilizer the trees here do not have good yield. The villager would be even more aggrieved. The olive tree is actually a tree suitable for organic farming but your yield would suddenly drop very significantly.

In fact, organic farmers can have great losses even if they use organic fertilizers. For example, Ali, an olive farmer from the Bahçedere Village, says that he experienced a sudden decrease in the yield when he made organic farming in the past.

> I did it two years ago. It stopped the tree and for a year it didn't yield crop to be collected. From the place that used to yield 200 sacks of olives I got 50 sacks... I gave its fertilizer. I bought the organic fertilizer from Tariş.

This problem is also exacerbated by agricultural practices of producers. In the past, peasants were using their manures at their olive groves. In this respect, the mukhtar of Yeşilyurt who is also an olive oil producer mentions as follows:

> For instance let's say 50 years ago or 40 years ago, there were not these artificial fertilizers that we call European fertilizer. What sort of fertilizer was there? There was manure. There was no ready-made fodder. The guy was feeding his animals, horses, donkeys, excuse my language, his sheep, goats with wheat and barley. He was throwing this manure at the foot of the tree. That product, there, that is organic.

Yet, peasants could not use manures any more as pasturing almost came to an end in the region. As organic fertilizers are too expensive, organic producers could usually not apply these fertilizers at their olive groves. At the end of the day, the land is simply not enriched by supplying the basic elements. Thus one of the serious problems faced by villagers in organic olive oil producing becomes the drastic decrease of the yield.

Today, it seems that organic farming has lost its appeal among the local producers for the most part. Producers do not want to have any loss of yield, whereas such a loss seems indispensable once an olive field is turned to organic farming. Farmers experiencing these losses in organic production are thereby not motivated at all to make organic farming with such low price incentives. Obviously, they do not follow organic practices primarily because of material concerns. That is to say, the end of price subsidies given by TARİŞ led farmers to orient towards conventional farming. Most importantly, a comprehensive strategy concerning organic farming has not been formulated by the public agencies, which could have spread organic farming throughout the region. Consequently, local producers could not find any motives for practicing organic farming.

It is clear that all of these factors make the production costs of local producers greater than the European olive farmers. As Keyder and Yenal argues, "The impact of globalization on agriculture has been to finally subordinate farmers, their resources and all flows of trade and credit to the workings of the market."[30] Therefore, they are definitely in a disadvantageous position in the market, and it is not easy for them to deal with the workings of the market without a comprehensive development policy taking into account these problems of olive oil producing.

4.3. Agricultural Production in the North of the Kaz Mountains

The region between the northern mountainside of the Kaz Mountains and the Skamenderes Creek (*Karamenderes Çayı*) is called as Derekolu. There are many villages scattered around the Skamenderes Creek in this region. The villagers living in these settlements are traditionally engaged in pasturing, forestry, and agriculture. Currently, most of them still earn their livelihood from these works in addition to other off-farm works. Most strikingly, agricultural production of these villages has diversified over time. It was rather limited to the cultivation of cereal crops and

[30] Keyder, Çağlar and Zafer Yenal (2011), "Agrarian Change under Globalization: Markets and Insecurity in Turkish Agriculture," *Journal of Agrarian Change*, 11 (1): 60.

grapevines before the cultivation of fruit crops in the 1970s. And peasants on the northern side were poorer than the ones on the southern side –or the other side as they call it- until the 1980s. Thus, they were also working as seasonal farm workers at olive harvests on the southern side at those times.

Today, pasturing is done extensively in the villages of Ayvacık and Bayramiç, as there are open pastures for grazing animals in these districts. The accessibility to these pastures is very important for herders since they raise stocks of cattle or sheep and goats in these pastures. In this sense, pasturing has also been practiced more or less in almost any village in the Derekolu region. Especially villagers from Toluklar and Dağoba, which are settled on the northern slopes of the Kaz Mountains, are much more engaged in pasturing. The distinctive feature of animal husbandry in the Derekolu region is that it is usually done in the pastures. As stocks are taken to the nearby pastures by a shepherd in the daytime during spring and summer seasons, animals need foddering only in the winter time. Yet, pasturing is on the decline in the villages of Ayvacık and Bayramiç. In this sense, a veterinarian from the Ayvacık District Directorate of Food Agriculture and Livestock asserts that the number of herds decreased in the region in comparison to the past.

> In the villages the number of animals people had was different then. For instance, there used to be more herds with 100 animals, 80 animals. Over here in our region and in Ezine, Bayramiç area as well the number of small cattle is very high. What my grandfather and others told us. They used to get thousands of sheep from one village only… Of course what I am talking about, what my grandfather told us is way back twenty or so years ago. You know back then it was better. But they say there is a gradually decreasing graphic in the number of animals… I mean it changes from village to village but generally it is 30-40 animal herds. I mean that is the population of a herd. Ok there are herds of a hundred too but I mean those are very few.

For example, the Kızılelma Village is one of the villages on the northern slopes of the Kaz Mountains where pasturing was rather done extensively beforehand. Barley and oaf were thereby cultivated for feeding animals in the past. Mehmet, an old villager from Kızılma, recounts those days:

> Fodder used to be fed to the ox working in the fields. Vetch used to be planted there. Lentils, vetch. These were fed to the ox. Not to the cattle, goat, or sheep. They were on the hills.

Currently, fresh fruit producing seem to take place of grain producing and pasturing in the forest villages of the Derekolu region. To give another example, the Serhat Village, which is also located on the northern slopes of the Kaz Mountains, apple production replaced animal husbandry in the recent decades. Thus, a villager from Serhat tells that:

> In the past we used to… we had loads of cattle here. Everyone had herds of livestock. We turned to fruit I mean.

But there was no extensive producing of fresh fruits up to the 1980s. To a great extent, wheat was traditionally produced by the villagers either for their own consumption or for exchange with other villagers on the southern side of the Kaz Mountains. There were thereby many water mills around the villages to grind wheat beforehand. İhsan, a villager from Kızılelma, recalls those times:

> In the past they themselves used to produce the wheat that they eat. Of course then there was wheat everywhere. There was a watermill. It was across from that village. It was right across there. But now even its site is gone.

As there were no fresh fruit producing before, crops were rather cultivated in great amounts, and they were reaped by combine harvesters. Thus, the mukhtar of the Serhat Village says:

> Twenty five years ago everyone was farming. For one month the combine harvester used to work in the plantations here… We used to load them on animals. They would unload it from there.

Although, in some villages like Kızılelma and Karaköy, wheat, barley, and oaf are still cultivated in smaller amounts, currently, apple, nectarine, and cherry production is rather made prevalently in the region. Before the fruit production started, the villagers on the northern side were poorer than the ones on the southern side. Thus, they were working in the villages on the southern side at olive oil harvesting as farm workers up to the 1980s. But today, most of them no longer work as seasonal farm workers since their economic conditions have improved over time.

Another traditional agricultural product that was cultivated in the Derekolu region was grapevine. Especially in the villages such as Gedik, Sarıot, Çavuşlu, Daloba, Yassıbağ, Serhat, and Beşik, grapevines were widely grown traditionally. In the past, grapevines were mostly produced for making molasses. After the establishment of the Tekel factory in Çanakkale, different varieties of grapevines were usually cultivated for winemaking. Especially in the 1970s and the 1980s, the harvest was bought with support prices by the TEKEL factory. That ensured a steady development for the villagers as their production was subsidized in any case. Thus viniculture was popular among villagers at that period. Meanwhile, the factory of TEKEL moved from Çanakkale to Çavuşlu Village in the 1990s, and subsequently it was privatized in the second half of 2000s. After privatization, the factory was first sold to a private beverage company in Turkey, and then it was sold to a foreign beverage company. As a result, the preferential prices given by TEKEL were abolished completely. Moreover, the machines in the factory was uninstalled and transferred to another place lately. In the last two seasons, the firm did not even process grapes in the factory in Çavuşlu. In this sense, the mukhtar of Çavuşlu, who is also a grapevines producer, tells:

> Grapes would be processed here. Price would be quoted. They would press the grape. They would take the juice of the grape to Tekirdağ or to Manisa to Alaşehir. As wort or as wine… But for the past two years they are not doing that anymore either... If I'm not mistaken there are 2400 ton galaris chrome tanks here. Press it here. Meanwhile you can send the produce you initially processed. But what is being done now? The grape is being transported… The village was benefitting from the pulp or the neighboring villages were. Grape has pulp, its seed and peel. This was made use of as animal fodder. Unfortunately now all these are no more, finished.

Thus, producing grapevines does not have any attraction for most of the villagers in Derekolu today. It seems that local grapevine producers have become much more vulnerable to the fluctuations of the market due to the privatization. As a result, many grapevines are being uprooted these days, and fruits such as apples and cherries are planted instead.

Evidently, peasants are engaged in fresh fruit production more and more in the recent decades. Apple production occupies the first place among other fresh fruits.

In addition, peach and cherry are also produced in large amounts by the villagers. Most of the orchards are mixed ones in the Derekolu region because peasants cultivated apple, nectarine, and cherry trees in the same field. Thus, one has different fruit trees in a single orchard. In this sense, Faruk, the head of the Evciler Village Agricultural Development Cooperative, states the following:

> It takes longer for the apple to grow. It starts to yield crops in five to six years. Peach on the other hand starts in the third year… our irrigable plot is limited… When making a garden, as peach matures fast and starts to yield produce sooner, you either plant rows of apple peach apple peach or a row of apples beside a row of peaches… Later on you pick out the peaches in the row and the field is left to apples. So the gardens are always mixed since you figure you will continue to get proceeds until the apple grows. But the pesticide used for the apple is bad for the peach.

Similarly, Hakan, the chair of the Bayramiç Chamber of Agriculture, also sees the old style mixed fruit orchards as a wrong practice.

> In the past our elders planted one row of apple, one row of peach, one row of cherry. Well, they made a mistake. Time to apply pesticide on the apple is different. That of the peach is different, that of the apple is different.

In fact, if villagers did not apply pesticide, mixed orchards could be an advantage for them as one would not depend on the singular production of any fruit species. The villages in the Derekolu region are well-known for their apple production. The apple production was first started in Evciler in the Derekolu region. Today, it is extensively done in Evciler as well as other villages such as Çırpılar, Yeşilköy, and Karaköy. For example, there are approximately between 30,000 and 40,000 tons of apple production only in the Evciler village.[31] Old species such as starking and golden is usually cultivated in those villages. While golden is mostly produced in Evciler, starking is rather produced in Çırpılar, Yeşilköy, and Karaköy. In this sense, Hakan states:

> our Bayramiç's Derekolu part is all typical trees. But now the typical tree has lived out its term. 45 years old trees, 50 years old trees. They have exhausted their lives. The product quality has decreased. Labor costs are high. Input costs are increasing by the day… I mean what I am trying to explain is that

[31] About 5 % of the total apple production of Turkey is done in Bayramiç.

> we must move on to new varieties. There is some trouble in Derekolu. The producers won't move on. It is continuing with techniques passed on from their fathers. They cannot keep up with technology. Here they have to renew themselves a little.

However, the new hybrid species such as Fuji, Cripps Pink (Pinklady), and Jeromine have also been cultivated by the producers in the recent years. Erhan, the head of the Çırpılar Village Agricultural Development Cooperative, says the following in this regard:

> For example, now at the very least 10,000 apple saplings are planted a year in this village if not more. Nowadays people are giving up on the usual trees. It's all about the stunted trees. Those are more fruitful and you plant it this year and start to get yields two years later.

Another apple producer from Çırpılar also says that there are drastic differences between the yields of the classic species and the new ones. He tells that young producers who started to cultivate new species have surpassed the yields of the classic orchards in a very short time:

> They exceeded our tonnages. For instance I have 25 decares. We make 50-60 tons of apples. He has already been making 80-90 tons of apples in three four years. There are some who make 100 tons of apples. Because they are the stunted kind.

In the region, there are cold storages in order to store the harvest for longer periods. In this sense, there is a cold storage in Bayramiç with a capacity of 9000 tons. Besides, the agricultural development cooperatives in Evciler, Çırpılar and Yeşilköy also have their own cold storages where the members of the cooperatives can keep their products by giving a fee. The capacities of cold storages in these villages are 7000 tons, 5000 tons, and 4000 tons respectively. To have a cold storage in their village is definitely an advantage for peasants since they have the option to keep their products in the cold storages if merchants offer low prices to them at harvest time. Thus, they can sell their products at higher prices later on. However, Faruk points out that the cold storage lost its advantage in comparison to the past.

> In the past—the make of cold storage is 1982, there, the first cold storages with 1200 tons, 1500 tons—cold storages were not this common. I am talking about entire Turkey, nation-wide… In September buyers come here.

> What is the going price of apple? If it was 1 lira that day in the market, it would be 2 liras if you put it in the cold storage. This was fixed like that. It would never change. Why was it so? As I said there were no cold storages. Until the new years the apples on the market would melt, be sold, consumed, gone. Then it would be the turn for the cold storages. But that's not the case now. If you go towards Isparta Eğridir there is a cold storage on every corner. In places where production is massive, if you go to Konya, there is a cold storage on every corner.

Villagers in the Derekolu region usually sell their products to the merchants from big cities like İstanbul and İzmir. But apple production in other regions of Turkey also affects their sales seasonally. In other words, they are also dependent on overall apple production at a national level. To give an example, in the Karaköy Village where about 3000 decares of land are worked for apple producing, peasants, who have already sold their harvest to apple merchants regularly coming there every year, could not sell their products to these merchants in 2013 due to the abundance of apple production in other regions of Turkey. In this sense, the mukhtar of Karaköy asserts the following:

> There were very few merchants. That is our given merchants, those who come every year came again. But I mean there are for instance some from İstanbul, from İzmir. There are big merchants. They did not come this year because around Amasya, Isparta it was more abundant with apples and higher quality apples there were. The merchant had turned there somewhat.

Obviously, marketing is one of the main problems of the producers in the Derekolu region. None of the development cooperatives in Evciler, Çırpılar, and Yeşilköy villages market their members' products. Hakan tells the following in this regard:

> Now we can produce the merchandise but we don't have the packaging. We will give our producer a training on this subject. We are always saying this. I mean merely getting a brand for a product is not enough. Here the producer organizations, cooperatives were unable to do the necessary work in terms of marketing. There are very serious cooperatives. But there is no marketing and organizing.

Besides, an excessive amount of pesticide has been applied to the orchards especially in apple producing. In this sense, Hakan points out that there are so many tractors in the Derekolu region which are mostly being used for applying pesticide, transporting harvest, and so on.

> In Derekolu there are so many tractors in front of each house, so much pesticide is used. There is an excess of machinery. I always say this. I mean both the one who has 3 decares of land and the one who has 100 decares owns dual-thrust tractors. This is a wrong policy. I mean the tractor, we should use the equipment of common use together. Back in the day three people in one village would have tractors. Three people would do the village's work by way of rental. I mean buying services as it is called now. Okay? I mean they used to. But now it is no longer like that. Everyone has one pulled up by their house, they're all rotting away.

In Bayramiç, good agricultural practices (GAP hereafter) are promoted among the villagers by the Çanakkale Provincial Directorate of Food, Agriculture and Livestock. 25 Turkish Liras per decare were given as a subsidy to the farmers in 2013 in this regard. In addition, the fee paid to the private supervising institutions was also covered by the agency. In the Derekolu region, good agricultural practices were followed by 20 peasants in Evciler and 10 peasants in Çırpılar villages in 2013. These producers have to carry out certain procedures in their fields in order to be eligible for a GAP certificate. Kamil, an agricultural technician from the Bayramiç District Directorate of Food Agriculture and Livestock explains good agricultural practices in the following terms:

> Good agricultural practice is to record every work the farmer does. That is the farmer writing down every single thing he does. Pruning, touring the garden, using pesticide, which one he used when, when he irrigated… For instance besides this there should be a site for pesticide preparation. There should be a toilet, a sink. The date of latest spraying should be written down, there should be a warning signboard at the door entrance. Residues should be in the residue barrels locked away. Used and leftover pesticides should be stored away in steel cabinets. Workers should have a resting area… There should be maintenance of instruments and equipment. That is, everything from A to Z should be sterile and on the record.

Private institutions such as Icert or CRT check producers in the field two or three times in a year. Thus, he states the following:

> There are institutions that audit good agricultural practice… A sample is taken from the very last fruit. It is sent to the residue laboratory. Is there residue or not? The stages of all that are checked out. Then those independent institutions give a good agricultural practice certificate. And with that certificate you should be able to sell your product a little better and at a higher price or at least sell it in good markets. But it is not implemented right now.

As farmers having certificates could not sell their products at higher prices than the others, certificated production has not become widespread among the villagers yet. In this sense, Faruk asserts:

> Good agriculture is also being supported but not satisfactorily. The man does not do this job, the good agriculture in order to receive subvention. He is doing it to be able to sell his product as a better, certified product. But traders never come and ask "Hey do you have certified produce? Do you have good agriculture product?" Or say I do good agriculture and you do not. I don't have a chance of selling earlier. I mean there is no such demand.

In GAP, peasants have to make analyses of soil. Salim, an apple producer from the Evciler Village states:

> As of November we get the soil analysis done in Çanakkale at the laboratory. Depending on its results, I also got these done as GAP. In our village too we are among the ones that look like GAP. Depending on their results we use soil fertilizing, chemical fertilizer, manure.

Thus, chemical fertilizers are not banned in good agricultural practices at all. Rather, they are applied in a controlled way. In this sense, Faruk argues as follows:

> In order to protect the environment you don't necessarily have to do GAP either. That's another point. Now the medicine licensed for apples, it is licensed for apple with the Ministry of Food Agriculture and Livestock decree number so and so. But a synthetic medicine. These medicines are exported from abroad. It is no problem for the seller… Not disadvantageous for the user either. … But that is not the case for the ecosystem. I mean that is not the case with the ecological balance because you are killing it all. It is hard to reverse that. I mean all of this is a system of chain reactions.

Villagers in the Derekolu region are mostly small farmers having lands varying between 10 and 50 decares. Yet, the district governor of Bayramiç tells that apple production must be improved in this regard. Thus, he suggests that contract farming should be made, and big farms should be founded in the region:

> Apple growing activity should be rehabilitated, improved. The citizens should be oriented towards bigger and organized and homogeneous apple orchards… or for instance a factory says "I guarantee to buy the produced apples. You will produce for me, you will produce according to my conditions." Now it seems to me this is the kind of apple farming that should be done.

Obviously, agribusiness companies have been gradually replacing the smallholders in the agricultural sector especially in the Western countries.[32] In fact, the increasing development of an agro-industry brings about unfavorable conditions for the smallholders in most cases as they become dependent on the agribusiness companies from seeds to fertilizers.

> Fertilizers, specially bred seeds, are now, along with machinery, generally made in factories and sold to farmers. Chickens and other 'farm' animals are produced and reared in circumstances resembling factories. Other goods that might in the past have been produced in homes or in scattered small-scale premises are made in increasingly centralized or concentrated factories.[33]

Thus, farmers are deprived of their "freedom to farm"[34] increasingly because these companies manage production processes by producing any agricultural inputs. Remzi, an environmentalist from the local environmental organization GÜMÇED states the following in this regard:

> In the past the villager used to save his seed. The following year he would plant seeds of the same wheat. Now there is no such thing. Hybrid seeds through Cargill committing suicide… Despite the scores of times Council of State and High Courts passed decisions of closure, adopting special laws in the Parliament, it continues its somewhat illegal existence on the banks of the İznik Lake. What is an American's seed factory doing in Turkey and it is saying "You absolutely must plant this seed" in Turkey.

As Aslı, one of the founders of Buğday Association for Supporting Ecological Living (hereafter Buğday),[35] asserts in the following, production processes are totally commodified lately.

> Every stage of production depends on the money. He buys the seed with money. That seed anyways is not a seed that can grow on its own. Chemicals

[32] Dickens, Peter (2004), *Society & Nature Changing Our Environment, Changing Ourselves*, Cambridge and Malden, MA: Polity Press, 100.

[33] Ibid.

[34] Ibid.

[35] *Buğday Ekolojik Yaşamı Destekleme Derneği* in Turkish. Buğday is a well-known environmental organization, which is active all over in Turkey. They have an office in Bahçedere Village in Küçükkuyu since 2007. They also opened the Çamtepe Rural Center for Ecological Education and Research there in 2010. See the website, http://www.bugday.org

> are needed, gets that with money. Then there is the fertilizer, the pesticide… That seed loses its productivity every year, after a while you must buy seeds anew. Because you have to buy that seed you will have abandoned your own seed. You abandon your ancestral seed that can renew itself. First of all the seed should continue to be planted, it is not good for the seed to be left aside waiting, it loses its quality. On the other hand, you are abandoning the productive seed, the one that will save you from dependency.

In this way, local seeds are being discarded by the peasants, and hybrid seeds are cultivated by the peasants. This makes producers much more dependent on these companies because of two reasons. First, these seeds lose their productivity in the following seasons, so that one is left with no choice but to buy new seeds. Second, these modified seeds become susceptible to pests, and producers need to use pesticides or herbicides intensively.

To some extent, similar processes also take place in the Kaz Mountains Region especially in terms of fruit producing and animal husbandry. The big farmsteads of agribusiness companies have already been established in Ayvacık and Bayramiç in this regard. At present, a considerable amount of land are being bought up by these companies in order to establish new farmsteads. In the next section, agricultural policies are discussed at length by taking into account transformations on the southern side of the Kaz Mountains.

4.4. Discussing Agricultural Policies in the Local Context

The Kaz Mountains Region belongs to the Mediterranean agro-ecosystem. According to Butzer, "The basic Mediterranean agrosystem that can be documented from Greek and Roman sources, or verified by ethnographic and archival work, was remarkably sophisticated."[36] He describes four components of this agrosystem as follows:

> a) outfield cultivation of a selection of grains and legumes, suited for local soils and climate; b) infield tending of various green vegetables and condiments, in kitchen or market gardens; c) orchard crops, not only

[36] Butzer, Karl W. (1996), "Ecology in the Long View: Settlement Histories, Agrosystemic Strategies, and Ecological Performance," *Journal of Field Archaeology*, 23 (2): 142.

> grapevines and olive groves, but also an array of other fruit trees; and d) livestock, among which sheep, goats, or pigs were more commonly kept than cattle, with the exception of draft oxen.[37]

More or less, one can see all of these components in the Kaz Mountains Region too. As olive oil production is overwhelmingly done in Edremit and Küçükkuyu, agricultural production looks like a monoculture on the southern side of the Kaz Mountains. In fact, the topographical and climatic features enable to cultivate a variety of crops.

Bostancı and Çıkrıkçı plains in Edremit have fertile lands where different types of fruits and vegetables are produced in smaller amounts. For instance, pears, figs, mandarins, and plums are grown as fruits, while beans, corns, and spinaches are cultivated as vegetables. The notable products in terms of the quantity and the cultivated land are fig, tangerine, tomato, and wheat in Edremit. In Appendix G Table 3, the corresponding statistics for these agricultural products between 2006 and 2009 are given.[38] According to the head of the Edremit District Directorate of Food Agriculture and Livestock, harvesting can be made three times in a year in Edremit:

> Three crops can be cultivated in our region. The climate conditions are favorable. Now for instance in spring there is beans. When that's finished you can do corn silage, fodder. Once the corn silage is cut, we can produce our winter vegetables, cauliflower, broccoli, spinach and similar produces.

However, agricultural variety has decreased considerably on the southern side in the recent decades. That is to say, local producers have become much more dependent on the production of olive oil. In this sense, Nuri, a retired teacher in his eighties from Tahtakuşlar, states:

> Now here since our childhood all sorts of products used to be grown on these lands. Whatever grows in the soil as a crop, it all grew here. Ranging from vetch to wheat, oat, barley, okra, everything was grown here. What happened? The wrong policies of Ziraat (Agriculture) Bank, soil erosion,

[37] Ibid.

[38] Besides, apiculture is also practiced in the Kaz Mountains. In Edremit, there were 200 beekeepers and 19,000 beehives in 2010.

> insufficient money given for terracing. Then what happened? On this aslope land the soil erosion razed the soil.

Viniculture is also no longer practiced in the southern side of the Kaz Mountains though it was done extensively by the Greek villagers before the population exchange. Afterwards, grapevines continued to be cultivated in some villages such as the Avcılar Village. The mukhtar of Avcılar mentions it in the following terms:

> A long time ago they say there was some over there above the village. Not a lot either, not too much. I mean enough to make your own molasses to eat, to sell your grapes in crates.

Nevertheless, local producers do not cultivate grapevines on the southern side of the Kaz Mountains any more. In this sense, Engin from Küçükkuyu states the following:

> Why for instance are there no grapes in this region? I mean there is no winemaking. I mean over there in Bozcaada there is… There are some vineyard carcasses but now it is finished. Is this diversity? Yes it may be. It should be done. The climate is suitable I think.

If one goes out for a walk through the olive fields in the forest villages, it is seen that peasants planted many fruit trees such as pears, figs, or pistachios inside the olive groves. But these orchard trees currently give fruit in very small amounts in comparison to the past. Especially in the 1960s and the 1970s, there was a considerable amount of pear production in addition to olive oil production. In this sense, local species such as *Ayasu* pear were massively produced and sent to the big cities then. A villager recalling those days tells that he was bringing 20 tons of pears by mules to the village square in Çamlıbel in order to sell it to the merchants:

> In the year 67 or 66 there was a place called Kızılçukur on the shore, approximately an hour from here. Back then I pulled 20 tons of pears with mules. 20 tons of *ayasu* pears from there. With two single mules, and two animals, no other workers. I used to do two rounds. I used to bring one in the morning, and then at noon. In the morning very early I'd wrap it and come down here. From here, in cases *ayasu* pears would go to İstanbul on motorcycles or buses, there weren't so many trucks back then. Not a single pear is left now.

For a while, pear production was secondary to olive oil production in the Kaz Mountains Region. The *Ayasu* species, the most popular one planted in the region, was sold by the villagers in large amounts as an agricultural commodity until the 1990s. In this sense, the mukhtar of Avcılar mentions:

> There are no more pears left. After the Chernobyl accident all pears of our region dried up. At least 50 tons, 60 tons of pears per year would be produced in our village. Now there is no pear, not even to eat. All the pear trees dried up.

It is common to hear from villagers that pear trees in the region died after the Chernobyl nuclear accident. Besides, the locals also assert that the thermal power plant or the sulphuric acid plant, which were established in Çanakkale in the 1990s, had a devastating effect on the trees. They claim that as the northeast wind blows dominantly in the region, the wind brought acid rains to the southern side. Thus, the mukhtar of Çamcı blame the sulphuric acid plant in this regard:

> All the acid rains of the sulphuric acid factory, of that Etibor and stuff, came here. The world's best pale pear, the most beautiful *ayasu* pear used to grow on these lands. During these months, two, three trucks full of pears, figs used to be wrapped here every day. It would go to the market. But look at what has become of us now. It is finished.

The figs of the region are also famous for its aroma and taste. In this sense, Onur from Çamlıbel states that TARİŞ was making special treatment to the figs produced in their village:

> They say at İzmir TARİŞ, in the 70s when you said Tahtaköy figs, they wouldn't even make you get in line. They wouldn't make the figs from here get in line; they would immediately bring them to the front. Tahtaköy is very famous, it is our old name here

However, villagers also get less harvest from the fig trees in comparison to the past. In this sense, the mukhtar of Tahtakuşlar says that he has been having poor harvest for a while.

> The figs are dried up. That is, there is low yield. But even though we applied to the District Directorates of Agriculture, to our Chamber of Agriculture countless times, we could not get any results all these years… For instance I myself used to sell around one tons of fruits. Right now I am buying 50 kilograms, and that is for me, to eat in winter… I mean for this fig there

> should be, I think it would be beneficial for the District Directorate of Agriculture to protect this fig which is a brand of this region.

Similarly, the mukhtar of the Ahmetçe Village in Ayvacık also mentions that orchard crops such as pears, figs, and grapes are no longer abundant:

> For instance during my childhood, there was an abundance of pears around here. There was an abundance of figs. They used to get trucks full of pears from here. They would be transported to İstanbul or Thrace. Same thing with figs. Same thing with grapes. Now these fruits are no more, they are all finished. Now we buy the pear, we buy the grape.

Besides, pistachio trees also lost their productivity in the recent years. These trees were mostly planted in some of the villages of Ayvacık and Edremit in the 1980s, for agricultural directorates promoted farmers to increase the agricultural variety. Once it was so popular that even olive trees were uprooted to plant pistachio trees instead. The mukhtar also states the following in this regard:

> There is quite a lot as pistachio too. They too lost their yield. For the past 10 years or so they don't do it either…I mean there used to be some who produced 1-2 tons of pistachio. But right now there is none.

As most of the pear, fig, and pistachio trees were important substitutes for olive oil production, dependence on the singular production of olive oil increased recently. The agricultural directorates in the region seem to underestimate this problem to a great extent, and they do not take any measures in order to prevent declining agricultural variety. There could be several factors for the dying of trees on the southern side of the Kaz Mountains. It could be related either to ecological factors such as climate variability, or to human-induced factors such as wrong agricultural practices. Obviously, further scientific inquiry should be made in the region to detect the reasons of dying of trees.

Industrial agricultural commodities such as cotton and beet were also cultivated substantially in the region. They were mostly grown in the plains, which were the most productive agricultural lands. Nevertheless, subsidizing policies of industrial commodities were gradually abolished after the 1980s, and certain limitations concerning the cultivation of beet were also imposed by the state. Besides, most of the fertile lands in the plains lost their agricultural status, and were transformed into

touristic sites. Accordingly, these agricultural commodities are no longer produced in the region.

In this sense, especially cotton producing had been done extensively in the 1960s and 1970s. Aykut, a young local olive producer from Kızılkeçili, recounts those times:

> In the Kızılkeçili Village there were cotton plantations of approximately 200 decares, more than 250 decares planted by various people. Now there is not. Anyhow conditions are not suitable to plant cotton… There is something called the fiber length in cotton. The world's highest quality cotton is here not being planted now. The cotton planted in Adana is not equivalent to the cotton of our region in terms of fiber length.

Indeed, cotton produced in the region is above the common standards in terms of fiber length. In this sense, TARİŞ was also making extra payments to local producers at those times because of the high quality of cotton produced in the region. Thus, Nazım argues:

> Look, in cotton as well, the Gulf of Edremit grows the best cotton of the world and the cotton that grows in this area used to be bought by TARİŞ at something called a premium price. I mean, TARİŞ announces the cotton price, announces it in the Aegean region, in İzmir. It says "I am buying the cotton for 5 liras". But for the cotton that grows in the area spanning the Gulf of Edremit to Altınova, Bakırçayı and Ezine due to the zone difference, it would say "I am buying it for 5 liras and 20 cents" and pay a premium. Do you know why TARİŞ pays a premium?... When you spin the cotton, the length that is called the fiber length of cotton, they say this Gulf of Edremit is one of the areas in the world where the cotton with the longest fiber length grows.

According to him, the abolishment of protectionist policies in the agricultural sector ended cotton farming in the region.

> Misguided practices of the state's agriculture policies in Turkey… Here we are importing cotton from Greece that does not even know cotton. Cotton is coming to us from Komotini. Cotton is coming from Kazakhstan, Turkmenistan… Well, from Egypt for instance, cotton is coming. Thus the lack of protection for the producer here, lifting of the import tariffs, suddenly finished the cotton plantation. Moreover, for instance when cotton was planted in the Gulf of Edremit during the initial years, this region yielded up to 400 kilograms, 500 kilograms of cotton. Because the lands were untouched, because it was not yet barren. This continued from the 1970s to the 1980s. Then, because it was irrigated farming, because it was the only

> crop, due to the overuse of chemical fertilizers and because the soil was infertile, the cotton yield dropped down to 150-200 kilograms per decare and the cost increases were high, … because there was a world of difference between the price of cotton produced in a unit square here and the imported cotton, the producer suffered a loss. And due to this loss cotton is not planted right now.

The Bostancı and Çıkrıkçı plains of Edremit were once cotton producing areas in addition to many other varieties of agricultural products. In this sense, many villagers went to these plains to work there as seasonal workers. Thus, Kemal asserts the following:

> Thousands of people used to flow to Çıkrıkçı, Bostancı Plain from this village, from that other village, from the districts of Edremit. It was never idle during the summer. Hoeing tomatoes, picking tomatoes. Picking cotton, hoeing cotton. Planting beets. There was every single thing.

Aykut depicts the difference between the previous and current states as follows:

> In order to rest for a day we would wait for a wedding, a holiday. And now we are worn out from idleness.

Most importantly, tourism has brought about a substantial increase in construction activities starting with the 1980s, which has been continuing at an accelerating pace even today. As the agricultural lands were opened to urban development, they gradually lost their agricultural status in the end. Most of the olive groves or agricultural fields alongside the coastal strip were transformed into the second houses in this process. For instance, Kazım states that the agricultural fields along the coastal strip in Akçay vanished as a result of construction:

> We call it a bean field. Beans were also planted at places where humidity was higher, where it was more damp. There were fields like that. Scattered, like that. There were places where cotton was planted at those wetlands on the roadsides. Such fields. Of course they all became houses all of them. Disappeared.

So it is not surprising that a great variety of agricultural products is not cultivated any longer. Aykut also explains the effects of construction in Akçay:

> As products grown here in the past there are cotton, beans. I mean the plain, here in the bordering area of Kızılkeçili, now parallel to Akçay, to the Akçay Çanakkale asphalt, there used to be open field cotton farming, corn farming.

> And then of course as it kept being filled with houses, our open agriculture fields were destroyed.

Murtaza, an old villager from Yassıçalı, remarks on the fertility of the land in Edremit in the following:

> Also they used to call it the horse bean plains over yonder this Akçay. Between this Edremit I mean Burhaniye… Now the old folks! Have you ever seen cities, towns in the middle of a plain? Either in the shade of a mountain, or the shore of a creek or a stream, that's where the cities, villages are. But now the nature is gone. Look where is Edremit? Farming in that plain and planting again and again… If you planted a human there it would grow humans. Over there around Akçay. It is such strong soil there. But it is all buildings now. If you farmed there today, now there is the tractor, motor power… But folks fancy retirement. Due to retirement they do not give a thought to that area. They don't say let me grow it myself, earn myself, eat it myself. Always for the readymade.

According to Taner, agricultural lands should not be opened to housing. In this sense, he draws a comparison between tourism development of the region and that of Spain:

> Environmental areas should be used with great awareness. They should not be opened to construction. Go from here on this road in the winter, there is not a light on in a single house until all the way to Küçükkuyu… In Spain, for example, they say in one region they abandon this type of settlements built in such olive grove areas to be demolished as shame houses.

Even the remaining olive groves are in increasing danger today as the construction of touristic sites or hotels go on relentlessly in the region. Actually, the agricultural fields of villages are also opened to construction after the enactment of the new metropolis municipality law. So it seems that more agricultural land would be turned into housing areas in the future. Kazım sees this as an immediate threat to the olive fields:

> Altınoluk was olive groves entirely... There were no empty lots. All the olive groves there are gone. After the 80s. Even after the 90s...But tomorrow when these places become neighborhoods they'll be open to land development here as well. There'll be neighborhoods in all these villages. They'll all be open to construction. Whatever Altınoluk is, this place will be like that ten years from now. I mean this olive farming does not have a future here. But the only income of this place is olives. There is no alternative.

Clearly, housing development turned out to be so overriding that the most fertile lands at the coastal plain have been lost ever since the start of tourism in the 1980s. Therefore, land use management is very important in terms of sustainability of the agro-ecosystems. It should be clear by now that declining agricultural variety and the loss of fertile lands are related with development policies followed on a national level.

Development policies prioritizing economic growth have conventionally depended on intensive farming instead of extensive farming for decades. In intensive farming, agricultural production is based on the mechanization as well as the use of chemical inputs. That is to say, it is capital intensive rather than labor intensive. In this sense, the Agriculture Credit Cooperatives in Edremit, Ayvacık, and Bayramiç, and the Edremit Chamber of Agriculture make sales of agricultural inputs such as seeds, fertilizers, pesticides, herbicides, fungicides, and agricultural machines.[39] Obviously, the use of fertilizers, pesticides, or herbicides for increasing productivity has been promoted by the public agencies to a great extent. Such a policy has encouraged farmers to use pesticides or herbicides for struggling against the pests and herbaceous diseases as well as to apply fertilizers in order to have more yields. As Jane, an environmentalist from Havran, clearly puts forward:

> So just the industrial agriculture model, it's got problems yeah, and well you know, it's not so much intensive…when you're in a system where you need maximum productivity in order to make any money at all because of the price for the product's so low, you are constantly feeling the need to put more chemicals and get more productivity out of your land. And so that's a major policy problem.

Accordingly, both traditional organic methods for struggling against pests or plant diseases, and using manures or organic fertilizers have been underestimated by farmers at large because they are accustomed to use chemical inputs overwhelmingly. But the use of pesticides and fertilizers is, in fact, one of the important issues in terms of ecological sustainability of the agro-ecosystems. As

[39] The Ayvacık and Bayramiç Chambers of Agriculture do not make such sales at all.

Nazım from the Edremit Chamber of Agriculture argues, the excessive use of fertilizers resulted in land degradation in the long run.

> Since the 1970s, and even [earlier] they introduced the farmer to the habit of using chemical fertilizers. This was appealing in the early years of course. Since our soils did not have it before, the chemical fertilizer enabled increases in yield. But as chemical fertilizer continued to be used, the poisons it left in the soil made the soil barren. It increased the calcification in soil. There was hardening in soil.

In this sense, he also explains the effect of the overuse of fertilizers in the cotton cultivated areas.

> And gradually in time I mean for instance for cotton—there used to be cotton fields here farming fields—during the first years you would use 30 kilograms of a 3-15 fertilizer per decare, after five ten years you would not be able to get the yield you got back when you used 30 kilograms even if you put 50 kilograms of fertilizer, because the soil is infertile. It does not uncoil, its solubility is gone and therefore a lot of farming for instance, in the country started not to be done in Edremit.

He also puts forward that the ignorant use of fertilizers by the producers led to the contamination of soil in addition to damaging the composition of the soil. Moreover, he argues that water resources were contaminated by the use of fertilizers.

> Now for instance it was used in olives too. In undeveloped countries like ours composed fertilizers like 3-15 fertilizer, 20-20 fertilizer. There "Use this" they say. Whereas perhaps if soil analysis were done it would be much different. The chemical fertilizers that we ignorantly used in very excessive quantities both destroyed the structure of our soil and created pollutions in the soil. And due to these pollutions, as we talked about earlier, not only agricultural pesticide but these chemical fertilizers also reached the streams through rains, reached the creeks, I mean reached the seas, the lakes. And these in turn polluted the environment.

As discussed above, most of the producers use excessive amounts of fertilizers in order to increase the productivity of the land which leads to land degradation as well as environmental problems. In this sense, Rıfat also asserts that the agricultural fields miss the essential elements due to using chemical fertilizers unduly:

> Now first of all because the soil is extremely worn out the organic material inside is weak. Around 1%, about 1-1.5%. I mean in terms of organic material the soils of Turkey are anyhow very poor. The soil is washed out too

> much, too much artificial fertilizer is used. It is weak in terms of the minerals it contains… there, its boron is low, its zinc is low, whatchamacallit other elements are low.

Moreover, he adds that some minerals should be used for enriching soil composition.

> The soils here is what we call the loamy soil, permeable soil on the slopes. The soil of the plain holds the water a little more. Around here the soil on the slopes does not hold the water almost at all. Now there are natural materials like leonardite etc. in order to add some quality to these soils. When you mix these with the soil, these materials, when you start using these materials instead of fertilizers, then the organic structure of the soil becomes stronger and inside of course bacteria and what not starts to reproduce. I mean, the richer bacteria a soil contains the more disintegration there will be so the tree will also benefit from the things that have become inorganic. Therefore, want it or not you use certain mandatory minerals.

Evidently, soil analyses are significant for applying fertilizers. The agriculture district directorates in Edremit and Burhaniye give help to producers in this regard. Yet, these analyses are expensive, according to the mukhtar of Mehmetalan:

> Last year I got my soil analyzed, my fields analyzed at the District Directorate of Agriculture in Burhaniye, not the one in Edremit. I mean I got my soil analyzed to find out what it needs, what sort of fertilizer it needs. And those soil analyses cost us an arm and a leg. You know, while the District Directorates of Agriculture should do these for the villager for cheaper, it is for a fee.

As Netting elaborates, the measurement of several factors is usually missing concerning the impact of intensive cultivators, who could be either smallholders or industrial farms, on agricultural sustainability and environmental deterioration. In this sense, he points out that a variety of physical, chemical, biological, and socioeconomic factors must be measured before putting smallholders to "sustainable end of the continuum as opposed to commercial and industrial agriculture."[40]

1. Physical: soil degradation through erosion, weathering, compaction; diminished water supply, flooding, salinization; depletion of non-renewable energy resources…

[40] Netting, Robert Mc.C. (1993), *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*, Stanford: Standford University Press, 144.

2. Chemical: decline in soil-nutrient status; decreasing responses to chemical applications, necessitating higher dosages; buildup of local or regional toxicity from the residues of fertilizers, pesticides, and herbicides…
3. Biological: loss of biodiversity; declining ecosystem stability and resilience. Only groups of low-density foragers or shifting cultivators in large natural ecosystems may pose no threat to biological diversity…Intensive cultivation can replace natural ecosystems, prevent their regeneration, and cause absolute declines in natural biodiversity…
4. Socioeconomic: providing sufficient sustained economic returns over the long run on existing cultivated lands so that people can achieve a continuing adequate livelihood…[41]

Without any doubt, measuring all of these factors is beyond the scope of this research. However, the discussion here has shown, though in a limited way, that agricultural practices of small farmers in the Kaz Mountains Region as well as agricultural policies have brought about a variety of the problems in terms of the physical, chemical, biological, and socioeconomic factors. It is clear that agricultural lands cannot be improved unless sustainable agricultural practices are followed by the farmers and promoted by agricultural agencies.

> Sustainable agriculture is posited in opposition to industrialized agriculture, which is based on optimizing purchased inputs to produce outputs at the least cost...the ecological approach is based on principles that conserve the renewable resource base and reduce the need for external technological inputs.[42]

However, agricultural policies do not promote environmentally friendly agricultural practices among the producers which are important for sustainable farming. That is to say, agricultural policies not taking into account sustainable agriculture lead to producers to follow agricultural practices which cause land degradation and environmental contamination in the long run.

Moreover, agricultural agencies in the region such as agriculture district directorates or chambers of agriculture do not develop any participatory projects for the

[41] Ibid., 144-145.

[42] Merchant, Carolyn (1992), *Radical Ecology: The Search for a Livable World*, New York and London: Routledge, 213.

promotion of ecological methods among the local producers.[43] Actually, the chambers of agriculture in Edremit, Ayvacık, or Bayramiç have a potential to develop such projects at grass-roots level as they can easily construct a direct contact with farmers. Their membership covers almost any farmer, for one should be registered to the chamber of agriculture in order to get agricultural insurances and supports according to the law. But currently, these chambers either give courses to their members on various issues such as the use of harvest machines, or organize tours to the agricultural expositions.

The South Marmara Development Agency does not also support such projects among the small farmers. The agency is rather concerned with giving financial incentives to medium and big farmers either to modernize their businesses in terms of equipment and infrastructure, or to establish new businesses. In other words, small producers do not benefit from the financial incentives given to local producers on a project basis by the South Marmara Development Agency at all.[44] Actually, small farmers are incompetent for applying to such projects in terms of economic capital. Furthermore, most of them are also uninformed about these projects. Aykut states the following in this regard:

> The farmer is not knowledged about this subject, not really. Now about these rural incentives out of the 100 farmers here 95 would be uninformed. The District Directorates of Agriculture does not do any informing on this subject.

More importantly, the abolishment of price subsidies in the recent decades as a result of the acceptance of the Agricultural Reform Implementation Project (ARIP) of the World Bank has made the local producers more vulnerable to the fluctuations

[43] The Edremit Chamber of Agriculture has 7,677 registered members in total, and there are approximately 6,400 active members. Among them, 5,000 members are olive oil producers. Other members are engaged in either vegetable or fruit production. There are also a smaller number of members who make stock-raising, apiculture, and fishing. The Ayvacık Chamber of Agriculture has 8,900 registered members in total, and there are about 8,200 active members. The Bayramiç Chamber of Agriculture has 11,800 members, and it has nearly 6,000 active members.

[44] See the brochure South Marmara Development Agency (2011), *2010 ve 2011 Mali Destek Programları Tamamlanan Projeler ve Etkileri*, Balıkesir.

of the market.[45] As Güven argues, the direct income support scheme favors the big landholders rather than the small producers.[46] Direct income supports are given to farmers in proportion to the amount of their land. They are given regardless of agricultural producing. Producers are thereby not encouraged to make production because one can get the support whether he produces or not. In this sense, Kemal criticizes subsidizing policies as follows:

> Ministry of Agriculture has two types of subsidy. One is through the decare, direct income support. And there is the support for the amount of production… They gave high direct income support in the name of satisfying big land owners …The man has tens of thousands decares of land, thousands of decares of land. Once they say "I gave this much money per decare," oh the man is thriving already, whether he plants anything or not… They gave a support without producing. First of all I believe such a support is wrong. Give support to production.

The direct income support scheme has been revised after 2005, and fertilizer and diesel fuel subsidies were given to producers in addition to "the European-style deficiency and compensatory payments, as well as livestock, insurance, and rural development supports."[47] However, these supports seem to be not sufficient at all to cover the rising production costs of small farmers, for local producers are very critical on agricultural policies. Overall, agricultural policies pursued by the state in the recent decades are considered as a setback in terms of agricultural producing by most of the local producers that are interviewed.

While discussing on the peasants and the regional markets in the Andes, Paulson argues that the low market values have become a major problem for the maintenance of small farms:

> In regional markets, agricultural products obtain market values too low to maintain the social and ecological resources necessary to continue producing

[45] See Aydın, Zülküf (2010), "Neo-Liberal Transformation of Turkish Agriculture," *Journal of Agrarian Change*, 10 (2): 149-187.

[46] Güven, A.B. (2009), "Reforming Sticky Institutions: Persistence and Change in Turkish Agriculture," *Studies in Comparative in International Development*, 44 (2): 162-187.

[47] Ibid., 180.

> them, let alone fuel the development and socialization of new generations farmers.[48]

Although the Kaz Mountains can be differentiated in many ways from the Andes, to a great extent, local markets seem to function similarly in both regions. That is to say, the situation of the small farmers in the Kaz Mountains bore a striking similarity to their fellows in the Andes. Most of the peasants in the Kaz Mountains also assert that returns from agricultural production are inadequate for their livelihood. Young people in villages do not see any future in agricultural activities, and most of them are employed in off-farm jobs either part-time or full time. In this sense, Engin from Küçükkuyu argues that subsidies concerning olive oil production in Turkey are so trifling that people are not encouraged to be olive oil producers at all.

> Let me tell you the practice in Mediterranean countries. The incentives are very high. But with us here unfortunately it is very nominal. Here you know, ok, people are again benefiting from it but I mean you know it is not at the level that one would say, "Let me be an olive farmer for the rest of my days. I will make money from olives." I mean those incentives are very much in the background and not at the levels that would encourage people.

It is true that public agencies take no measure to encourage farming among the young generations. To be a farmer is not stimulated economically or socioculturally by the public agencies at all. Not surprisingly, young villagers do not have an interest in making agriculture. Thus, especially small farms could have serious difficulties to carry on agricultural producing in the future.

However, small producers still occupy an important place in the Kaz Mountains Region. Though there are big exporting firms mostly located in Ayvalık, agribusiness companies have not become prevailing in the olive oil sector yet. These firms are rather interested in collecting olive and olive oil from the small producers in the forest villages via the middlemen in order to bottle and sell it under their own brand. Thus, the mukhtar of Çamcı asserts:

[48] Paulson, Susan (2004), "Gendered Practices and Landscapes in the Andes: The Shape of Asymmetrical Exchanges," in *Political Ecology across Spaces, Scales, and Social Groups*, Susan Paulson and Lisa L. Gezon (ed.), New Brunswick, New Jersey and London: Rutgers University Press, 187.

> All right we have olives. Look, at that village they used to grow 500-1000 tons of olives. It was collected, for table consumption. There were family companies. They finished this. They sold the sieves. Big corporations are coming here. They announce whatever price they want. They buy your olives and go.

It is clear that agricultural policies followed in the recent decades exacerbated the position of small farmers vis-à-vis big farmers and agribusiness interests. Although small farmers are competent at dealing with the economic problems by adapting a variety of strategies, they also seem to be much more vulnerable to the insecurities of the market than the past. From a sustainability perspective, these developments make it harder for small farmers to pass their farms to their children. Therefore, these developments could lead to the de-peasantization of rural communities in the long run.

Instead of following such policies, sustainable agriculture could be developed in order to enhance rural livelihoods as well as agroecological development. Obviously, such an approach would include a transformation of agriculture "from high-external input, large-scale systems to smaller, low-input organic systems."[49] This could also offer a solution to the various socio-economic and socio-environmental problems discussed above. These prospects are further discussed in the next chapter.

[49] Ibid., 217.

CHAPTER 5

RURAL COMMUNITIES AND ECOLOGICAL INITIATIVES IN THE KAZ MOUNTAINS REGION

5.1. Rural Communities in the Kaz Mountains from a Livelihood Perspective

Rural communities had followed a nomadic living in the Kaz Mountains for generations. The Kaz Mountains was a site providing the self-sufficiency of these communities for a long time, as forestry and pasturing were the traditional activities for nomads. In this sense, *Yörüks* characteristically made pasturing while *Türkmens* engaged in the timber works. As Beşikçi argues, the various needs of nomads could be met from the animal products as their living was simple, and dependent on animal.[1] In other words, having flocks of sheep and goats enabled them to meet their basic needs in terms of food and clothing. Moreover, the availability of wood enabled them to make a variety of wooden tools. They also exchanged their products in the market places founded in the Kaz Mountains or in the nearby towns.

Even after the compulsory settlement of these nomads took place in the late 19th century, they did not give up nomadic way of living at once. Most of them continued to pursue a semi-nomadic living for a long time. So, in summertime, they moved to the pastures at higher altitudes where they pastured their flocks. Besides, they also lived with their families in the tents or huts to make cuttings in the forests. Thus, both communities continued to live in the Kaz Mountains for three or four months at least. After settlement, the distinguishing lines between *Yörüks* and *Türkmens* in terms of work had gradually become absolute, for the former would engage in forestry, and the latter in pasturing over time. Besides, they also

[1] Beşikçi, İsmail (1985), "Göçebe Alikan Aşireti," in *Köy Sosyolojisi Okuma Kitabı*, Oğuz Arı (ed.), 2nd ed., İstanbul: Boğaziçi Üniversitesi Yayınları, 251. In his research on the nomad *Alikan* Tribe in the Eastern Anatolia, Beşikçi also asserts that the nomad economy of the *Alikan* tribe was a closed economy because nomads created many goods and services in their structure. Ibid.

cultivated the cereal crops such as wheat, maize, and barley after settling in the villages. While wheat was grounded in the water mills nearby the villages, and used for household comsumption, maize and barley was rather used as fodder. Therefore, to a great extent, rural communities in the Kaz Mountains had a subsistent economy until the 1960s.

The *Türkmen* communities' livelihood depended almost solely on the forest for a long time. Timber production was made primarily by them in the region. As skilled craftsmen, they had cut timber from the Kaz Mountains for generations, and had provided the timber supply for the local market. Timber was generally used in construction, and local people were in need of it to build their houses. İbrahim, a workman in his fifties from the Mehmetalan Village, who is skilled in building houses, explains why *Türkmen*s are called as *Tahtacı* in the following passage:

> Think of a construction now, imagine the wooden structure. By the walls there is a roof, there is a ceiling, a door, a window. In the old days you used to make these with wood. There was no iron. Our Turkmens used to do this door, window, ceiling works and whatnot. He used to travel. What would he do? He'd bring the tree from here. He'd cut it with a whipsaw… There are saws that work horizontally like that. One holds the saw at the lower end the other at the higher end. Anyhow you cut it 2 centimeters thick. These are used in the homes… That's where woodworking [Tahtacılık] comes from. They say in Gazdağı [Kaz Dağı] woodworks were the craft of our Turkmens.

As forest production was not regulated strictly until the 1960s, it was common for the villagers to do illegal cuttings in the Kaz Mountains beforehand. In this sense, İbrahim mentions that his grandfather made such cuttings for producing bead, which was used in the horse-drawn carriages:

> Back then at first there was disorderliness. I mean in the 1940s, 1950s they were doing smuggling around here… By smuggling I mean my grandfather was going into the forest. In the forest he was saying a load of beads. You know that tiny part of the cart wheels, they call it bead [tespih]. It is used in horse carts to make wheels, I mean it is a tree. In the mountain he would make a bead. They'd bring it and sell it in the village.

Even though smuggling was made by many villagers at those times, villagers were also making cuttings for the state, which were brought to the warehouses founded inside the Kaz Mountains. In this sense, İbrahim mentions:

> Even if there was inspection they say there was a mounted woodsman. He was anyhow roaming around like the village guard. I mean just for the heck of it. There were warehouses in the forest. Some were bringing it to the warehouse in the forest, to the meadow.

Most of the locals who had made cuttings in the 1940s and the 1950s seem to be engaged in illegal cuttings. In this sense, Mustafa, an old peasant from Pınarbaşı, tells:

> Folks learned forestry work later. There was mostly smuggling around here. The villagers would sell large wood. I used to take wood from here to Edremit. For instance here it is 1.25 liras, there I used to sell this wood for 1.5 liras. Give to houses, selling... We even would bring and stack it up here and they'd come pick it up, however much wood you had, you'd sell it. They'd give it carting, you'd sell it. Like that.

In this sense, Gani, an old peasant from the Hacıarslanlar Village, who is 87 years old, recounts those days when he made illegal cuttings in the Kaz Mountains. In the 1940s, they were going to the villages of Edremit, and trading timber for wheat.

> Here everyone who strapped their wood and saw on their donkey would go to *Avunya*. *Avunya* that is Woodwork. He would go for example, arrive at the villages over there… There you need it, you will build a house. He was giving a list. "Make me this much of that, that much of this." He was taking that and going to the mountain. But in the forest it wasn't like that, it was illegal. He was going, making it there, coming back. In short, he is in the forest till nightfall. Always going from one village to the next… Now, we call it the linen sack, pepper sack. If you bring wheat in two loads of that, it is enough for the winter. It's that much. Oh wonderful. Two, two loads. Brought crops they say. That winter if that man finds work he will store it up anyways. But there is none, anyways there isn't… This he was procuring from the forest. He was going to the mountain, making a deal with the woodsman, giving a few bucks to the woodsman. He was providing for his children and family, getting the winter supplies with woodwork with this… No money. Bartering. If he wrings ten pieces of wood he gives you one load of crop in the equal amount.

From the 1940s to the late 1960s, peasants who were traditionally involved in pasturing and forestry also started to plant olive trees by clearing forest areas. State agencies also encouraged them to plant olives by giving credits with low interest rates. So Gani from Hacıarslanlar states:

> After 1950 this people bloomed, very wonderful work was done in our village until 1970. Banks gave interest. For example you have open field, they were giving you money to plant olives. You were to plant olives in the

> open space. The state always gave that. It gave loans. Some people used these appropriately. And some took the money and squandered it all.

To a great extent, red pine zones nearby villages were cleared by peasants in this period. Murtaza, another old villager from Yassıçalı, who is also in his eighties, recalls those days:

> In our youth we used to say let me make one more sack of olives; plant a seedling, grow one extra tree of olives. I joined the army in 1944. 47! I was in the army for three years. After three years I started working on a hill over there, in the forest, pine forest. Plus I would not miss out on the timework. I mean I would take daily jobs too. At night when others called it a day and ran to the coffeehouse I would run there to the hill. I would knock down the pines, pull out the roots. I would clear lands in the forest. I would plant seedlings. There are 600 something seedlings. 650. I myself would grow that fig, almond, and the pear. And then with the money I saved I also bought an olive grove.

The Ortaoba Village is also one of those forest villages where clear-cuttings were made extensively in the past. So the mukhtar of Ortaoba tells:

> They say around here it was all forest from here to Kadıköy. All the way down to Kadıköy. At the time the citizens cut it down almost. Planted olive groves. By this time it came to be an olive grove.

The forest areas of red pines nearby villages were transformed into the olive groves until the 1970s. Villagers gave up clearing forest areas to plant olive trees only after the forest laws had become stricter in the late 1960s. For example, Nuri states that short-term prison sentences were given for felling a tree at those times:

> When the forest laws also got tougher it could no longer be touched. For instance, the guy was clear-cutting a field in the forest. When it was said "It is forbidden to procure field from the forest land" they were sentencing him to one, two months of jail. He was making do with that. Later when the laws got increasingly tougher he started to pull back. Now it is completely forbidden. Cutting one pine tree has very big consequences, damages. So then no one was able to touch them.

Opening agricultural fields by clear-cutting forest areas has been a common problem among the Southern countries where small farmers made subsistence

production.[2] In this sense, there seems to be a link between environmental degradation and subsistence farmers.[3] In the Kaz Mountains, this was mainly observed in terms of deforestation and overgrazing.

Certainly, all of the olive trees in the region are not planted in this way. In fact, in some villages such as Adatepe, Narlı, Altınoluk, Avcılar, Çamlıbel, Kızılkeçili, and Zeytinli, most of the olive groves are the old ones planted long time ago.[4] In this sense, Kazım from Avcılar states:

> Now there are olive groves that have been planted by opening fields in the forest. This higher ground, those close to the pines, the lands all around there were cleared, they were all transformed from the forest. But let's say one fourth was cleared from the forest. Three fourths are again the old groves.

In the 1940s and the early 1950, olive oil was produced in smaller amounts, and did not make too much worth. Most of the peasants were using it for their private consumptions rather than selling. That is to say, many did not earn a livelihood from olive oil producing in those times. According to Mustafa, olive oil was not sold for high prices then. He asserts that it was made for household consumption, as there was not any market for olive oil.

> back then nothing was money anyway I mean. Now it's in high demand. Now it's worth money. For instance, there is the trader, the buyer. In the past they didn't even acidify the oil. It was sold like that. Back then there wasn't even a large galvanized can. Before that tin galvanized cans came out. There weren't even those but there were leather bottles... before. You know the part of that thing I called leather, they were put in that... They was no buyer for

[2] Adams, W.M. (2009), *Green Development: Environment and sustainability in a developing world*, 3rd ed., London and New York: Routledge, 254-259.

[3] In a similar vein, the Brundtland Report also points out a correlation between poverty and environmental degradation. "Those who are poor and hungry will often destroy their immediate environment in order to survive: They will cut down forests; their livestock will overgraze grasslands; they will overuse marginal land; and in growing numbers they will crowd into congested cities." See World Commission on Environment and Development (1987), *Our Common Future*, Oxford: Oxford University Press, 28.

[4] In this sense, some of the olive groves remained from the Greeks. Indeed, there are very old olive trees in Altınoluk and Edremit, which have estimated ages of 1100 years, 800 years, 600 years, and 500 years respectively. See Efe, Recep, Abdullah Soykan, Süleyman Sönmez, İsa Cürebal (2010), *Edremit'in Anıtsal ve Korunmaya Değer Ağaçları*, Edremit Belediyesi Kültür Yayınları, İstanbul: Ebru Matbaacılık Bas. Yay. San. Tic. A.Ş., 370-382.

> olive back then. Who'd buy the oil? There was no market then... We made oil for ourselves.

In the 1950s and the 1960s, peasants who overproduced olive oil were mostly selling their products at low prices either to the merchants in towns, or to the landowners (*ağas*) in their villages. For example, in Mehmetalan, peasants were renting their olive groves to the landowner of the village before collecting the harvest. In return, they were paid the price of their harvest in installments. Thus, the landowner had peasants' olive groves at his disposition. In this sense, İbrahim tells the following:

> You the villager were harvesting for the landowner, the agha. You were saying, "Agha here take my field". He was buying. You were selling. He was paying you for the crop. And when the villager was in a jam he was going and getting money from him. He would pay you the money in installments. You were harvesting your own crops for the agha in return for a daily wage.

Meanwhile, olive oil production had increased substantially in the village, and the opening of new factories in Zeytinli as well as the beginning of olive oil purchasing by TARİŞ eliminated the difficulties that peasants experienced as to squeezing and marketing after the 1960s.

> Anyways now everyone has started to change. Now people have started to react. …men came forward. The olive of this area was small. It started to develop. If earlier say people were for example filling 10 sacks, as the trees thrived they started filling 30 sacks. Then he said, "Instead of giving this to the agha" he said, "I will put it to use myself". The number of factories in Zeytinli increased. All right? More…the poor-fellows could not get sacks from the factories. There were three factories in Zeytinli. Its pressing would end. You would go at four, five in the morning and get sacks from the factory. You would get in line to get the olives pressed. Getting it pressed is a problem. Selling it is a problem. But the agha does not have any such problems. The factory is constantly working for the agha anyways. He doesn't have such a problem… But then this TARİŞ olive buying thing was set up. That developed. After this member and that member, anyone who got 100 sacks, 150 sacks of olive started to become something like an agha himself. Of course this thing fell to pieces. Now everyone is his own agha.

Besides, there were also several big landowners having considerable amount of olive fields or other agricultural land in the plains of Edremit. The stewards of these big landowners were collecting bunches of people from the forest villages for olive oil or cotton harvesting until the 1980s. Thus, seasonal agricultural works were also

available to the small farmers as a subsidiary means of livelihood at those times. Murtaza states the following in this regard:

> There are rich ones, merchants. They have crews harvesting olives… What do they say in the east? You know in the east they say village aghas. That's how they were here as well. In Altınoluk, Güre, Edremit. Everyone used to work for them.

Thus, peasants worked at these seasonal works in summer seasons. The entire family including women and children went to the plains to work at cotton harvesting as it provided an additional income to their households. Seher, a peasant in her sixties from the Doyran Village, mentions those days as follows:

> in the past the entire family, children and all would for example in summer, people did not have monthly yearly pensions like now. What is the only means of livelihood in your village? There is olive. If olive did not make ends meet, first we would go to Altınova to cotton. We would go to cotton and stay over there. To those edges of Burhaniye, to the newly constructed parts, now there is the road, you know the highway, on this side of that highway, it was all cotton fields.

Fatma, another woman sixty years old from Mehmetalan, also states the following in this regard:

> In the past in our village there used to be crews. There used to be cotton hoeing. For instance beans would be harvested in September. There used to be crews with tractors. But now cotton and stuff is not planted anymore.

Seasonal works were thereby available for women peasants at the plains of Edremit until the early 1980s, which were one of the means to contribute to the livelihoods of their households. In the 1960s and the 1970s, women also looked after stocks in the pastures in summer while men worked at off-farm works in towns. Murtaza from Yassıçalı tells the following in this regard:

> I remember when there used to be 60,70 cows here. To the pastures, this time of the year we'd go to the mountain, to the pastures. We'd take the children up, with the cows, all the way over there, there were pastures, to the pastures. This Akçay mine used to be operational, we'd go to the mine for work. Once a week, we'd take provisions to the children, the family.

Pasturing was another primary livelihood for villagers in addition to forestry and olive oil production until recently. It was done in almost any forest village because

the pastures were open before the establishment of the national park. There were many stocks in the region especially in the 1960s and the 1970s. Gani from Hacıarslanlar depicts those days as follows:

> The year is 1956. I raised ten goats from yeanlings myself... Look first I went and at the entrance of Küçükkuyu, from Çetmibaşı I bought fifteen goats, and ten goats I bought for myself. These became twenty five goats. Eight nine people we tended twenty five goats. Now multiplying and multiplying the yeanling these became almost 190-200... They make 140-150 kilos of milk... Look from those places we see we know we would go to Edremit with loads. There are no vehicles. You have to... We'd bring it there, 0.65 liras. There was a dairy farm in Edremit. We'd bring it to the dairy farm... When we started a season, for example, we'd start in March, come July 10 the dairy farms would close. The milk we got would be recorded in the daily logbook. I can never forget, in the year 67-68 I had milked 14,500 kilos... Nine months out of twelve I spent there at the top of that mountain you see. Yes! As a family. There now the moment the milk was finished our family the kids would come here home. We, it snows there I mean, we'd graze those animals. When winter came, here we have our barracks, our hay sheds. We'd bring them here to the sheds. We'd feed them here. When the birthing started, again we mobilized. Out. Everyone to the tents.

More or less, traditional way of life also led to solidaristic relations among the villagers. In this sense, Gani tells that goats belonging to various villagers were pastured by a common shepherd. For example, if one had several goats, his turn to look after the flock will come for only a few days in a year. Then, he was required either to go to pasturing or to send a shepherd instead. That is to say pasturing was done collectively in such a way that villagers had time to do other works.

> You've gotten two goats to your roof. They'd graze them taking turns. There was no money. You had two goats, you'd go shepherd two days. Either you pay wages send a man or you go yourself. If there are 60 goats it'd be your turn every 60 days. You'd go one day. I mean there'd be solidarity, there'd be such a union. Look even that disappeared in the village, it came down to zero.

Until the 2000s, big stocks of sheep and goats, or cattle were seen in most of the villages.[5] However, the national park and tourism have led to the drastic decrease of pasturing or raising livestock in the region. In this sense, Nuri from Tahtakuşlar says that raising livestock almost came to an end in their village after the 1990s.

[5] For the statistics on stockbreeding in Edremit and Ayvacık, see Appendix J.

> The pastures were open here. The nature was open. When the milk started to decrease after spring, people were taking their cows, and moving to the pastures. They were making use of pastures. Afterwards, animals began to decrease. Pasturing began to end. Besides, everyone had a few goats. In the morning everyone took his goat out. They were hiring a shepherd. Shepherd was whistling. All the goats were coming out to the upper part of the village. Shepherd was taking them, and grazing them in these pastures, and bringing them back… While the goats decreasing, there are no more goats now. Sheep could not go the mountain. Anyway it is floor animal, plain animal. They were grazing below at floor. Floors were sold too. They could not be entered because of the constructions. There did not remain any pastures for the sheep. The sheep decreased too. There remained 15-20 sheep. It could not be managed. And they also said: "Bird influenza is coming." All chickens are collected. Well, besides this, other animals such as horses and donkeys are left over at people having slopes, not at ones with level areas because agriculture…this farming event began to vanish with other animals. Again, raising livestock has come to wither away (die out) here.

In a few villages, raising livestock did never occupy a significant place at any time. In this sense, İbrahim from Mehmetalan asserts that stockbreeding was not done in their village because it was harmful to the olive saplings:

> As far as I know there was no stockbreeding because these olives were grown later you know? The olive trees you see around here are all from seeds that were planted and grown. In my childhood they were mostly clearing lands to grow crops around here. Around the 60s. Then the penalty for opening fields, this clear-cutting in the forest became very. It was three months, five months imprisonment. All right? Then when it got tougher it was not done. In the 1960s or so, these fields were all cleared. There is not much stockbreeding here because olive trees are planted and animals harm the olive.

Moreover, olive oil producing seems to replace pasturing in many villages over time. For example, pasturing was the primary livelihood in Ortaoba up to the 1980s. After olive trees were grown, it could no longer be made in those areas, which were used as pastures previously. In this sense, the mukhtar of Ortaoba asserts:

> Now, when it becomes an agricultural field stockbreeding dies. After the 60s, 70s, when olive was grown there, when those places became olive groves, the stockbreeding thing ends.

Animals such as bulls were also used in forestry for a long time. Although the trucks had begun to take the place of bulls in forestry in the late 1960s, bulls were still used by many forest workers in order to carry the wood up to the early 1980s.

So the mukhtar of Ortaoba, who made cuttings in the Kaz Mountains in the early 1980s, mentions:

> When I, for instance, used to work in the forest in the past what we call *mahda* –around here we call those divisions *mahda* –I used to do the cutting of that part and you used to do the ground skidding. When I say skidding I mean the skidding of the logs, there were oxen back then. Now after you did the skidding, it would be tied on the ox, is it to be transported to the road, then it'd be transported to the road... It used to be said that if the ox's cost is left over as profit it'd suffice. Now that's all finished as well. Now they've made roads everywhere. Now stockbreeding is finished entirely.

When the forestry production was regulated in the late 1960s, illegal cutting vanished to a great extent since strict penalties were imposed on the people. Then, villagers had started to make cuttings under the terms of the forestry directorate. Starting with the 1970s, village development cooperatives were established in many forest villages in this regard. These cooperatives mostly dealt with the forestry work, though some were also engaged in olive oil production too. Especially in the 1970s and the 1980s, forestry work was plentiful in the Kaz Mountains. So it occupied an important place for the livelihoods of villagers. In this sense, İbrahim from Mehmetalan asserts:

> In that period there were times when 40 tents would take off from our village, and sometimes 60 tents… A few old people would stay back in the village, the elderly. This is how it was in the 70s. Until the 80s, until 85s.

For example, the village agricultural development cooperative in the Doyran Village, which was founded in the 1970s, was active up to the 1990s. In this sense, İsmail, an old villager in his seventies from Doyran, states the following:

> They would go out every year every summer. As long as there was cutting for instance they would go out. Anyhow the ones who worked were obvious. 40-50 people constantly worked.

There was also a village development cooperative founded in Hacıarslanlar in 1978. As the mukhtar of Hacıarslanlar argues, the cooperative was active especially in the 1970s and the 1980s, and took all the forest works in their localities then.

> If there was forest work in the area we would take it as the cooperative. Then we had more rights… as the cooperative we had the right to take 10% of the

> crops we processed. Now you cannot take it individually but you can as the cooperative.

These cooperatives were mostly active up to the 1990s. As the forest works gradually decreased after the establishment of the national park in 1993, and were completely forbidden in the national park area subsequently in the 2000s, most of these cooperatives were disorganized and closed down after the 1990s. It seems that the failure of the cooperatives in the Kaz Mountains is also related to the mismanagement by the president and executive board in most cases. The mukhtar of Yeşilyurt where the village development cooperative was active up to the early 2000s states the following in this regard:

> We had a cooperative founded in 1973, called Yeşilyurt Village Development Cooperative. It did not work out. All around, it was the same, it did not work anywhere. Our society is interesting. Now it has 500 members. The others say, "Man, that president is travelling so much, doing this and that, spending the money on himself…" You make the person who is saying this the next president, then they say these things about him and these cooperatives don't work out. You know it means union begets power but unfortunately that union never worked out.

Today, several village development cooperatives in Mehmetalan, Avcılar, Narlı, and Adatepebaşı are still active in forestry. For example, the Mehmetalan Village Agricultural Development Cooperative has stayed active while the cooperatives of the neighboring villages such as Pınarbaşı, Beyoba, and Ortaoba were dissolved. There are 130 members of this cooperative, who are mostly from Mehmetalan and these neighboring villages. Currently, the cooperative is not active in olive oil production but rather in forestry. So the mukhtar states that it supports its members with respect to forestry:

> Here because we have production in the mountain, the produce is taken in the name of the cooperative. The members in the village go up there, cut wood, cut lumber, make production. I mean, the cooperative gives him subsidy at the outset before he makes money from the forest. And with that subsidy… he buys his gas. They start working, when they make production… [the cooperative] takes back the subsidies it already paid and from that our cooperative gets VAT and a certain amount of money like 10 percent, 5 percent. That is how the cooperative is sustains itself and provides support for the workers in this regard, supports its members.

Especially in the northern part of the Kaz Mountains, there are many forestry workers getting their livelihoods from the forestry work. The chef from the Bayramiç Forestry Directorate states that cuttings are done by either the village agricultural development cooperative or small groups of villagers working as a team:

> When you say activities of production, of cutting in the forest you must consider all of these as a whole. Cutting, skidding, hauling, loading… Again either the cooperative or the forest villager is doing it… They work as a team [*posta* in Turkish]… By team we mean where the forest villagers who have not been able to become a cooperative come together and work. Where they work independently.

Even forest workers from the southern side go to make cuttings on the northern side. Yusuf, a forest worker from Pınarbaşı on the southern side of the Kaz Mountains works as a member of the Çırpılar Village Agricultural Development Cooperative, which is on the other side. In this sense, he states:

> This year [in 2013] there are about 35 or so cutting motors. That in turn means 35 households…Now for instance say from the top of the village, from here to Çırpılar it is more than 10 kilometers, about 11 kilometers. From there all the way here there are cutters.

Moreover, another forest worker from the Evciler Village, making red-pine cuttings for a merchant together with his two fellows at a distant locale on the northern side of the Kaz Mountains in December 2013, says the following on other forest workers:

> If it is close to the village then the aspirants are many. In such places, how should I put it, if it is in winter, in the idle period, you cannot find more than 20 people. People consider it. If it is flat, if it is easy then he goes for it for example… If we count the ones cutting near the village there should be… about 80-70.

Indeed, forestry work is hard, and work accidents occasionally take place. However, until recently, forest workers employed by the forestry directorates had worked without having any insurance at all. Today, forest workers mostly work for the private merchants in the Kaz Mountains, so that they began to have insurances

lately.[6] Ergün, a forest engineer from the Edremit Forestry Directorate, asserts that the public do not know the hardships of forestry work:

> Forestry services are not much known in the society. It is known only by the villagers who make their living on this job. I mean it is known by the villagers who toil, do the labor for this job, who sweat on it, do its donkeywork. Of course that is the villages inside and at the edge of the forest.

Either merchants or village cooperatives have a right to bid a price for cuttings in the Kaz Mountains. Foresters assert that priority is given to the village cooperatives especially in the cuttings close to their villages. Apparently local merchants offer a bid for a cutting only if a village cooperative is not interested in making that cutting. However, the real situation is completely different than this. Village development cooperatives could not bid prices for the cuttings since they do not have the financial capacity. That is to say, mostly merchants take the cuttings in the areas close to the forest villages too. Accordingly, it seems that the district forestry directorates have been assigning the cuttings in the Kaz Mountains mostly to private businesses in this way.

On the other hand, some of the village development cooperatives have also been engaged in olive oil production. Some even run olive oil factories in this regard. For example, villagers founded a village development cooperative in the Çamlıbel Village in 1972, which had an olive oil factory at Güre. After these lands at the seaside came under the governance of the municipality in the 1980s, olive oil factories on the coast were banned, and the factory of the cooperative was moved to the village then. A villager from Çamlıbel tells the following on this issue:

> Below, on the sea shore, now as these sites were transferred to the municipality it was banned, then it was brought here. And here too the past administrations did not operate properly, it was closed down I mean. It has not been open to production for the past couple of years, past couple of seasons. I mean when the season comes, there is no oil. Therefore the partners had to go elsewhere.

[6] If merchants take over the forestry work in a certain locale, they have to make insurance of the forest workers whom they employed.

In the Avcılar Village, the agricultural development cooperative was founded in 1972. Today, it has approximately 200 members. There are also members of the cooperative from the neighboring villages such as Arıtaşı, Çamlıbel, and Tahtakuşlar. The head of the village cooperative asserts that villagers were waiting for long periods -even a month passed sometimes- to squeeze olives previously before the establishment of the cooperative. As olives were not squeezed immediately, the quality of olive oil was degraded due to late processing.[7] After the establishment of the cooperative, this problem was overcome as the cooperative had operated three olive oil factories which had cold press olive oil machines. In the beginning of the 2000s, TARİŞ took over the olive oil factories in the Avcılar Village from the cooperative. They founded two new olive oil factories having the continuous centrifugation system for producing olive oil. According to the mukhtar of Avcılar, the cooperative should also market the agricultural products.

> There is an agricultural development cooperative… People just get their olive pressed, they benefit from that. But cannot benefit from nothing else… for instance if the cooperative would take people's quality olive, package it, market it in the name of the cooperative. Plus since it is agricultural, if people could benefit from herbs and things. For example, in our region here there are herbs that are good for a wide range of diseases. If it would package these and sell them.

Actually, marketing had always been the aim of village development cooperatives. To give an example, the Çamcı Village Development Cooperative was founded in the early 1970s. According to the mukhtar, its objective had been not to crush villagers to the local landowners and factory owners, and to market the products of their members.

> Now for the development of the village, development agencies and the sort have also been established… Before the development agencies first the villager should sit down and think. Primarily its village headman, committee of elders and opinion leaders will sit down and decide. They did, for instance, in 1970; they said "How can we prevent being exploited by the landowner or the factory owner; how should we produce our own product, harvest it and turn it into olive oil" and in 1970-71 they founded the cooperative saying "let's can this and market it."

[7] If olive waits for more than three days after collecting from the tree, then its acid rate increases, which makes it less valuable.

Marketing olives was also tried by the Mehmetalan Village Development Cooperative in the past. In order to sell the products of the cooperative members at higher prices, an olive brining facility containing pools for olives was founded in the village in 1994. The head of the cooperative tells the following in this regard:

> Olive brining facility. There were pools. One year we filled it with 140 tons of olives and people had anyway espoused it... There was a discord in the village. There were those who wanted to take it over, whatever. But we didn't give up. We fought. Nobody was able to take that 140 tons of olives from us here. They came from the Tariş Congress Directorate. We did the thing with them. On the market, for instance the guy who didn't bring his olive to the cooperative sold his olives for 30 liras, 29 liras then. We had sold it for 45 liras. A lot, because there was a great difference. This was very good for the villagers. Then, well in 97 after I resigned the other managers could not make this calculation properly. I also had olives in the pools. They sold the olives to someone called Gümüş Zeytincilik from Havran. Without calculating its VAT. And that, this time that remained much below the market price with the VAT. Then of course... everyone was...

Later on, the pools have become inactive due to the technical requirements were not met. Despite all the efforts of the cooperative, they could not achieve to renew the olive brining facility after all.

> Anyway according to the new food thing olive is not thrown away either. We built that place in 94. I mean we built it with Orköy loan. According to the food regulation then, olive in concrete pools, brined olive could be done. When the earthquake happened in 99, that big earthquake, the land development legislation in the villages changed… That place has to be renovated. Well, ok then, renovate it! We made a project. It was rejected by the Project Survey Department of the Ministry of Forestry. I mean you should have an MP backing you up, you should have something. That is how these things work. Well, we don't have an MP backing us. It was rejected by the Project Survey Department. It was not accepted. Say what? Our Farmer Registration System is insufficient. Back then Farmer Registration System, folks began to register to the Farmer Registration System only in 2002-2003. That's why it remains idle. We'll see, up to a point.

The development cooperatives in villages are mostly disorganized in the Kaz Mountains, and a few active ones are not effective in olive oil production at all. Actually, olive oil producing done by the small farmers is especially suitable for the functioning of the local cooperatives, and there are successful examples in the

Mediterranean countries like Spain and Italy.[8] In this sense, Moragues-Faus et al. argue that the local cooperatives of small olive oil farmers in Alto Palancia in Spain construct different place-making strategies which attribute different quality features to olive oil producing. One of these cooperatives, operating in a larger area in comparison to the others, constructs quality "through the development of an internationally-known organic product that embodies generic and territorially-dis-embedded ideals of naturalness."[9] On the other hand, the other two cooperatives, which operate in smaller places, construct quality through "specific and very unique territorial attributes that involve local varieties and traditional production and processing practices."[10] Moreover, these cooperatives also give services to their members such as olive oil processing and commercialization, farm management techniques, hiring machinery, bureaucratic support, and training.[11]

In a similar way, a place-making strategy emphasizing the locality could also be adopted in the Kaz Mountains by the village development cooperatives if they are also oriented towards marketing the territorial attributes of olive and olive oil produced in the Kaz Mountains. In fact, local producers point out that the uniqueness and the quality of olive oil produced in the forest villages of the Kaz Mountains have been acknowledged worldwide. Thus they assert that even the olive oil companies from Italy buy up large amounts of olive oil produced in the Edremit Gulf, and sell it under their own brands after bottling. Without doubt, the climate of the Kaz Mountains has been the main determinant of the quality of olive oil in region. In this sense, Kazım from Avcılar tells the following:

> Iodine from the sea and fresh air from the mountain come. For example let's say the wind blows from the sea to the land like this during the day. At night,

[8] See for Spanish small farmers' cooperatives, Moragues-Faus, Ana M. and Roberta Sonnino (2012), "Embedding Quality in the Agro-Food System: The Dynamics and Implications of Place-Making Strategies in the Olive Oil Sector of Alto Palancia, Spain," *Sociologia Ruralis*, 52 (2): 215-234.

[9] Ibid., 229.

[10] Ibid.

[11] Moragues-Faus, Ana (2014), "How is agriculture reproduced? Unfolding farmers' interdependencies in small-scale Mediterranean olive oil production," *Journal of Rural Studies*, 144.

> after 11, 12—we call it the mountain breeze—it blows from the mountain to the sea... We have an oil man from our village also... I mean our village folk but they've been living in Edremit for many years. He is getting oil from his own grove in this village, his own olive. There was a competition in Lesbos on olives-olive oil and he got first place. You know with the oil of our village… It being exactly on this ridge of Kaz Dağı between Küçükkuyu and Güre makes a difference.

Although olive oil produced in the Kaz Mountains Region is very qualified, the villagers experience marketing problems to a great extent. Most of them sell their olive oil either to TARİŞ or local merchants. Olive oil produced by the small farmers in the region is used for either consumption at the national market, or exporting in the international markets via TARİŞ and the intermediate exporting firms. Therefore, olive oil producing in the forest villages of the Kaz Mountains is integrated with the national and global markets in large part.

Moreover, the neo-liberalization of the agricultural policies also seem to affect the olive oil producers in the Kaz Mountains as the price supports of olive oil were completely eliminated, and other agricultural supports have been limited considerably. The price of olive oil is also determined according to the global olive oil market. Thus, small farmers seem to cope with the uncertainties of the market on their own.

In this sense, they develop a variety of survival strategies in order to sustain their households at a time which is characterized by the low agricultural prices and the high production costs.[12] Family work is one of those strategies adopted at olive farming in the Kaz Mountains. In this sense, Kazım tells how he made harvesting in the 2012/2013 season as follows:

> Well, last year it ended on the twenty fifth of March. I started olives in October. And I didn't take a pole man, I harvested myself... The yield of the olive you get pressed at the factory is 310 sacks, that is to say 30, 31 tons... I mean these arms of mine got buff like weightlifters... Other years I was also bringing people. For example two pole men, two harvesters. But a woman collects the olives. You sell the olives she collected until the evening, it does not amount to the woman's wage. That's why all the olives that fell to the

[12] Aydın, Zülküf (2002), "The New Right, Structural Adjustment and Turkish Agriculture: Rural Responses and Survival Strategies," *The European Journal of Development Research*, 14 (2): 195-203.

> ground remained there. Most people's remained. You take the pole man, he takes three fourths of the olives he shakes down. It barely meets the cost. You'll do the development of those fields, what we call the grooming, I mean you'll do the cutting, fertilize it, plow the ground. I mean will you maintain it or will that family make ends meet? I mean it's like that, there are those who experience very difficult situations I mean. That's why we didn't take people. We toiled ourselves as a family. But it's not like we earned anything either.

Almost all of the olive farmers point out that the production costs such as fertilizers, pesticides, diesel oil, and hiring labor have increased much more than the price of olive oil especially after the 2000s. In this sense, Kazım compares the price of labor hired at harvesting in 2012/2013 and 2013/2014 seasons with the past times:

> Now coming from the old times, if you compare oil to a person's daily wages, what has been said since our childhood. One woman works for one kilo of oil, one man works for two kilos of oil. That's the ratio of daily wage, that's the remuneration. I mean it was. But in recent years this is a completely inverse ratio. As we said it's gone to very very extremes. Last year we gave *dizem* [specific acidity] oil for 5.25 liras. Well a woman's wage is 30 liras. Look it goes up to 6 kilos from 1 kilo. For instance a pole man's wage is 40 liras. Well this year olives are 7 liras, 7.5 liras. What does that make? It makes 15 liras... Again it is not enough.

Moreover, he also makes a comparison between today's olive oil producing and that of the 1970s in terms of earnings:

> Let me tell you about early 70s my childhood periods. They used to say—for example they're talking about someone—"Oh, he makes 100 sacks of olives". Whoever made 100 sacks of olives was rich. 100 sacks of olives 10 tons of olives. Now even someone who makes 500 sacks is not rich.

Borrowing has also become another strategy for the smallholders in the Kaz Mountains in such circumstances. Hayri, an olive oil producer from a forest village in Küçükkuyu, states:

> For example my father used to collect 600 sacks of olives. 600 sacks 60 tons. He collected 60 tons and I didn't see him run out of money either... Now I collect that crop alone. There is no money, really, there is no money. We get loans, we live on loans. That's the problem... If you don't pay it, they sell your house, your field, your grove.

Another strategy followed by villagers is the diversification of livelihoods. In this sense, some villagers sell vegetables and fruits at the marketplaces in towns, which

they either cultivate themselves, or buy from the wholesale food markets. Besides, they also sell mushrooms and chestnuts that they collect from the mountain. To give an example, a considerable amount of villagers in Ortaoba are engaged in this kind of work. The mukhtar of Ortaoba tells the following in this regard:

> Villagers marketing, either they grow it themselves, or go buy it from the wholesale market and sell it... He collects milk-caps, mushrooms on the mountain, goes sells it at the marketplace. He sells the olive, the oil he produces at the market. Well, in addition to that, I don't know, if he has planted tomatoes, peppers, this or that, a vegetable, he takes that and sells that there too. There isn't much fruit in the village. Friends from the plains sell fruit. There is figs, also cherries, peaches, apricots, mulberries... Edremit, Altınoluk, Akçay, Zeytinli. Yes, from here they go all the way to Kalkım, Yenice, Çan.

According to Netting, "smallholders do indeed adapt to changing population and market forces, and that households have a variety of off-farm production strategies."[13] In the Kaz Mountains Region, the small peasantry has also survived by following a bunch of strategies, which are vital for sustaining their livelihoods. Nevertheless, if one compares the current rural households with those of the past, it is clear that rural communities were leading a much more self-sufficient living in the past. Veli, a pasturer from Sazlıköy, explains this as follows:

> I mean we used to live for free in the past. We used to produce everything. We made everything. You ground your wheat. Do you understand? You used to go around with the oxen, thresh. Y'know you used to get your wheat yourself. Y'know you used to grind it at the mill. I mean you wouldn't pay for flour. So, you don't pay for your oil, your onion, your garlic, your everything, your goods. Do you understand? You didn't, for your meat, milk, cheese, eggs. Now there is nothing. Even an egg, you buy everything.

Up to the 1980s, rural communities in the Kaz Mountains were self-sufficient to a great extent. First of all, the consumption of the households was much more limited than today. There was no electricity in most of the villages, and water was also free. Besides, they did not buy any dairy products as well as vegetables from the market. Many households were raising livestock, and gardening next to their houses then. Moreover, most of the villagers were cultivating wheat in small plots of land. There

[13] Netting, Robert Mc.C. (1993), *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*, Stanford: Standford University Press, 145.

were water mills in places such as Kızılkeçili, Yolören, Zeytinli, Edremit and Burhaniye. Mustafa from Pınarbaşı tells the following in this regard:

> I went to this Arabs [the old name of the Yolören Village] a lot to the mill to make bread. On the way to Edremit, they call it Yolören. I went to Zeytinli village. There was a mill there as well. I went to this Gızılgeçili also... We used to take it, grind it. We'd bring it, make bread and eat it.

Fatma from Mehmetalan also mentions that their elders were going to the water mills in the 1960s and the early 1970s in order to get flour:

> If you've been to the Hanlar side, there were mills on that exit. There were double mills… In our childhood the one in Edremit used to work. Our elders used to go there. They used to plant wheat. Those who planted wheat used to go there to get flour ground.

At those times, villagers were rather eating *bazlama*, which is a flat bread made by women by baking at the ovens in the yards of their houses. Most of the villagers were consuming these flat breads though there were also bakeries in the big villages like Adatepe. Besides, a cereal food called *bulgur* was also made by women by boiling and drying wheat. There were also the stone mills for grinding the wheat in villages. By grinding the wheat, villagers made a different kind of *bulgur* that is only used for making up *keşkek*, a dish prepared for the special days like weddings and so on. In this sense, Musa from Ortaoba tells:

> Honest to God, our grandfathers in the very distant times they used to grind the wheat they planted here at stone mills themselves. By rotating, I mean *bulgur* [cracked wheat] stone our elders call them.

Bekir from Ortaoba also recalls those days when he was a child in the 1960s:

> It was there in the square... That for instance, at the wedding for instance around here we say *keşkek* [a meat and ground wheat dish]. They make their *keşkek*. They make it from that. They grind the *bulgur* and that's how they make it... The ones below were watermills. Ours here was not a watermill. This is manual. It was from such a tree. For example the tree had a stalk. Folks used to go round and round to make a mill. For instance the villager would come here. You'd go around two rounds, I'd go around two three rounds. That's how they worked the mill. They crushed the crop, the wheat I mean. But to make flour it was given to the mills below, to the watermills.

Bartering agricultural products had also been of vital importance for the self-sufficiency of rural communities especially up to the late 1970s. There was a kind

of informal agro-food network between peasants living on the southern side and the northern side of the Kaz Mountains. The peasants from the northern side were coming a long way through the mountain trails by mules for bartering with the villages on the southern side, or vice versa. For example, Mehmet from Kızılelma, which is a village located on the northern side of the Kaz Mountains, states:

> They says barley was taken from here, and therefrom oil was wrapped and brought here. Molasses was taken from here, cheese was taken, oil was brought here. These things happened I mean a while back.

The mukhtar of Beyoba also acknowledges bartering activities in the past:

> They say we were going from here to back there… towards Bayramiç Garagöy [Karaköy]… Over here in our region there is oil. They have barley, wheat. In the past too they used to tax wheat and barley you know. The folks were coming down the mountains smuggling… Mutually.

Yusuf from Pınarbaşı also says the following concerning bartering:

> Earlier they used to come to us all the time. For example, beans, this and that, cheese, jam... molasses, tomato paste, they used to bring such things and exchange it with oil, with olives.

Bartering between the villagers of the northern side and the other side still goes on in some villages today, even though it has been decreasing gradually each year. The mukhtar of Yassıçalı states the following in this regard:

> Now when it is autumn the apple producers on the other side make apples, tomato paste… They bring it here from there. From here they sell it with oil, soap.

Erhan from the Çırpılar Village on the northern side also mentions that they barter with several villages on the southern side such as Kızılkeçili, Pınarbaşı, Mehmetalan, and Ortaoba as follows:

> For instance from here he takes, be it tomato, pepper paste, apples. There they have olives, oil. He buys oil. He takes paste, sells it. He sells fruit. And with that buys oil. Bartering is also done… Zeytinli has villages. They go to those villages. For instance there is the Kızılkeçili Village. There is Uçurumoba. There is Mehmetalan. There is Paşaköy.

Seher from Doyran also tells that they exchange olive with agricultural products produced in the villages of Bayramiç:

> Now our village's livelihood is very nice. Now y'know we say this Bayramiç side of our village, it don't have oil. And here there is no cheese, no milk production. No groves and gardens, no fruit. They bring us that. We give olive oil. We barter. We are done.

It is clear that rural households are provided with a great variety of foodstuff by bartering olive oil with other agricultural products. Such exchange relations allow the villagers to stay out of the market economy to some extent. Thus, these exchange relations can be considered as constituting alternative local food networks. Bartering is not only made with other villagers, but also made with the peddlers. Many villagers buy dairy products, eggs, and fresh vegetables and fruits from the itinerant salesmen in exchange for olive oil. In this sense, the mukhtar of Çamcı states:

> Well, right now we get the eggs, yogurt and cheese completely from the outside. In our village especially by bartering, we produce olive oil, we produce olives…The folks come from outside, pulls up his car here, gets it announced; he says potato, onion or cheese seller is here… The folks go give the oil and take that produce, by barter. Right now everything here is bartered, even fabric and shoes.

The mukhtar of Tahtakuşlar also states the following concerning the peddlers:

> From the outside, you know, peddlers come on certain days, make their sales. These sales are not done with money; it happens through bartering of oil, bartering of olives, I mean the price of a product is paid by bartering.

Women are one of the important actors in terms of exchange relations because they usually engage in such exchange relations with those peddlers. In this sense, Seher mentions that exchanging products are handled by women in their village:

> Groceries come here. Our rice comes with oil. Our sugar comes with oil. Our chickpeas come with oil. Our vegetables with oil, fruit with oil. It all comes with oil here. These are at the women's hands.

In a similar vein, gardening has also been practiced by women in many villages. They also prepare various foodstuffs for winter. In addition, there are still women herders looking after small stocks in some villages. Clearly, women occupy a significant place for the sustainability of rural households.

In this sense, women are also involved in cooperation and solidarity with their fellows. They are especially successful at utilizing community ties while working on the land, or at home. For example, they work at each other's olive groves, or help each other to prepare foodstuff for winter such as *erişte*, *tarhana*, *gözleme*, and canned food.[14] Zelha from Mehmetalan tells the following in this regard:

> Ladies at home used to get ready for winter. Make their *tarhana* [sundried curd, flour, tomato]. Then make their *gözleme* [pastry dough]. We make *erişte* [homemade noodles]. We preserve fruits and vegetables. We do it collectively, helping each other. We get together in the neighborhood. Today for me, tomorrow for you, like that.

There is also a kind of division of labor between men and women concerning olive farming in the forest villages. The women also work at the olive groves almost for the whole year. Fatma from Mehmetalan explains the various works that women made as follows:

> Well, there is the work of these fields... Women burn their shrubs and come. Women do the fertilizing. She does the cleaning. Well that's the ladies' work... Pruning goes on till March, April, May. Men prune the head. Ladies burn the shrubs. Men plow. Ladies do the fertilizing.

Moreover, they also get together to make these various works. For example, they clear the land collectively by removing the weeds together. In this sense, Songül, a woman in her thirties from Mehmetalan, tells:

> Between the months of September-October women go to the fields. We clean the weeds around September. Three four women come together. They go to one's field, then to the next one's, then to another's. Now once the woman has left the house, she does not go back in before the olives are done. She's in the field the entire day. Anyway it's four-five people, we call it *badaşık* [pals, co-workers]. When you have *badaşık*, well five fields each, women weed out twenty five fields anyhow. When you are *badaşık* with me, fifteen, twenty days, maybe a month, that caring time takes. I mean you care for the field, right. It is called caring time.

Women also work at each other's olive groves during harvesting. They can be considered as the mutual beneficiaries of such cooperation. Fatma explains this as follows:

[14] *Tarhana* is a dried foodstuff for making soup made of flour, curds, and tomatoes. *Erişte* is a homemade macaroni. *Gözleme* is a kind of flaky pastry.

> How would they go to each other's fields? Now he comes to me, for example, for five days. And I go to his field for five days. Like that. They harvest taking turns... Now my friend will come to me. For example he'll work in my field for ten days. Well, in his field there is eight days of work. The two days' wages of the work in my field I give to him I mean. However many days he's worked in your field you go to his.

At the harvest time, men and women work in the olive fields concurrently. While men use poles for harvesting, women collect the olives scattered on the soil. In this respect, Songül depicts how women collect different types of olives:

> The dried out olives in the beginning fall to the bottom of the tree. Collecting these is anyway very toilsome. It again takes fifteen, twenty days, what we call *koruk* [unripe], because that olive is small and dry... There, for instance, in a day, those things we call baskets which hold five kilos—you know gypsies make them, it is made of straws—I mean, there are times you collect two three baskets of that in a day. Anyway that is used to make soap. Soaps are made at the end of November… Now in December harvesting with poles starts. Men at it—we call it *sırık*—begin to shake down the olive. And afterwards women collect it again. For instance, the normal olive that drops after that *koruk*, you can collect more than ten baskets of those. They are both large and durable... Then pole ends. Olive ends... Harvesting, caring takes more than three months. So you see we are out on the street in the winter. We work throughout the entire winter.

After finishing the olive harvest, villagers celebrate it with a traditional meal which is given to the workers, friends, and relatives. Songül mentions this harvest meal in the following:

> You give a special meal during harvest time. If Mehmet has come to pole in my field, I tell him, "come on Mehmet to *kurtuluş* [liberation] tomorrow". He puts aside all his work. Even if he is going to someone else to work he comes to *kurtuluş* because there is *rakı*, dried beans are cooked. We have a saying, "Leave your mark on the field, so that you have the face to eat"... You have a feast at the field, the harvest meal. It takes place around January or so. Depends on when you finish harvesting the olive.

Therefore, the old generations and women can be considered as the followers of traditional lifestyles in the forest villages. Traditional ways of living are especially important in terms of the economic, cultural, and environmental sustainability. Obviously, one can still see the remnants of self-sufficient rural communities in the Kaz Mountains Region, though the latest developments have made them much more dependent on the market forces recently.

Today, the outreach of market relations to the forest villages in the Kaz Mountains can easily be seen among the rural communities. The penetration of market relations to the countryside has changed the consumption and production patterns of villagers to a great extent. As Luke argues, the traditional rural households have undergone a rapid transformation recently:

> The organic need for air, drink, food, clothing, shelter, and productive labor, hitherto defined by the homespun organic crafts of the precapitalist or entrepreneurial capitalist household, underwent rapid commercial redefinition through many artistic transformations to constitute the incessantly commodified needs beneath everyone's purchasing of corporate products.[15]

The consumption habits of the young villagers have strikingly differentiated than those of the elders over time. For example, most of them do buy dairy products and eggs from the village groceries or the supermarkets in the nearby towns. In this sense, Gani from Hacıarslanlar states the following:

> There were 13 goat herds... sheep herds about the same more or less. There were about over 2000 animals large and small. I mean sheep, goats. As for now yoghurt comes from Havran, look *ayran* [yoghurt drink] comes from the dairy farm in Havran... Look what we used to be where we are now. It is no longer a villager's life. This is not what the villager is like. The villager will produce. In a village, look, you are village folk. Are there chickens in your house, chickens? Do you have a rooster crowing? Do you have a calf mooing? If you have a yeanling sound the happiest home is yours because these are the main source of the family budget. There is no hardship beyond this.

Not only did consumption habits but production practices of villagers were also transformed considerably. In this sense, the mukhtar of Ortaoba asserts that most of the rural households produced their dairy products in the 1970s when he was a child:

> In our childhood, at our own house we had a goat. We had chickens. Excuse my language we had a donkey. We didn't pay for milk, cheese, yogurt. But it doesn't work like that now, we pay.

Similarly, Zelha, a women sixty-two years old, from Mehmetalan also tells:

[15] Luke, Timothy W. (1999), *Capitalism, Democracy, and Ecology: Departing From Marx*, Urbana and Chicago: University of Illinois Press, 70.

> Now our villages are villages but now life is not different from the city, because in the past when you said village, he brought his wood himself, he had chickens, cows, goats. Now he buys the wood with money. Water with money. Everything I mean. I mean it's a village in name… We buy eggs from the grocery store. Eggs come to the grocery store from below for instance. We can't eat village eggs I mean.

As gardening is usually made by villagers in the small plots next to their houses, raising fowls or livestock has become much harder for them. Many villagers do not prefer to raise animals in a closed space because of the expensiveness of the forage. According to Fatma:

> It's not difficult to build a coop but it's difficult to look after chicken. Everybody has groves. The chickens do harm when you let them out. You can't let them out they remain locked inside. And when they remain inside they eat a lot of forage... The milk you get from your own stock is better but now you need to do it in a closed space. And that the forage is expensive. It didn't work out, I mean people can't do it. Life of the villager is gone now I mean.

Obviously, rural communities have lost their self-sufficiency for the most part in the recent decades. Nevertheless, some villagers in the remote forest villages still follow a traditional way of living, and they seem to stay out of market relations to some extent. They continue to cultivate their traditional seeds inherited from their ancestors, and they do not use chemical inputs of pesticides and fertilizers too. Moreover, their consumption and production patterns are not market oriented at all. Accordingly, to a great extent, these kinds of smallholders could be considered as self-sufficient and sustainable on a local scale.

As the former studies on villages also point out, rural development should be considered by taking into account the rural-urban interaction.[16] From the very beginning, forest villages in the Kaz Mountains were integrated to the urban areas on regional and national scales. The development of the transportation facilities also increased this integration over time. Currently, villagers living in the Kaz Mountains can reach to the local and national markets much more easily than the

[16] See Taraklı, Duran (1990), *Ormanlarımız ve Yerleşimleri Akçakoca, Mudurnu, Yığılca Örnekleriyle*, Ankara: ODTÜ Mimarlık Fakültesi Yayınları, 261-262, and Tütengil, Cavit Orhan (1969), *Türkiye'de Köy Sorunu*, Ankara: Kitaş Yayınları, 42-43.

past. The forest villages on the southern side of the Kaz Mountains are very close to the touristic towns of Küçükkuyu, Altınoluk, Akçay, and Edremit, and the others on the northern side are not far away from towns such as Bayramiç, Çan, and Yenice.

Migration has also been significant in terms of linking the rural areas with the urban areas. Migration from the forest villages to the towns or cities started in the 1950s, and accelerated after the 1970s. Today, a great amount of people from the region have been living outside, and social mobility among rural communities increased considerably in comparison to the past. These outmigrants work as either employees in the private sector or civil servants at the public sector throughout Turkey. There are local people from these forest villages who became officers, teachers, doctors, nurses, policemen, and so on. Besides, there is also a small amount of villagers who went abroad to Europe or America to work as laborers. After their retirement, most of these immigrants return to their villages in old ages.

Nowadays, intra-regional migration also continues at an increasing pace. Mostly, young generation prefer to live in the towns of Edremit, Zeytinli, Altınoluk, Küçükkuyu, Ayvacık, Bayramiç, and so on. It is common for young men to seek jobs in these towns especially after marrying, for their spouses do not want to live in the villages any more. Today, many young men work at tourism establishments or small manufacturing industries in these towns. They rather work the land during harvests in order to help their families. On the other hand, some of the young villagers entirely depend on their parents because they are either students or unemployed. The retired wages are also important for many rural households as the population average is very high in most villages. Although the old generations usually practiced a variety of works such as farming, pasturing, and forestry, this is not observed among the young villagers any more. In this sense, it is common for the old to complain bitterly about the young concerning their disinterest in agriculture. Gani tells the following in this regard:

> I both did that stockbreeding. And I planted between 50 to 70 trees daily, 400-500 olive trees. Now we live off their thing. They don't have any expenses no more. I planted them, grew them. There is no one who goes and

> pickaxes its fruit. My things don't work no longer, my battery is dead. I'm at a standstill, just like that.

Indeed, agricultural activities seem to lose its appeal to the young. Young people hardly ever want to be a farmer in the forest villages. In this sense, Zelha from Mehmetalan argues:

> Genuine village life existed in the 50s, 60s. In the 70s it began to degenerate slowly... Now whoever can, goes away to study. Those who can't go to school find a job with social security. Then, there, the village thing slowly fades away. There aren't many youth who go to the field, the groves and work. If they do, maybe it's from one olive harvest to the next. In the past everyone used to work in their field because there was no such thing as going to school.

According to Chambers, poor people follow complex and diverse livelihood strategies. That is to say, they undertake different activities in different places throughout a year.[17]

> Besides farming themselves, these can include laboring for other farmers, share-rearing of livestock, work on or for non-farm enterprises, migration, craft work, petty trading, and the gathering, consuming and selling of a large range of common property resources.[18]

In the Kaz Mountains Region, peasants also follow a variety of livelihood strategies. Today, there is an increasing outmigration from the villages to the urban centers either for education or employment. Clearly, education has become much more prevalent among the young villagers in comparison to the past. Besides, the young people also look for off-farm jobs in the nearby towns in the region. There are several factors behind this situation. First, development polices do not promote farming among the young. Second, the lands are usually much divided, and farming done in the small patches varying between 5 and 20 decares are not sufficient at all. And lastly, living at the countryside as a farmer is no more attractive for the young generation. Thus, most of them usually migrate to the urban areas either in the Kaz Mountains or elsewhere.

[17] Chambers, Robert (2008), *Revolutions in Development Inquiry*, London and Sterling, VA: Earthscan, 52.

[18] Ibid.

Today, the young villagers work at the construction sector or in the small industries in the towns more and more. For example, the young from the *Türkmen* villages usually work as woodworkers in the timber workshops in Edremit. In addition, some are also employed as blue-collar workers at factories in towns or cities. To give an example, young people from the villages of Bayramiç and Çan work as manual workers at a ceramic factory located in Çan. Thus, off-farm employment opportunities increased considerably in the recent decades.

The jobs in the tourism sector have also become much more available to the villagers after the 1980s. Tourism gave way to new livelihood prospects in the region. Especially the young people from the forest villages of Edremit and Ayvacık are employed in the tourism sector. The settlements along the coastal strip such as Küçükkuyu, Altınoluk, Güre, and Akçay have become the tourism centers enabling employment for rural communities living in the immediate vicinities. For example, there are several thermal hotels in Güre where the young people from the nearby villages are employed. So the manager of the Saruhan Hotel in Güre states:

> We employ at least forty, forty five people in a season. So in high season we employ seventy, eighty people. Can there be better employment than this?

The young people from the Çamlıbel Village, which is one of those villages near Güre, could find jobs in the hotels or touristic camps at the seaside. The mukhtar asserts:

> There tourism, in hotels. Here there are summer camps for instance, camps of SSK [Social Security Institution]… of the Ankara Municipality, the Labor Union camp. Such camps…There are some who find employment in these camps.

The young from the Tahtakuşlar Village, which is another village close to Güre, are also employed in the tourism sector. According to the mukhtar:

> In general in these restaurant type places we have children, university graduates who finished junior college, they work in the tourism sector. They enter the tourism sector I mean.

Even the young villagers from the Çamcı Village of Edremit, which is far away to the touristic places, are employed at hotels. Thus, the mukhtar mentions:

> We have three kids who graduated from the Vocational School of Tourism, our children. Plus we have our young people who work in the hotels throughout what we call Yalıboyu that is in Güre, Akçay, Altınoluk. But it is not enough, I mean it is very little.

Another development that tourism brought on is the overvaluation of the lands. A considerable amount of land has already been sold to either in-migrants or real estate agents. Many in-migrants reside in the forest villages in this regard. In the long run, this could turn out unfavorable for villagers as they could become landless in the end. The mukhtar of the Bektaş Village states the following in this regard:

> My elders, my grandfathers used to say, "Look, these people started selling places, soon my fellow villager will be either a gardener or a janitor or a cleaner on the very lands they live". But finally this too started, this too started. He is now working as a gardener in the land that he himself sold. I don't condemn it… I mean the land is being lost, the resources are being lost. But what are you doing? Keep selling it all, what have you got left for God's sake?

The above statement of the mukhtar which also reflects the general concern of other villagers seems to be in line with the assertion of Netting in terms of smallholders: "The very long time-horizon of the family's intergenerational security and its valuable, heritable property give the smallholder household a unique perspective on sustainability."[19] Thus, the interests of smallholders operating their farms together with other members of their households lie in enhancing "sustainable agriculture [which] is ecologically sound, economically viable, socially just, and humane."[20] In this sense, Netting contends that it is usually taken for granted that smallholders are "traditional cultivators, because of their low-energy technology, diversified production, small-scale operations, subsistence rather than market orientation, settlement stability, and lack of manufactured inputs occup[ies] the sustainable end of the continuum, as opposed to commercial and industrial agriculture."[21]

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[19] Netting, *Smallholders, Householders*, 145.

[20] Terry Gips cited in Francis, Charles and Garth Youngberg (1990), "Sustainable Agriculture: An Overview," in *Sustainable Agriculture in Temperate Zones*, Charles A. Francis, Cornelia Butler Flora, and Larry D. King (ed.), New York: Wiley, 4, quoted in Netting, *Smallholders, Householders*, 143.

[21] Netting, *Smallholders, Householders*, 144.

Nevertheless, as mentioned in Chapter 4, if chemical, physical, biological, and socioeconomic factors identified by Netting are taken into account, it will seem that the practices of smallholders in the Kaz Mountains cannot be considered as sustainable agriculture. Evidently, especially the use of pesticides and fertilizers is contrary to such agriculture.

From a sustainable livelihoods approach, rural communities have to pursue sustainable agriculture which is defined as "environmentally friendly methods of farming that allow the production of crops or livestock without damage to the ecosystem."[22] In this sense, assuring the diversity in farming constitutes the backbone of sustainable agriculture:

> It is also clear that 'natural communities represent not random assemblages of species but rather collections of species that can coexist' (Ives, 2005). In many respects this is even more true of agroecosystems. The diversity of crop and livestock species and of their varieties and breeds are present because human beings have recognized that they can coexist. Humans have also recognized that there are strong benefits in their coexistence.[23]

Furthermore, as Scoones argues, "Very often in discussion of livelihoods – and particularly sustainable livelihoods – a set of ideas about bottom-up, locally-led, participatory development dovetails with livelihoods analysis."[24] In the next section, the discussion of ecological initiatives and rural communities by referring to local knowledge and agroecology further sheds light on this issue.

Even though diminishing economic returns from agriculture as well as other factors such as the availability of off-farm employment opportunities, education, and so on has led to the increasing outmigration of young villagers from villages to the urban areas recently, agriculture in the forest villages still "provid[e] sufficient sustained

[22] See sustainable agriculture, Collin, P. H. (2004), *Dictionary of Environment & Ecology*, 5th ed., London: Bloomsbury, 207.

[23] Conway, Gordon (2007), "A Doubly Green Revolution: ecology and food production," in *Theoretical Ecology: Principles and Applications*, 3rd ed., Robert M. May and Angela R. McLean (ed.), Oxford: Oxford University Press, 165.

[24] Scoones, Ian (2009), "Livelihood perspectives and rural development," *The Journal of Peasant Studies*, 36 (1): 184.

economic returns over the long run on existing cultivated lands so that people can achieve a continuing adequate livelihood."[25]

Overall, these villages underwent significant economic and social changes in the recent decades. The traditional close-knit communities of forest villages which have been transformed since the 1950s have disappeared to a great extent today. As Rusten and Skerratt argues, "rural areas now rarely exist in isolation but do, in some way or another, relate to (and may be interdependent with) the economic and social activities of urban areas."[26] Moreover, the information technologies also led to the blurring of the geographical distance between the countryside and the urban spheres. It seems that information and communication technologies "might *undermine* the qualities of geographical proximity that characterize rural areas such as a sense of 'community' or 'civic connectedness'."[27] It is clear that rural communities have undergone a transformation with serious challenges presented to their livelihoods as well as cultural sustainability. Therefore, forest villages in the Kaz Mountains can no longer be considered in an isolated way from economic, social, and ecological developments taking place at the local, national, and global scales which seem to determine their trajectory in terms of sustainability.

5.2. Ecological Initiatives, Rural Communities, and Local Knowledge

Evidently a broad range of discussions made in ecological communities are related to achieving a certain level of self-sufficiency and sustainability at the community level. Sustainable ecological communities cannot be achieved unless the basic issues such as food, housing, employment, and energy are arranged in congruence with ecological principles as described precisely in the following passage on ecovillages.

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[25] Netting, *Smallholders, Householders,* 145.

[26] Rusten, Grete and Sarah Skerratt (2008), "Being rural in a digital age," in *Information and Communication Technologies in Rural Society: Being rural in a digital age*, Grete Rusten and Sarah Skerratt (ed.), London and New York: Routledge, 6.

[27] Ibid., 8.

> Ecovillages are intentional communities that aspire to create a more humane and sustainable way of life…An intentional community aspiring to become an ecovillage attempts to have a population small enough that everyone knows each other and can influence the outcome of community decisions. It hopes to provide housing, work opportunities, and social and spiritual opportunities on-site, creating as self-sufficient a community as possible. Typically, an ecovillage builds ecologically sustainable housing, grows much of its own organic food, recycles its waste products harmlessly, and, as much as possible, generates its own off-grid power.[28]

Although there are currently no ecovillages in the region, there are a bunch of environmentalists scattered in different villages in the Kaz Mountains. Most of these environmentalists are in-migrants, who were typically professionals working as engineers, managers, etc. beforehand. That is to say, these people come from upper middle class origins.[29] It seems that many fled from the bustling cities, and settled down in small villages or towns in order to pursue an ecological living at the countryside. There are small farmsteads founded by various groups, which are ""full-featured settlements in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development."[30] These environmentalists usually make agricultural production by following methods in accordance with the environment and the biodiversity. Alternative agricultural methods like organic agriculture or permaculture are usually practiced in these farms. Moreover, some also obtain their energy from alternative energy sources such as the solar or the wind energy. Therefore, small-scale, sustainable communities under the guidance of the ecological principles are emerging in these sites, albeit rather slowly.

For example, Tolga, a member of Buğday in his forties, is an in-migrant from İstanbul, who has worked in corporations as an engineer before settling in the Kaz

[28] Christian, Diana Leafe (2003), *Creating a Life Together: Practical Tools to Grow Ecovillages and Intentional Communities*, Gabriola Island, BC, Canada: New Society Publishers, xvi-xvii.

[29] In this sense, Arıcan discusses that "these initiatives are individualistic, escapist, and more private efforts of the urban (new) middle class consisting of well-educated, white collar professionals." See, Arıcan, Ebru (2014), "Individual Escapism or Eco-Community: Selected Cases of Ecovillage Initiatives in Turkey", Middle East Technical University, the Department of Sociology, unpublished Ph.D. thesis, 190.

[30] Christian, Diana Leafe, *Creating a Life Together*, xvi.

Mountains. Currently, he runs an ecological farmstead nearby Küçükkuyu together with his wife and children. In their farm, they produce their energy via the solar panels and the wind turbines in small capacities. They have several bungalows for people coming there to stay. They organize different activities concerning natural living, permaculture, and alternative education for these visitors. Besides, they also produce olive oil with the old traditional method, and sell it to urban consumers in cities.

> After picking the olives we get it done in old style stone mills, the remaining old style olive oil factories, and you know it is people we know.. I mean even though we get little yield from there we prefer them. That is we get it dry pressed, stone-crushed without even any water. We are producing only raw oil because it is very healthy, high quality. By doing it as such both we end up eating healthy oil and also the buyers purchase healthy, high quality oil. And surely it is priced accordingly.

For a while, they also tried to live communally in their farmstead with other families, but it did not work out at all. Tolga puts forward that even if people seem to agree on establishing an ecovillage, it does not guarantee for its success. According to him, what is more important is that people should be familiar with each other.

> For instance, it does not work out with the very different sort of people, even if they agree in principle. The similar sort of people, I mean the sort that can be friends if they met somewhere, it is that kind of people who should get into such an undertaking. That is what I deduced after many years.

In this sense, he went to places like the Findhorn Ecovillage in Scotland and the Zegg Ecovillage (Center for Experimental Culture Design) in Germany to have a broader outlook on the issue. He states the following as to these ecovillages:

> But since they started earlier there are groups living as 300-400 people. Anyways among the ones I've visited no one says it's super, ideal, no one says, "Done. There, we've done it. This is it". I mean they all say, "We are trying, we have shortcomings, there is this and that, we are working on it." That's what they say also. I mean there is no place that has solved it all or perfected the whole thing. Everyone, every commune has their own problems, and their own pluses.

He argues that there is a lack of experience in Turkey because there was not any generation that tried to found ecovillages in the past. In other words, they are the first generation to attempt to do such a thing.

> I mean, there, Güneşköy, Marmariç, Dutlar, İmece all are friends we know. Also in Turkey there arebeginners, people with plans of starting… And it is more advanced in the world there is that too... Frankly, we started this thing 30 years late. They started it and now their children are founding new eco-villages. I mean we don't have that second generation yet. Now, our children, the ones here for instance, will maybe also live in the eco-village or found eco-villages.

As there are no past experiences which were passed on from older generations, environmentalists could rely on no one but themselves to construct their models concerning ecological living. In this sense, Tolga argues that they approach the matter in terms of ecological neighborhood rather than ecovillages.

> Our goal here among ourselves is not an eco-village model. We define it somewhat as a model of ecological neighborliness. It is about the people who can get along with each other to live in such similar places and cooperate. You know, not under very strict, binding rules but a more relaxed and ecological neighborliness. We can also define it as a more ecological model of neighborliness. You know, four or five people can also live in those relationships somewhere. Then perhaps those people will create something else somewhere, create an eco-village. But these are yet very new concepts in Turkey. It still needs a bit more time it seems.

Murat, who was an engineer working in İstanbul before settling at the countryside in Küçükkuyu in 2004, run İmece Evi with his wife, which was an ecological initiative operating on a small plot along the coastal strip in Küçükkuyu.[31] Not surprisingly, he also had an intention to establish an ecovillage in the region earlier on. Similar to Tolga, he also argues that familiarity and trust between the participants are necessary in this regard.

> And now the ecological village is not to be done with people who do not know each other, who spent time together in meetings only in brief periods, who have not done anything together, but by people who have known each other for a long time, who trust one another; and only through steps towards transforming a specific, living village or a street or an apartment building.

[31] İmece Evi moved to another place in İzmir in 2012. See the website, http://www.imeceevi.org

According to him, it is better to give a try to living together in smaller settlements before establishing an ecovillage. Thus, he suggests that one should start transforming an existing village, a street, or an apartment at the beginning. Obviously, it is not so easy to form a well-knit community like an ecovillage. As he points out there are also cultural limitations such as the urban habits and lifestyles working against the realization of ecovillages.

> Communal living, ecological village you know. In Turkey we have many cultural obstacles. See here I'm telling you first of all we are the obstacles. And the most fundamental reason behind that is our culture, habits, our life style. Therefore, there is need for a little more time.

There was also a failed attempt to establish an ecovillage in the region. Caner, an environmentalist from İstanbul, running an ecological farm with his wife in a village of Kalkım nowadays, was involved in such an attempt to found an ecovillage in the Kaz Mountains with a small group of in-migrants. In this sense, he recounts his experience as follows:

> Now we got together, about 12 or 15 of us got together to found an eco-village and had very long conversations. We lived somewhere. We lived together by consuming that which we ourselves produced. We lived together by grinding our own waste. We acted like as though it was actually a demo of this whole village. Meanwhile, of course there are many examples in Europe, in Asia. We got in contact with them. Many friends came from there. They shared their experiences and what not… But it did not work out. Why did it not work out? Everyone was in accord in terms of sustainability, permaculture, agriculture, organic… People could not agree on the subject of this village's income and expenses. I mean they could not agree on if there is to be a monetary relation in this village how is it going to be.

Evidently, it is not easy for many people coming from the cities to leave aside their old habits which mostly stems from the urban consumer culture. Caner also remarks on this problem in the following way:

> It was one of the issues I criticized. 99% of the people who want to do this are people who come from the cities. People who have in no way or form partaken in such a sharing, who always had jobs, worked in highrises or their own offices. And they embark on such an undertaking and it hits the buffers of course. There is something I always suggest, that about half of the people in this undertaking should be farmers, villagers.

Therefore, ecological initiatives in the region are in their infancy to a great extent. It is clear that they need some time to fully develop sustainable living. However, they have already been sharing their practices and knowledge with the other ecological initiatives in Turkey concerning ecological innovations, agricultural production and sustainable living. Some even make bartering with the ecological initiatives in other places. For example, environmentalists from Buğday have been exchanging agricultural products with their fellows living in other regions. In this sense Aslı states the following:

> I mean for example here we produce olive oil. Another TaTuTa [eco-agro tourism and voluntary exchange farms] comes up and produces flour for example. We talk about bartering that flour with oil for example. How much flour shall we barter for how much oil… Similarly you know there is an eco-village in Marmariç. They produce molasses. Here we produce soap. Let's barter soap with molasses. I mean these things are discussed. Therefore, you know there is a group of people meanwhile who are trying to create ways, methods of talking about these again.

The relationship of ecological initiatives with their counterparts is more like ecological neighborliness rather than an ecovillage model. Thus, they do not suggest a predetermined ecovillage model at all. Rather, they consider that an ecological community could have place specific features insofar as it does not break with the tenets of self-sufficiency or sustainability.

At first glance, these ecological initiatives can be considered as the small enclaves of in-migrants at the countryside. Yet, there is also an interaction between environmentalists and peasants. First and foremost, they experience face-to-face relations with the peasants in the daily life. Evidently, this makes them to be aware of the potential of traditional lifestyles concerning sustainability. According to Jane from Emanetçiler,[32] who is an environmentalist in her middle ages living in Turkey for almost two decades, a synergy must be created between environmentalists coming from the cities and peasants pursuing traditional lifestyles in villages.

> However in a place like Turkey where you still have sustainable traditional lifestyles in the villages. I think it is important to create synergy with this,

[32] Emanetçiler is an ecological initiative making several projects on natural seeds as well as gardens. See the website, http://www.tohumambarlari.org

> and not create an apple village that is a completely sort of postmodern model where people from the city come down and you know create their own. I think that there should be constant communication and as I said a synergy, a working together with the sustainable traditional lifestyles that exist already in Turkey with the traditional villages that are still using the old plant material and using their own seeds, and using the water that they have in a way that is not compromising future water resources.

In this sense, Jane sees traditional lifestyles in villages as sustainable. She suggests that working together with the traditional lifestyles, and communication with villagers is necessary for environmentalists. Thus, she asserts that much can be learned from traditional lifestyles:

> I mean, the villagers, that we talked to, talk about in the old days it was against all the rules to cut down a green tree. You could only take that wood to burn. These are the kind of cultural things that exist within the traditional way of life. There is much that can be learned from that.

Peasants are experienced in environmentally friendly practices because they are the bearers of traditional knowledge which has been transferred from their ancestors. Environmentalists in the region are also concerned with the vanishing of those people who are the inheritors of traditional knowledge on nature. In this sense, Aslı from Buğday points out to the importance of the mountain villages:

> In this region anyways the village life still continues in a sense. I mean it is not completely finished. You know people continue to farm, plant crops. That is the most important thing right now, I mean that is what is disappearing from the world. There won't be people left who know how to live with the soil… That is our biggest danger and threat… Therefore, we must protect the areas where those people live, if there are means necessary for them to sustain their lives we must mobilize those means, combine those efforts, and I am saying that mountainous regions, and this is such a region, are the last refuges for this.

In this sense, she points to the importance of local initiatives in the following terms:

> I mean I don't believe there is one salvation for everyone. Right now I believe in local initiatives. Wherever they might originate from, whether it is the city, the country side, the village, etc. it does not matter at all. I believe that everything that has been mobilized to do something at the local level, in order to build a system is very valuable. Whether it is small or big, that's not important. It will be local but there must also be a communication network among these.

According to Merchant, "Scientists argue that sustainability can be achieved through ecological methods that incorporate the wisdoms of traditional peoples."[33] In this sense, more or less, ecological initiatives in the region also utilize traditional knowledge of peasants in different ways. According to Aslı, the experiences of peasants on traditional agriculture could be translated through special programs. She asserts that their center in Bahçedere Village, namely Çamtepe Ecological Living, Education, Practice, and Research Center[34] could play a role in this context. This center is supposed to act like a mediator between environmentalists and rural communities.

> At the same time, for instance among the villagers, people with knowledge on specific issues should come as teachers to certain courses on practical living we sometimes organize in the center, you know, they should come and teach how to make bread for example… Local knowledge anyways constitutes a very important part of the center's works… But that is no easy feat either. An elderly villager woman growing tomatoes in her garden for herself giving lessons, and being able to transfer her knowledge, because that requires translation… Programs should be run that will enable her to go through that transformation. That act of translation is somewhat a Çamtepe thing… It is necessary to derive that information from her and turn it into something that can be transferred to the other somehow. Therefore, it is also an implementation center there.

İmece Evi is also good at utilizing local knowledge. In this sense, Murat from İmece tells that they approach local people like wise men.

> Our approach to the villager here, to our neighbor, is like approaching a sage. Because it is they who know this place best. I mean, the climate of this place, its conditions, what grows here and what does not, its people, what should be done, what its culture is like, it is these people who best know all that.

While they revive the old practices of villagers concerning everyday life, they also try to foster these practices by disseminating ecologically friendly knowledge to other people.

> We use lye; but of course when we say we use this it is not like we brought it in our bundle, in our dowry from the city. We found these here; I mean

[33] Merchant, Carolyn (1992), *Radical Ecology: The Search for a Livable World*, New York and London: Routledge, 213.

[34] *Çamtepe Ekolojik Yaşam Eğitim, Uygulama ve Araştırma Merkezi* in Turkish.

> people have used this in the past. It took us one year to put this into practice, to find the most correct form of production. So then what is this? What is it that you call lye? What is its chemical content? So we learn these things and convey it to the people. In lye there is potassium, that is when combined with water it forms potassium hydroxide. This is at the same time a fertilizer; simultaneously yeast, gene for yeast; and at the same time something multifunctional like a personal hygiene product.

Moreover, they also reintroduce traditional ways of making products which are no longer practiced in the region.

> We make goat yeast. It is an almost extinct form of cheese production in Turkey. Now we make this goat yeast but we also learn what is in this goat yeast. We learn that there are two bacteria; that one does not ferment well enough and the other does but that the two of them support each other, I mean think of it like male, female; we learn all this. Does the shepherd need this information? No. He already learned about that yeast from his ancestors, his grandmother, his grandfather, and continues to use it.

Constructing face-to-face relations with peasants in the region, and wandering forest villages led them to prepare a natural calendar concerning agricultural production. This calendar shows the timetable for different works that peasants made in a year.

> We wander all around this mountain, you know we talk. We say, "So what happens in the month of February?" And the shepherd says, "There are goats. Goats are born in the month of February". The other one says, "You sit back and rest". "You do pruning." We write them down one by one. That is how İmece's nature calendar was created. That is the most visited page of our website. People, people who want to learn about farming were in need of such a calendar so they search and find it… This was realized by talking with the villagers.

Traditional peasant life was arranged in accordance with the recurring rhythms of nature. In the past, peasants were even arranging their agricultural activities according to the phases of the moon. Aykut from Kızılkeçili asserts the following in this regard:

> People of the old days made correct use of even the state of the moon, the lunar stages. They acted in line with the stages of the moon. They determined the time to prune an olive tree, time to apply pesticides, all with traditional methods. And surely the traditional methods are the correct methods in understanding ecology.

Traditional methods of olive oil producing are congruent with ecological ways of treating olive trees. According to the mukhtar of Tahtakuşlar, the use of seaweed is one of those traditional methods applied in line with ecological farming. It regulates the temperature of the olive trees by cooling them naturally.

> I don't know in the past we used to open troughs on these olive trees and put in what we call sea weed to keep the tree cool; so that the olive were large, I mean they don't accept those.

The agricultural technicians and engineers working in the district directorates are usually biased against the traditional methods of agriculture. Thus, it is not surprising that officers from the Edremit District Directorate of Food Agriculture and Livestock rejected the traditional method of cooling the olive trees described above. Actually, peasants have long been applying ecologically friendly techniques in order to have more coarse grained olives, and this method for cooling the trees seems to be appropriate to agroecological farming. More or less, traditional methods of olive producing are still followed by villagers in the Kaz Mountains. For example, grafting has been done in the same way for generations. In the following, the mukhtar of Mehmetalan argues that he has inherited this knowledge from his ancestors.

> Well right now, normally it is grafting time, time to graft the olives. I graft the wild olive like I saw my grandfather, my father, my ancestors do it and produce olives.

Traditional methods are important in terms of agroecological farming as the latter promotes "farmer generated technologies and farmer-to-farmer knowledge transfer."[35] In fact, integrating small farmers' knowledge, experiences, and technologies into agricultural practices is one of the most important constituents of agroecological development. In the Kaz Mountains Region, most of the ecological initiatives, though making agroecological farming, do not implement such integrated agroecological methods. The Campesino a Campesino movement (farmer-to-farmer movement), which was started in Latin America in the 1970s and

[35] Holt-Gimenez, Eric (2010), "From Food Crisis to Food Sovereignty: The Challange of Social Movements," in *Agriculture and Food in Crisis: Conflict, Resistance, and Renewal*, Fred Magdoff and Brian Tokar (ed.), New York: Monthly Review Press, 216.

based on small farmers' knowledges and experiences can be shown as a successful example in this regard:

> Initial methods of composting, soil and water conservation, and seed selection soon developed into a sophisticated "basket" of sustainable technologies and agroecological management approaches that included green manures, crop diversification, intergrated pest management, biological weed control, reforestation, and agrobiodiversity management at farm and watershed scales.[36]

However, environmental initiatives are in a close cooperation with those peasants who cultivate natural seeds in their fields in accordance with ecological principles. The cultivating of natural seeds is one of the important issues in terms of sustainability. In this sense, Aslı from Buğday asserts:

> There are still people who know this you know, they live in the villages. There are still some people who know to plant the seed in the soil at the right time, to hoe it at the right time, people who protect those seeds, and sustain them.

Thus, environmental initiatives also search for those peasants who still plant natural seeds. For example, environmentalists from İmece Evi went to the forest villages in the Kaz Mountains in order to collect natural seeds. In this way, they made a seed library with so many varieties.

> We created a campaign. Of course seeds came from every corner of Turkey, seeds whose origins are known. It came from different countries also. But mostly of course it came from this region, from this mountain. We went around one by one. You know I was telling you that is how we made contact with the village folk…While talking with the villagers inevitably the subject of seeds came up. Well, they too, the time to open the seed bag, they don't always open the seeds, when they opened the seed bag, they delivered us the extra, they sent it to us. Thus our seed library came to be… We have 147 varieties thus far.

[36] Ibid.

Emanetçiler also endeavors to promote the use of natural seeds by villagers. They carried out a project called granaries or *Tohum Ambarları* when they were the secretariat of the seed network.[37] Jane describes this project in the following terms:

> We are trying to form up, we call, granaries, Tohum Ambarları. And this is a sort of a system whereby local people assume responsibility, a regional responsibility, and coming to know the local seeds, the local varieties, and then attempting to get that staff in the ground to have it planted and look after it, and share those seeds and share the knowledge.

In this sense, they travelled too many villages in different regions of Turkey in order to find out local varieties in the remote villages. They also visited the villages of Havran and Burhaniye in the Gulf of Edremit.

> We go all around Havran, Burhaniye. We wish we had more time to spend. I mean we love going to the villages and, and learning more about what people are sowing, and what, what old varieties they have and so forth.

The use of natural seeds is a key issue in terms of sustainability as it is related with food sovereignty. In this sense, food sovereignty is "defined as the right each nation or region to maintain and develop their capacity to produce basic food crops with the corresponding productive and cultural diversity."[38] Clearly, achieving food sovereignty is dependent on cultivating natural seeds, and consuming local food to a great extent. However, the globalization and standardization of food has been a growing phenomenon around the world. Similar processes are also seen in the Kaz Mountains Region too. The supermarket chains have enormously increased in the recent years. Although these supermarkets are opened to meet the needs of the massive tourist population in summertime, the consumption habits of local people have also been changing drastically. Hence, Tolga from Buğday mentions:

> We have been here for eight years. There was one Tansaş in this area. Now there is one Kipa, three Tansaş, two Migros, etc. So there, the number of

[37] Seed network was first established by Buğday in 2009. It aims to promote the use of natural seeds among producers by protecting and sharing local seeds as well as to share experiences and knowledge of farmers throughout Turkey. See the website, http://www.tohumambarlari.org

[38] Altieri, Miguel A. (2010), "Agroecology, Small Farms, and Food Sovereignty," in *Agriculture and Food in Crisis: Conflict, Resistance, and Renewal*, Fred Magdoff and Brian Tokar (ed.), New York: Monthly Review Press, 255.

> stores increased tenfold in eight years. In the meantime three shopping malls were opened. I mean consumption is increasing at a horrible rate.

In this sense, the development of alternative, local agri-food networks becomes much more important in terms of sustainability.

> In contrast to globalized food provision, in the case of local agri-food networks, sustainability is understood to include short supply chains, more fresh and seasonal food, and knowledgeable relationships between growers and consumers.[39]

The consuming of local organic food seems to constitute an integral part of sustainability. "When we buy organic and local it might seem, at first sight, to be more expensive, but as more and more people do so, they help to create more robust local communities which need less transport, less pollution clean-up and have less unemployment."[40] In this sense, local markets established weekly in every town seem to function in a similar vein. These markets have long been the places where villagers sell their food to local consumers. Thus, the buying of local food in these markets also supports small farmers, who produce with less transport and pollution in contrary to the supermarket chains.

These small farmers' markets are thereby significant for local food provision. In these markets, local people can directly buy their products from the producers who are familiar to them. As there are no middle men mediating between the producer and the consumer in these markets, both parties benefit from this situation in many aspects. "The farmers receive fair remuneration for their produce, while the consumers enjoy fresh produce coupled with a more conscious awareness of the origins of their food."[41] Therefore, such markets are the strongholds of local farmers against the centralization and standardization of food provision.

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[39] Oosterveer, Peter and David A. Sonnenfeld (2012), *Food, Globalization, and Sustainability*, London and New York: Earthscan, 110.

[40] Bang, Jan Martin (2005), *Ecovillages: A Practical Guide to Sustainable Communities*, Edinburgh: Floris Books, 137.

[41] Norberg-Hodge, Helena (2002), "From Global Dependence to Local Interdependence," in *Sustainable Agriculture and Food Security*, Vandana Shiva and Gitanjali Bedi (ed.), New Delhi: Sage Publications, 435.

> These can be seen as attempts to resist the centralized, globalized and industrialized nature of contemporary food production…Such markets short-circuit the 'trivialization' of agriculture by a centralizing and increasingly concentrated and anonymous agricultural industry. Here you can actually meet the people who have been involved in producing the food.[42]

These markets are also the meeting points where producers and consumers can have face-to-face interaction. As the relations between them are built on confidence, both parties can be more attentive to the origin and quality of agricultural products. In this sense, Jane tells:

> The local farmers' markets, for example the Havran, that's a good example. You have mostly staff from the hal, which is ordinary industrial, well you know, commercial agriculture. But you also have a street that goes off and it's fairly long. And here, you have local producers using local varieties to a great extent, using their own seeds to great extent. And they are very popular. I mean, a lot of people I know in Havran, go there specifically to get their vegetables from the small producers, from that particular street of the small producers. And so, there is already an existing consumption habit.

Besides, there have also been several attempts to establish organic markets in the region. As Buğday has already run organic markets in İstanbul, they helped the municipality of Burhaniye to open an ecological market by sharing their experience and knowledge.

> We try to meet the local demands as follows. For example, they want to open a farmers market in Burhaniye or in Küçükkuyu. But there are certain conditions for opening a farmers market; you must fulfill those conditions. About these for example the Burhaniye Municipality or you know the City Council gets in touch with us… They up and went to the Kartal market for example, a group of farmers from there went as well. They talked and stuff with the bazaar team there.

As a result, an ecological market was founded in Burhaniye in 2012 in cooperation with 37 villagers in the Kırtık Village who have been making certificated organic production of tomatoe, bean, apple, strawberry, walnut etc. The municipality is

[42] Dickens, Peter (2004), *Society & Nature Changing Our Environment, Changing Ourselves*, Cambridge and Malden, MA: Polity Press, 110-111.

working on extending organic production to other villages in the vicinity in order to increase the quantity as well as diversity of organic products.[43]

Moreover, ecological initiatives can also contribute to the local farmers by buying organic products from them. In this way, they can back small producers in their vicinities more or less. "Buying things you can't grow from local organic farmers also creates that connection. You could galvanize a district into action by being the seed that creates a local economy, based around the production, processing and consumption of food."[44] To some extent, this is similar to what İmece Evi had tried to do when they collaborated with peasants making traditional agriculture in the forest villages. In this sense, they bought agricultural products from several local producers for a while:

> Encouraging the people who still insist on natural farming or who could not help but use industrial yeast, pesticide, ready-made fodder, or synthetic fertilizer but in principle are in favor of natural farming. Encouraging them, inspiring them to produce again in that traditional method, with that natural, healthy and clean method of production. Being in direct financial cooperation with them… In that sense our productions are run in collaboration with the producer, with the local producer in the region.

Thus, they provided a small but alternative network for the smallholders from the forest villages such as Arıklı, Tuztaşı, and Nusratlı in Küçükkuyu at that time. İmece Evi had become a site where local villagers producing with the traditional methods could sell their products regularly. Afterwards, İmece Evi was selling these products to urban consumers looking for organic products via internet. Therefore, the local products were conveyed from the countryside to the urban areas in this way.

As Lietaert stresses, "Clearly, more communication is needed about why we all must live more sustainably."[45] In this sense, ecological initiatives in the region can

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[43] This information is taken from the article, "Burhaniye % 100 Ekolojik Pazarda Üçüncü Sezon Başlıyor!" For further information, see the website, http://ekolojikpazar.org

[44] Bang, *Ecovillages*, 139.

[45] Lietaert, Matthieu (2007), "Challanges for Ecovillages in the 21st Century," *Communities*, 137: 63.

be considered as important actors in terms of sustainability to a degree. First and foremost, they develop the agro-food networks at the countryside, which is important for food sovereignty. Besides, they also make use of traditional local knowledge in their farming practices. They are thereby engaged in a variety of relationships with villagers following traditional lifestyles, which can be considered as significant for achieving sustainability in the Kaz Mountains. Nevertheless, they are far from following a farmer-to-farmer approach. To a great extent, their activities cannot be considered as a remedy for the agro-industrial production too. Therefore, ecological initiatives can establish an alternative to the existing production and consumption practices only by extending their relationships with rural communities to a broader spectrum, and building on the successes of their cooperation with rural communities.

CHAPTER 6

KAZ DAĞI NATIONAL PARK, ECOTOURISM, AND RURAL COMMUNITIES

6.1. Conservation Policies in the Kaz Mountains

States are currently considered as the agencies of environmental protection by many scholars. As environmental discourse has been adopted by states in the recent decades, they have gradually become one of the main actors in terms of environmental governance. Today, they are obliged to "guaranteeing their populations' fecundity and productivity in the total setting of a global political economy by becoming 'environmental protection agencies'."[1] Not surprisingly, national parks and nature reserves have become one of the common ways to institutionalize environmental management by these agencies.

As Macnaghten and Urry put forward, "The various government agencies commonly conceive of the environment as a set of *non-human* qualities, defined in physical terms, whose conservation is essential for the agencies to fulfil their statutory duties."[2] The government agencies in Turkey also put similar conservation policies into practice which "helps shape the future of the countryside, including the boundaries of appropriate human use and engagement."[3] In this sense, forty national

[1] Luke, Timothy W. (1999), "Environmentality as Green Governmentality," in *Discourses of the Environment*, Eric Darier (ed.), Oxford: Blackwell, 145.

[2] Macnaghten, Phil and John Urry (1998), *Contested Natures*, London: Sage Publications, 186.

[3] Ibid.

parks and thirty-two nature protection areas were established throughout Turkey on the basis of the national park decree 2873 and the national park statute.[4]

Both the nature protection areas and the national parks are nature reserves designed for the conservation of the natural environment and of wildlife. Thus, they are established in the areas having a rich biodiversity. The endemic and rare species, and wildlife are protected from the degrading human activities in this way. The nature protection areas are managed for scientific and educational purposes, and are not open to the public, whereas the national parks are open to the public for recreational and other activities. According to the International Union for the Conservation of Nature and Natural Resources (IUCN) protected area categories, the national parks are identified as:

> Areas of land or sea, designated to protect the ecological integrity of one or more ecosystems for present and future generations, to exclude exploitation or occupation inimical to the purposes of designation of the area and to provide a foundation for 'spiritual, scientific, educational, recreational and visitor opportunities' (all of which must be environmentally and culturally compatible)[5]

The Kaz Mountains are determined as an ecologically "Important Plant Area" because of its rich biogenetic diversity.[6] In a former study made by Gemici and et al. in 1998, 800 taxa and 101 familia were detected in the Kaz Mountains.[7] Today, it is found out that there are more than 900 taxa belonging to 101 familia in the Kaz Mountains, which consist of 24 % Mediterranean flora elements, 17.6 % European-

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[4] Bademli, Raşit Raci (2006), *Doğal Tarihi ve Kültürel Değerlerin Korunması*, Ankara: ODTÜ Mimarlık Fakültesi Yayınları, 11. For a list of the national parks in Turkey, see the website, T.C. Orman ve Su İşleri Bakanlığı Doğa Koruma ve Milli Parklar Genel Müdürlüğü (2013), *Türkiye'nin Milli Parkları*, http://www.milliparklar.gov.tr/mp/mp.pdf

[5] Adams, W.M. (2009), *Green Development: Environment and Sustainability in a developing world*, 3rd ed., London and New York: Routledge, 279.

[6] Tümen, Gülendam, Fatih Satıl, Tuncay Dirmenci (2005), *Kazdağı Milli Parkındaki Endemik ve Nadir Bitkiler: Yayılış Alanları Botanik Özellikleri Risk Durumları ve Koruma Önerileri*, Balıkesir Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü, Balıkesir, unpublished study, 4.

[7] Uysal, İsmet (2010), "An overview of plant diversity of Kazdagi (Mt. Ida) Forest National Park, Turkey," *Journal of Environmental Biology*, 31: 146.

Siberian elements, and 1.3 % Iranian-Turanian elements.[8] In their study on the endemic species of the Kaz Mountains, Tümen and et al. assert that there are at least 77 species which are endemic to Turkey, and a further 29 of them are endemic to the Kaz Mountains. [9] In addition, 31 species in the region are rarely met throughout Turkey, though they are not endemic. According to Ekim, the latest botanical researches detected that there are 35 endemic species to the Kaz Mountains out of the approximately 80 endemic species to Turkey.[10] In this sense, future studies could further detect new species in the Kaz Mountains.[11]

In the southern slopes, there are red pines (*Pinus brutia*) up to 800 meters, and black pines (*Pinus nigra subsp. pallasiana*) after 800 meters. There are also the maquis which is characteristic of the Mediterranean climate up to 350 meters. In the northern slopes, which are moister than the southern slopes, there are oaks (*Q. petrarea-Q. cerris*) up to 500 meters. There are oriental beeches (*Fagus orientalis*) and black pines between 500 and 800 meters, and then there are oriental beeches, black pines, and the Kaz Dağı firs (*Abies nordmanniana subsp. Equitrojani*)[12] between 800 and 1200 meters. And lastly, there are the Kaz Dağı firs and black pines between 1200-1650 meters. The pseudo-alpine zone begins after 1650 meters. Although there are not any forests, there are many endemic plants in this zone.[13] This area was used as a pasture before the establishment of the national park.

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[8] Özhatay, Neriman (2012), "Kazdağları'nın Endemik ve Tıbbi Bitkileri," in *Kazdağları Ulusal Çalıştayı*, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 80.

[9] Tümen, Gülendam, Fatih Satıl, Tuncay Dirmenci (2005), *Kazdağı Milli Parkındaki Endemik ve Nadir Bitkiler*, unpublished study, 4.

[10] Ekim, Tuna (2012), "Kazdağları'nın Fitocoğrafyası," in *Kazdağları Ulusal Çalıştayı*, 73.

[11] Ibid.

[12] There are two fir species native to Turkey, namely the Cilician fir (*Abies cilicica*) and the Caucasian fir (*Abies nordmanniana*). The Kazdagi Fir (*Abies nordmanniana subsp. Equitrojani*) is a subspecies of the Caucasian fir. See Global Environment Facility (1993), 'Part Two Technical Annexes', in *Republic of Turkey In-Situ Conservation of Genetic Diversity*, Report No. 11295-TU, Project Document, 6.

[13] For a more detailed discussion on the vegetation of the Kaz Mountains see Cürebal, İsa et al. (2012), "Kazdağları Ekosistemi ve Ekolojisi" in *Kazdağları Ulusal Çalıştayı*, 104-108.

The endemic plants in the Kaz Mountains are usually seen at the higher zones after 1300 meters. But there are also endemic plants at the lower altitudes such as coriander (*Ferulago trojana E. Akalın & Pimenov*) between 100 and 650 meters, foxglove (*Digitalis ferruginea L.*) between 90 and 800 meters, and hawkweed (*Hieracium scamandris Zahn*) between 600 and 800 meters. At the higher altitudes, there are endemic plants such as thistle (*Cirsium steirolepis Petrak*) and thyme (*Thymus pulvinatus Celak*) between 1300 and 1500 meters; yarrow (*Achillea fraasii Schultz Bip. var. troiana Aschers. & Heimerl*), stock (Matthiola trojana T. Dirmenci, F. Satıl & G. Tümen), and cornflower (*Centaurea odyssei Wagenitz.*) between 1500 and 1600 meters; Sarıkız tea (*Sideritis trojana Bornm.*), campion (*Silene bolanthoides Quezel Contandriopoulos et Pamukçuoğlu*), and Rose of Sharon (*Hypericum kazdaghensis Gemici & Leblebici*) between 1500 and 1700 meters.[14]

The fauna of the Kaz Mountains is also rich. There are mammals such as brown bear (*Ursus arctus*), wild pig (*Sus scrofa,*), deer (*Cervus elaphus*), roe (*Capreolus capreolus*), sable (Lutra lutra), stone marten (*Martes foina*), wolf (*Canis lupus*), jackal (*Canis aureus*), fox (*Vulpes vulpes*), hyena (*Hyaena hyaena*), lynx (Lynx lynx), hare (*Lepus europaeus*), badger (*Meles meles*), squirrel (*Sciurus vulgaris*), and hedgehog (*Erinoceus europaeus*).[15]

Besides, the Kaz Mountains are on the migration way of the birds. Wood pigeon (*Columba Palumbus*), wildgoose (*Anser anser*), swan (*Cygnus cygnus*), eagle (*Hieratus pennatus*), falcon (*Falco peregrinus*), hawk (*Buteo buteo*), sparrowhawk (*Acciter nissus*), kestrel (*Falco tinnunculus*), blackbird (*Turdus merala*), partridge

[14] See for the wild flowers of the Kaz Mountain National Park, Dirmenci, Tuncay, Fatih Satıl, and Gülendam Tümen (2007), *Kazdağı Milli Parkı Çiçekli Bitkileri*, Balıkesir: Dileksan Kağıtçılık Tic. San. Ltd. Şti.

[15] These animals are under the protection in the national park. The number of brown bears in the Kaz Mountains is estimated as a hundred. See Cürebal et al., "Kazdağları Ekosistemi ve Ekolojisi", 108.

(*Alectoris graeca*), pheasant (*Phasianus colchica*), woodcock (*Scolopax rusticoa*), quail (*Coturnix coturnix*) are some of the bird species seen in the region.[16]

The protection of the natural habitats of birds is important for the bird species as it is acknowledged in the international treaties such as 1971 Ramsar and and 1979 Bern Conventions. Yet, the changes in land use along the coastal strip not only transformed the agrobiodiversity or the livelihoods of peasants, but also had important implications for the bird species. Several species of birds were especially effected by the destruction of their natural habitat along the coastal strip due to the touristic construction. In this sense, the mukhtar of Tahtakuşlar tells:

> Take for example the species of eagles, ducks, goose, there used to be a unique wood pigeon here. Small birds are like almost extinct. Because in the 70s when I was a child, ten-fifteen years old, flocks of birds used to fly through here. On this seaboard there used to be spots for birds. Over there on the shore there was a field where ducks and birds could nest and feed. But when buildings were erected here, and the nesting places of these birds were loutishly used up, they probably had no choice but to migrate from here.

Indeed, the wetlands in the region were not protected at all. For example, Kazım from Avcılar recounts how the birds were swimming in the reedbed at Akçay in the 1970s:

> Both sides of that flat road before you come to Akçay center used to be lakes in the winter. Only ducks, cormorants used to swim in the reeds. They elevated it a bit. The city was built over water where Akçay is... In the 70s as we went from here to Edremit we used to always see the birds swimming in water. Completely, not a single house. Both sides of the road were completely water I mean. I mean it was a lake. It was entirely water in the reeds.

In addition to this, excessive hunting as well as pesticide use also led the extinction of the bird species. Gani from Hacıarslanlar states that the birds of the 1960s and 1970s are not seen today:

> There is a bird we call the partridge. Spearheaded by the hunters. Look, as soon as it was morning these partridge would come all the way here. Once the morning came, it would go "Coo coo coo!" I mean it would crow like a rooster. There were so many of them… These hunters drove them to extinction… Free rein and all. The man was going off from this village, he

[16] Ibid.

> was going off and coming back at night with a bag of birds. Thus the bird became extinct. Also the peony bird. Once night fell in the mountains, the sound of jackals, the sound of wolves, they would start to howl. Now we could not find a single one. Once the spring came, we call it the cuckoo, it announces the arrival of summer. So these would sing beautifully reciprocating one another. One would stop the other would start. Now not a single one comes here. Those cranes, there are no birds left. They used to migrate to the upland on March 15. It is a migrant bird… That bird is extinct. As the month of November approached those birds would again pour back here… it would surge from the north to the south. No more, all vanished. You see carps are vanished, purged.

The mukhtar of Çamcı also points to the effect of pesticide use as well as hunting on the bird species as follows:

> In the past there was everything. Pheasant, then there was wood pigeon they call it, in winter there was starling, we used to call it the blackbird, the ring blackbird. All the birds, I mean there used to be all kinds of birds here. No more. You know the spraying of pesticides, reckless hunting. Now in the month of February or January, in the hunting season, people with rifles go up all those hills. The animal returns to the forest, during the day it comes down, at night it goes back home. Bam bam bam! They set off thousands of shells. It is a crying shame, a sin!

Veli from Sazlıköy also tells that pesticide use has destroyed the bird species, which were plenty until the 1980s.

> There is no bird species. Now the bird species in the nature are all poisoned. This vineyard, gardens, everywhere it is poison, due to the pesticides birds are gone. You know there are goldfinches, small birds for example. There used to be a lot of them for example. There were plenty of all kinds of birds.

The mukhtar of Avcılar remembers the flocks of wood pigeon passing through the Kaz Mountains towards the sea in the 1970s and the early 1980s.

> It would take off from Şahindere towards the Plain of Ayvalık in the morning go for one hour. Early in the morning the animal would get up go grazing towards Ayvalık. And in the afternoon it would come back maybe in two hours; at night until the evening calls to prayer were done. Now in its place is a shop window. It is finished now, wood pigeon is finished.

He also argues that the reason behind the extinction of the wood pigeon in the Kaz Mountains is not pesticide use in olive oil producing, but rather pesticide use in wheat production in other regions of Turkey:

> Whenever the wheat was sprayed with pesticides. And this wheat is not all the way over here. For example, whether it is in the Plain of Thrace, or in the Plain of Konya, those animals perished when they ate off the surface of the remaining sprayed wheat, off the surface of the soil.

According to the mukhtar of Beyoba, they were using manures for fertilizing their lands beforehand. After they had begun to use chemical fertilizers which birds were picking in order to eat up, it led to the decrease of the birds after the 1980s.

> Back in the day we had wood pigeons around here. For example when the afternoon started to draw away until the sun set, there was no seeing the end of the birds on this strait from the sea to Sarıkız… There was a lot of partridge but it's gone. Back when I was a shepherd for example it would keep hopping in front of us. The dogs were running the partridges. That is before 1990. After it became a national park these birds were gone for good. In the past we did not give European fertilizer to these olives. We used manure. Animals were abundant. Our manure was abundant also. They would load it on an animal, a donkey, and spread it to their olives. They did not spread European fertilizer. Whenever livestock breeding was finished, people turned to the European one. As they spread the European the bird too was picking it to eat.

In the 1970s, the villagers were either hiring men who are armed with rifles to wait at the olive fields or waiting themselves instead, because there were so many flocks of wood pigeons eating the olives. Bekir from Ortaoba tells the following:

> Now folks used to guard the fields. We used to guard them with rifles. For example they would hire daily workers. They'd say, "Let me give your daily wage, guard my fields". For instance let's say I have five fields on this side. We give the man wages. He waits with a rifle for instance or bangs on a tin so the wood pigeons don't come. From that side, from this side, if an end of the flock came out of the mountain, anyway the other end of those wood pigeons would be at the sea. Once it descended, it'd take five-ten sacks, three-five sacks all at once.

Moreover, villagers were ringing tins in their olive fields in order to prevent the sterlings to eat up the olives. Kemal from Kızılkeçili states that several species have been decreasing each year:

> There is also something we observe in terms of the animals for instance. I mean in the past it is known that olive growers used to play tin in the fields. Starling regiments would come attack the olives. There is neither starlings nor anything else. For example there used to be a lot of blackbirds, quails, migratory birds they say. And I mean there were. Each year there are less.

Aykut from Kızılkeçili puts the blame on hunting and construction with respect to the decreasing of the bird species:

> This field, 15 decares of land, they used to play tin around its three sides in the past. It used to take off from the high side dive to the lower side. When a starling flew and dipped it used to take 5-10 sacks of olives... There was uninformed hunting in the past. They played in the birds' paths.

It is clear that vanishing of natural habitats of birds, pesticide use, and excessive hunting, all have been devastating for the birds. Today, birds are still being hunted by the locals at the countryside, and villagers still apply chemical fertilizers to their fields. However, no serious measures are taken to protect birds from excessive hunting or fertilizer use.

Besides, excessive fishing has also contributed to the decrease of brown trouts in the brooks. Can, a guide in his thirties from Mehmetalan, asserts that brown trouts in the streams should be protected as well because fishing in the streams was done by destructive methods.

> Actually there is in the creeks also the trout that should be protected. People are poisoning it. The guywho does not even know how to fish with the line electrifies them with the generator. He goes and poisons it, throws in chlorate, gas tubes… There are living beings in that water of the creek.

Also, it is worth noting that water resources dried up in some locales. For example, the mukhtar of Yassıçalı tells that the nearby brooks where his ancestors were fishing in the past are no more seen today.

> They used to fish in the hills across, in the creeks. We would not know about it this is back then. Now there are no fish or anything in those creeks. Anyhow there is no water… Those abundant waters in the expanses where they used to practice transhumance back then are no more.

Nevertheless, there is still a variety of flora and fauna in the Kaz Mountains. The conservation policies were thereby implemented in the region in order to protect the integrity of the ecosystem of the Kaz Mountains. In this sense, a Nature Protection Area of the Kaz Dağı Fir was established at first on June 15, 1988. This area totally covers 258 hectares where there are endemic Kaz Dağı fir, black pines, and oriental beeches. According to the head of the Edremit Forest Directorate:

> There are mainly firs in Kaz Dağı. We call them Kaz Dağı firs. It is an endemic species. The region where Kaz Dağı firs are found is a nature preservation area. No tree cutting, plant picking, nothing is permitted there.

In 1993, a conservation project was also started by the public agencies in collaboration with the international organizations. The biogenetic diversity project, namely "the In-Situ Conservation of Plant Genetic Diversity Project," supported by the World Bank Global Environmental Facility (GEF) was implemented in the Kaz Mountains in the 1990s. The extent of the project was not only limited with the Kaz Mountains. There were also other sites in Turkey. In this sense, the "Kazdagi National Forest" was selected as the exemplary habitat of the Aegean Region. According to the GEF project document, the Project has five constituents as a whole. These are site surveys and inventories, Gene Management Zones (GMZs), data management, national plan for in-situ conservation, and institutional strengthening.[17] These separate parts of the project are intended to be integral and supportive to each other. In the overview of the project, it is stated that:

> The global scope of this project necessitates that the major focus be on in-situ conservation of wild species, with an emphasis on the following wild relatives: (a) non-woody species –wheat, chickpea, lentils, and barley; and (b) woody species –pear, apple, walnut, chestnut and pistachio because these are the most globally significant genetic resources found in Turkey. The project will also address the management of woody species from an ecosystem approach rather than a species-specific approach. Therefore, important associated forest germ plasm, such as fir, cedar and pine will be incorporated into the project scope.[18]

Accordingly, the forests in the Kaz Mountains were also included in this project because an ecosystem approach was adopted in order to manage the "woody species." Although the major focus of the project is in-situ conservation, the project extends beyond the in-situ conservation, and applies the ex-situ conservation as well.

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[17] Global Environmental Facility (1993), "Part Two: Technical Annexes" in *Republic of Turkey In-Situ Conservation of Genetic Diversity*, Report No. 11295-TU, Project Document, 13-14, http://gefonline.org/projectDetailsSQL.cfm?projID=71

[18] Ibid., 13.

> Within these sites, ecosystem based surveys will be conducted to determine suitable habitats with regard to representativeness, diversity, naturalness and management considerations for in-situ gene management. Following the survey, a species-specific inventory will be conducted at each site with regard to species abundance, distribution and management needs. To support a complementary approach between in- and ex-situ conservation, a few select representative germplasm samples will be collected for ex-situ preservation.[19]

This biodiversity project was applied in the Kaz Mountains in collaboration with the Ege Forestry Research Institute in İzmir. The Institute made the survey and inventory studies in the field. Five Gene Management Zones (GMZs) were chosen in the various sites of the Kaz Mountains.[20] "After the designation of the sites, surveys were made in accordance with ecosystem principles. A suitable management plan has been proposed to protect current genetic diversity and structure of the selected GMZs in a sustainable manner and to perform scientific research studies."[21] As Ergün who is a forest engineer from the Edremit Forestry Directorate states the GMZs in the Kaz Mountains are directly under the supervision of the Ege Forestry Research Institute.

> We have the İzmir Forestry Research Institute. There are gene preservation forests identified by that institute. Everything of those forests belongs to them. For instance, if it is necessary to do thinning there, they come. If the pine cones have to be collected, they come. If the seeds have to be collected, it's them… For example there is a chestnut gene preservation forest. There is a Kaz Dağı fir gene preservation forest.

Besides, Kaz Dağı National Park was also established with the decree 93/4243 of the Council of Ministers on April 17, 1993.[22] The national park extends over an area of 21,452 hectares. The boundaries of the national park extend to Edremit in the south and to Bayramiç in the north. The national park is managed by the Kaz Dağı

[19] Ibid.

[20] Özel, Nihal, Atila Gül, M. Emin Akkaş, Bünyamin Doğan, *Kaz Dağları'nda Belirlenen Gen Koruma ve Yönetim Alanları (GEKYA) ve Yönetim Plan Modeli Yaklaşımı*, 1.

[21] Ibid.

[22] Türkeş, Murat and Telat Koç (2007), "Kaz Dağı Yöresi ve Dağlık Alan (Dağ Sistemi) Kavramları üzerine Düşünceler," *Troy Çanakkale*, 29: 19.

National Park Directorate in Güre. The national park chef explains their activities as follows:

> Now as an activity, it's not like we have a very detailed activity… well since it is a preservation area, first, our main activity is to shield the area from illegal cutting, grazing… where there are species keeping them away from citizen's things… Then, well there are our entrances from the gates. We collect entrance fees from citizens based on the rates the General Directorate sends us. There are routes designated in our field manuals, they take the citizens, show them around on those routes, and bring them back through our gates. That is our field of activity… As for tents, it is possible to set up tents for the day. They have the opportunity to take walks. They have the opportunity to go by car and visit the places to be visited by car accompanied by guides. Of course Kazdağları is a world renowned place at the end of the day. People can't help but be interested in these things, they come and visit.

The head of the Edremit Forestry Directorate points out that there has been an improvement in terms of biodiversity after the establishment of the national park.

> There used to be three management directorates at the place where Kaz Dağı National Park is located, before the national park, production was done under the forestry directorate. But after it was turned into a national park there is improvement in the forest, let me say, the preservation of endemic species has increased even more. Because entrances take place in an organized manner. People are not allowed to just enter the forest as they please.

It is obvious there has been a strict protectionist policy concerning the national park. It is common to hear from the national park officers that local people's lack of concern for nature leaves them no other option rather than enforcing rigid rules. In this sense, the national park chef asserts that the attitudes of local people force them to follow such a strict policy:

> It varies from country to country… culture to culture…our citizens regard the forest only as a barbecue party place. They don't enter it saying let me go around, take a walk, sweat. I don't know, let me see the plants there, let me see the animals there, show them to my children. I mean, they don't come thinking this will enable my children to have an affection for that forest, nature, animals … That is the truth of the matter. Perhaps that's why… we go into a more strict protectionism.

An environmental management prioritizing conservation and ecotourism was thereby institutionalized in a small part of the Kaz Mountains after the establishment of the national park directorate. However, there are important

organizational deficiencies of the national park directorate, so that it cannot implement a comprehensive conservation policy. First of all, there are not enough experts as the national park chef asserts:

> This national park thing is something that should exist in the present day. There should be preservation areas so that, I mean at least in terms of transmitting those rare species, mountain animals to future generations. Well it should be done more professionally. I mean for instance I am a national park engineer, I am responsible for Kazdağları. I think in our department, among our staff there should be a botanist. If you ask why. Well, we have our endemic species, our herbs, our plants, flowers. That's not my expertise. I am responsible for administration, managing the place. But for example how are these endemics… did their flow to the area decrease? Did seeds germinate this year? Was there depredation in that area?

Similarly, Ergün also points out that there are certain deficiencies of the institutional structure:

> The organization, staffing of the national park, the constitution of the institutional structure… For example there is a forest engineer here… So where, for example if there is archeology, where is the archeologist? Where is the biologist? Where is the environmentalist? Where is the environmental engineer? What about the veterinarian? I mean if you are going to protect these, you must protect biological diversity… then you have to employ experts in these fields here. You have to establish this organization.

Besides, he asserts that the national park regulations only aim to protect the ecosystem from human interference rather than increasing biological diversity:

> There is nothing toward increasing biological diversity at the moment. … But there is toward conservation. I mean for instance the other day the villagers collected centaury. Our foresters went ahead and reported it. Why? Because yellow centaury is one of the endemic species. It exists in certain regions. And it should not be collected from the national park.

Yet, he also puts forward that the conservation-utilization balance must be established in order to implement a sustainable forest management.

> We have to establish the conservation-utilization balance in Turkey. Especially for the forests. Only a conservationist approach, only a utilitarian approach will definitely disrupt sustainable forest management. We have to have the two together.

According to him, there has to be a development project of the national park in accordance with the protection and utilization balance.

> So if you say just protection you gridlock it, you can't get people to do anything. If you say just utilization then you destroy the national park. I mean you destroy especially the endemic species. That is what I was referring to when I said conservation-utilization balance. This is in scope of a plan. For example this place should have a development project, the national park. Development projects are done in national parks. Those development projects are very important for national parks.

Obviously such a balance has not been constituted at all, since conservation policies are weighted unequally by the national park directorate. Accordingly, there has been an entirely protectionist policy in Kaz Dağı National Park, which even restricts any forestry activities and infrastructure developments.

> There is the national parks law in Turkey. In that law the forestry activities are delimited. In line with those restrictions, you can't undertake certain production activities. You can't do certain road constructions. Therefore, this is how I see it. In a part of Kazdağları, an entirely preservationist approach has developed in the National Park.

Although cuttings are forbidden in the national park area, there has been ongoing logging in the other parts of the Kaz Mountains. While discussing farm forests and rural livelihood in Finland, Hyttinen and Kola assert that, "Potential forestry activities consisted of cuttings as well as silvicultural and forest improvement practices proposed in the forest management plan."[23] Likewise, forestry management in the Kaz Mountains also includes silvicultural and forest improvement activities in addition to logging. In this sense, the chef from the Bayramiç Forestry Directorate tells the following:

> All the works we do are geared towards the maintenance of the forest, improving its quality and moreover always expanding the forest land…If you can stave off the incurred damages and preserve the forest as is, I think that is a success as well. On top of that we do rejuvenation of old forests, there, through the things we call rehabilitation, through income generating activities we do tree planting, under planting and other works for the idle, damaged lands, open lands to again so that they become fertile forests, or at least to be less exposed to erosion. We set our grazing to a plan, we do grazing plans.

[23] Hyttinen, Pentti and Jukka Kola (1995), "Farm Forests and Rural Livelihood in Finland," *Journal of Rural Studies,* 11 (4): 393.

Cuttings are made in various areas of the Kaz Mountains under the management of Edremit, Ayvacık, Bayramiç, Yenice, and Çan Forest Directorates, which are responsible for the forestry production in the Kaz Mountains. These cuttings are done periodically in certain spots that have been already determined by the forestry directorates according to the ten years programs in accordance with the sustainable forest management. The chef in the Bayramiç Forestry Directorate explains these cuttings in the following way:

> There is an old forest. Think of it that way. There, we must rejuvenate this forest. You rejuvenate this forest through natural rejuvenation works. What happened? Natural rejuvenation. I mean the cutting we call *tensil* [regeneration]. Then this area was rejuvenated. What happens? Because they are young saplings maintenance is done here. What is it? Youth maintenance. Monitoring the oak and other sprouts that harm the saplings. Carrying out interventions that will minimalize the weed pressure and enable it to gain advantage in terms of nutrition and light… It reached a certain density age. Density maintenance… Thinning too actually happens at a further stage. Thinning maintenance when it gets to the stage where we start producing wood products… When we say thinning maintenance you can't make use of the cut products in the financial sense. Then the maintenances are done. Naturally of course the maintenance period is long. We rejuvenate a black pine forest at the age of a hundred and twenty on average. I mean a hundred twenty, a hundred and forty years.

The Bayramiç Forestry Directorate also makes clear fellings in the degraded forest areas. Lately, they made such cuttings in the forest villages of Yassıbağ, Çavuşlu, and Serhat in order to regenerate those areas. For example, in the Yassıbağ Village, 26 hectares of red pine trees in a degraded zone were clear felled in 2012, and red pines, stone pines, terebinth, and almond trees were cultivated instead. Especially stone pines are regarded to bring an important income for the villagers in the future. The chef in the Bayramiç Forestry Directorate explains these cuttings as such:

> I mean our rationale is as follows. Let's have the calabrian pine and the stone pine grow up to a certain level. Ultimately when the stone pine reaches the time when it yields a financial value here, when the villager starts to make money, then by clear-cutting all the calabrian pine we will both get reimbursed for the expenses we have made to this day and also it will be a business. The villager too in its aftermath will start to generate an income from the stone pine towards the future… To date we must have planted about 50 hectares of stone pine.

Currently, such clear-felling in degraded zones in order to plant new income bringing species is made on the northern side of the Kaz Mountains. This project aims to promote livelihood of villagers living in forest villages. In this sense, Le et al. assert that, "Livelihood-enhancing activities must be part of the [reforestation] plan, livelihood projects as a part of the overall plan should address the needs of people in the area in order to ensure their participation and interest in sustaining the project."[24] In addition, they also give examples from Indonesian and Peruvian restoration projects, and comment that, "Tree planting programs are most successful when local communities are involved and when the people perceive clearly that to achieve success is in their own interest."[25] Thus, to what extent the reforestation project in the Kaz Mountains would support rural communities, is a contesting issue since forestry management is rather planned and implemented in a top-down approach by the district forestry directorates.

Furthermore, scholars also argue that traditional forest conservation knowledge of indigenous communities should be given recognition by the forestry agencies. Discussing on the Cordillera in Philippines, Camacho et al. put forward that, "The forest management approach adopted by local people treats forest as a 'lifeshed' where human existence is connected with land, forest and water."[26] In the Kaz Mountains Region, especially *Türkmen* communities have traditional knowledge on timber work transmitted from older generations. Thus, their knowledge can be utilized in various ways by the foresters. It is clear that acknowledging the potential of rural communities for forest sustainability could be the first step towards

[24] Le, Hai Dinh et al. (2012), "More than just trees: Assessing reforestation success in tropical developing countries," *Journal of Rural Studies*, 28: 11.

[25] Ibid.

[26] Camacho, Leni D. et al. (2012), "Traditional forest conservation knowledge/technologies in the Cordillera, Northern Philippines," *Forest Policy and Economics*, 22: 8.

integrating local people into the sustainable forestry management through participatory mechanisms.[27]

The cuttings which are of vital importance for forest management in the Kaz Mountains can simply be classified as rejuvenation cuttings on the one hand, and maintenance cuttings on the other. Both are an integral part of the sustainable forest management, which aims to conserve forests as well as to sustain logging through scientific methods. In this sense, the type of forest also makes a difference in terms of cutting. For example, different techniques are adopted in the rejuvenation cuttings of red pine trees and of larches. The head of the Edremit Forestry Directorate explains this as follows:

> Different intervention forms are foreseen as *tensil*, as rejuvenation… Seeding cutting in larches. First the trees are thinned. The seed…if it is increasing, the rejuvenations formed according to the given seeds are made. Trees inside are extracted at certain intervals in larches. In calabrian pines you take all of them at once. A method called clear-cutting… that is the main method in calabrian pines. And so far our success rate is at 80-90%.

Besides, he mentions that maintenance cuttings are also made which are essential for extinguishing forest fires:

> And then there are maintenance cuttings. This is a forest but trees and their tips touch each other, disturb each other, pressure each other… The main one in the group… remains but we remove those trees inside that squash one another. This is called thinning… I mean you do maintenance in the forest. This is also essential in terms of fire. I mean when there is a fire in a very thick forest it climbs directly to the top and cannot be extinguished. But in a maintained forest it has a hard time climbing up.

So the maintenance cuttings made by the forestry directorates is an effective way of preventing the spread of forest fires. Even though forest fires seldom take place in

[27] In this sense, Tucker further argues that "community forestry" adopted in the mountainous zones of La Campa in Western Honduras, and of Capulálpam in Mexico offers "an alternative to external management of resources," and that local communities "have achieved relative success at protecting their forests" through community forestry. Accordingly, she asserts that "the residents' organizational experience and background of self-governance contributed to their ability to implement forest management. Their local governance included the practice of reaching a consensus or compromise agreements in the community's best interest, above strong differences of opinion. Moreover, they had strong traditions of communal labor to accomplish community projects and a commitment to forest protection." See Tucker, Catherine M. (2000), "Striving for Sustainable Forest Management in Mexico and Honduras: The Experience of Two Communities," *Mountain Research and Development*, 20 (2): 116-117.

the Kaz Mountains, in case of fire, the fires can be controlled more easily in the forests if maintenance cuttings are regularly made. Other measures were also taken by the Edremit Forestry Directorate to prevent forest fires in the Kaz Mountains. Today, there are about 14 active watchtowers in the Edremit Forestry Directorate today,[28] and an electronic fire alarm system was also set up in the national park in 2010. The head of the Edremit Forestry Directorate asserts:

> Fire monitoring system… the camera goes around the field, scans it. It detects smoke, it stops there…. it has a detection system… it sends an alarm to the center.

Some scholars oppose the conservation policies which aim to prevent forest fires since they see forest fires as essential for the regeneration of the forests. In this sense, Darier criticizes the conservation policies as follows:

> This is the case with 'conservationism', which wanted to prevent deforestation, but led to increased exploitation of forests for commercial and state interests, through greater scientific –and presumably 'rational' –forest management. Fire prevention can be seen as a measure to protect forests (as well as commercial, fiscal and tourism "avenues), but can also lead to long-term ecological decline if forests are prevented from regenerating themselves through fire. Therefore, the degree of 'greenness' of resistance can be measured only in context, not in the abstract.[29]

Whether forest management leads to greater exploitation of forests under the guise of scientific methods or not, which is an issue beyond the scope of this study, it is true that forest fires lead to the regeneration of forests. In fact, a big forest fire had taken place in the Kaz Mountains in the 1940s, which had destroyed a considerable amount of the forests. The forests in the Kaz Mountains regenerated to a great extent after this fire. In this respect, Ergün states unequivocally that sometimes interventions in the national park area need to be made by the forestry directorate in order to prevent the degeneration of forest or forests fires.

> There are certain difficult situations. For example, there are bug reproduction issues, mushroom reproduction issues. Then you have to intervene. For example the roads are closed off. If you don't intervene now, God forbid, if

[28] Villagers also work as lookouts in these watchtowers in the Kaz Mountains.

[29] Darier, Eric, "Foucault against Environmental Ethics," in Darier, Oxford: Blackwell, 234.

> there is a fire in the national park, especially if there is a fire at night, intervention is very difficult…. Why? At night, air vehicles don't work. And well, the road is closed too. Tell me, what option do you have? I mean if you just let it be.

The locals also see the national park management as a problem in case of forest fire. The mukhtar of Avcılar criticizes the national park directorate on the grounds that they do not let villagers utilize anything from the national park. According to him, a forest fire can be extinguished much harder in the national park as the surface of the forest is covered with too many leaves and decaying trees.

> Even the woods that are about to rot, the National Parks don't give away. They rot the logs there, they rot the wood. Even though we are forest villagers, you can't enter the forest, it is prohibited. Even though it rots there. Tomorrow when there is a fire, putting out those thick layers would take ten helicopters of water; a fire in the forest that is thin, cleaned can be extinguished by spraying one helicopter of water. But they regard even these too much for the villager. "No it'll stay" he says… The villager's loss from this is great.

In this sense, pasturing is also considered as a natural way of controlling forest fires by villagers. As pasturing is forbidden in the national park, the land is entirely covered by grass in summer, so that extinguishing a forest fire could be extremely difficult.

On the other hand, the national park regulations are usually supported by environmentalists and tourism entrepreneurs because of their conservation facet. However, that is not to say that they take for granted everything about the national park. In fact some are very critical of the national park arrangements. In this sense, Ercüment, a retired in-migrant from İstanbul who runs a pension in Çamlıbel argues that the national park system has not been established properly in the Kaz Mountains.

> This is not a National Park that is managed like the National Parks in Europe, in America. It is interesting, why isn't it, I don't know either. And yet all the engineers, they went, they studied the National Parks there. But they could not create a system that would fit here. Now at Kaz Dağı, we've received no map, no direction. We are told, "Here we have guides. Take one guide and go". This National Park administration should not be like this.

Although foresters, national park officers, and environmentalists usually consider the issue from a conservation perspective, such a point of view more or less ignores the complexity of the problem. In fact, the national park is much more than a natural reserve established according to conservation criteria. Discussing about Yellowstone National Park, Robbins argues that the establishment of a natural reserve is also a human act as well as a political act.

> The removal and reintroduction of the wolves, the culling and protection of the elk, the abolition and return of fire, indeed the very establishment of a "wilderness" reserve from a sacred hunting and living space, are all human acts. They are, moreover, political ones. Each decision and counter-decision is born of bureaucratic incentives, economic pressures, and the changing power of rangers, legislators, hunters, concession companies, hoteliers, ranchers, visitors, environmentalists, and scientific experts in an ongoing struggle. Yellowstone is an expression of political power both in its very existence, as well as in the specific distribution of species across its landscapes.[30]

A nature reserve does not merely refer to a protection site of flora and fauna but it also refers to a sociocultural site constituted by the acts of a variety of actors. Thus, the national park should be reconsidered from a new perspective going beyond conservation. In the next section, the national park is thereby examined from the perspective of rural communities in order to shed light on this issue.

6.2. Kaz Dağı National Park and Rural Communities

The establishment of national parks created similar problems worldwide. First, the indigenous communities are forced to pull out from mountains, forests, pastures or savannahs. That is to say, they are deprived of natural resources. Afterwards, environmental management policies are implemented by declaring these spaces as the national parks or the nature reserves. As Demeritt argues on Arusha National Park in Tanzania, "The creation of Arusha National Park as a protected nature reserve involved removing peasants from the land and depriving them of access to

[30] Robbins, Paul (2004), *Political Ecology*, Malden, MA and Oxford: Blackwell Publishing, xvi.

resources in the name of biodiversity protection."[31] In this sense, the Kaz Mountains are no exception. The conservation model adopted in Kaz Dağı National Park is the fortress conservation model which excludes local people from the national park areas. According to Adams,

> The conventional approach followed the experience of industrialized countries by establishing protected areas (PAs), land set aside for 'nature' or 'wildlife', where human use could be either prevented or severely constrained. This approach, often called 'fortress conservation' (Brockington 2002)…has tended to place conservation in direct conflict with those people with rights to, or need for, resources in protected areas.[32]

In this sense, Hartter and Goldman also argue:

> Under the fortress conservation model where parks have hard-edged boundaries, often indigenous peoples have had little to no input in park establishment and are excluded or forcibly removed from these areas despite having ties to the land from settlement, traditional hunting, and grazing rights.[33]

Before the opening of Kaz Dağı National Park in 1994, the forest villages around the national park had to approve it. In the beginning, public authorities gave many promises to villagers because they needed the ratification of nearby villages for establishing the national park. However, the majority of mukhtars were against the national park then. Can, a guide from the Mehmetalan Village, remembers that officers came to their village in those days to ask the mukhtar for help in order to persuade his opposing fellows in the other villages that the national park would be beneficial to them.

> Apparently the guys came and immediately found our mukhtar because he was a forester. "We are going to make this a national park, there are some problems with other mukhtars, help us convince them", they said. Our mukhtar went, convinced them all.

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[31] Demeritt, David (2001), "Being Constructive about Nature," in *Social Nature: Theory, Practice, and Politics*, Noel Castree and Bruce Braun (ed.), Malden and Oxford: Blackwell Publishers, 27.

[32] Adams, W.M., *Green Development*, 278.

[33] Hartter, Joel and Abraham C. Goldman (2009), "Life on the Edge: Balancing Biodiversity, Conservation, and Sustaining Rural Livelihoods around Kibale National Park, Uganda," *FOCUS on Geography*, 52 (1): 11.

However, Can also asserts that the then mukhtar approved the project with a different motive.

> He had that place made thinking that people will constantly work in it, beautify it, and that it will generate more income for the people. Doesn't know a thing about the ecosystem.

According to Deniz, another guide from Mehmetalan, villagers were not informed appropriately on the national park regulations by the public authorities at that time.

> I mean, actually it is a mistake, this was not explained to anyone when it was decided to make this a national park in 93… They only came to the mukhtars and said, "Look we will make this a national park. Well, this mountain will be preserved, new employment opportunities will be created for the villagers," saying these, tricking them, this national park was built here. So the villagers were tricked.

Moreover, the regulations concerning the use of the national park were not applied strictly soon after the establishment of the national park. In this sense, villagers mention that they could enter to the national park without restrictions until 2004. As the mukhtar of Avcılar asserts:

> Under the circumstances of the time, you know they spoke to the villagers in fancy phrases, you know, "We'll make you guides. You'll guide the tours. You'll get the wages. You know we'll make you guards. Then you'll benefit again." After over a decade has passed with those fancy phrases, they have a right to object within a 10 year frame. The villagers listened to this. Back then a bit lax, free, they let them be. After ten years was up, "It is absolutely restricted, you can't enter." Your right to object has expired.

Nevertheless, the public authorities did not hold on to their promises, and the expectations of villagers concerning the national park were not realized at all. It is clear that rural communities were not taken into consideration by the public agencies when the national park was established two decades ago. That is to say, the needs of local people were underestimated completely. In this sense, the head of the Association of the Kaz Mountain National Park Guides mentions:

> Before it was declared a national park the region's population especially benefitted from this mountain in some way or the other for years. You know from its herbs, creek, mushrooms, wood, from many things. Well, now after it was declared a national park, this was of course restricted. When it was restricted this time the people... began to regard the national park almost as

> an enemy. Yet, right before this was declared a national park or right after the declaration of national park if dialogues were frequently established with the region's people explaining why that area will be declared a national park, why we should protect it... this should have been emphasized both by the local authorities and through town municipalities. But I guess it was not explained adequately.

Establishing a national park is also an act of construction of nature as a natural capital and an ecotourism site. "Even the setting up of a natural reserve is basically only a change in the form of social construction of nature, namely utilization for ecotourism or as "natural capital.""[34] This has important implications for rural communities. First, local people are missing from this landscape. Although, during a festival in August, they can visit the national park where there is a supposed tomb of a mystic figure called Sarıkız, and can even camp there for a week, they are not allowed to enter into the national park freely any other time. Second, the traditional living of peasants dependent on the Kaz Mountains disappeared, largely through the conservation policies of the public authorities. In sum, the sociocultural and the socioeconomic environment of forest villagers were abandoned in order to construct a nature reserve and ecotourism site instead. Thus, the national park was established by disregarding rural communities from the beginning.

While rural communities are excluded in the name of environmental conservation from entering into the Kaz Mountain National park on the one hand, it has been opened to visitors who are able to afford for an ecotourism experience on the other. Actually, "in most countries, park visitation rates are continuing to rise."[35] Likewise, according to the statistics of the Kaz Dağı National Park, the number of visitors were 7625 people in 2013, 7615 people in 2012, 9087 people in 2011, 7134 people in 2006, 4792 people in 2005, and 4072 people in 2004. These figures show that visitors to the national park increased almost twofold in comparison to a decade

[34] Brand, Ulrich and Christoph Görg (2008), "Sustainability and globalization: A Theoretical Perspective," in *The Crisis of Global Environmental Governance: Towards a new political economy of sustainability*, Park, Jacob, Ken Conca and Matthias Finger (ed.), London and New York: Routledge, 18.

[35] Buckley, Ralf (2012), "Parks and Tourism," in *Ecotourism and Sustainable Tourism: New Perspectives and Studies*, Jaime A. Seba (ed.) Toronto and New York: Apple Academic Press, 104.

ago. The national park directorate charges these visitors, and earn up from entry and activity fees, which are in turn redistributed to guides as well.

Guides are required to accompany the visitors during their excursions in the national park. To some extent, guiding provides an additional livelihood for some villagers. Out of 37 guides in total, 23 of them are from the forest villages in the Kaz Mountains.[36] There are only two entry gates to the national park. One of these gates is close to Avcılar, and the other one to Mehmetalan. Guides are most numerous in Mehmetalan and Avcılar in this regard. More or less, guiding is of benefit to forest villages then. As one cannot enter into the national park unless accompanied by a guide, this reminds one of the surveillance theme discussed by Macnaghten and Urry concerning the British countryside.

> Surveillance is powerfully involved here. The visitor to various environments is subject to extensive monitoring. In Britain visitors to the countryside are subject to an extensive 'country code' which is partly implemented by countryside rangers or wardens. Often there is no general right to roam and one is enjoined not merely to walk in particular directions but even to keep rigidly to the footpath otherwise one may contribute to environmental damage.[37]

Visitors to the national park are also subject to monitoring. In this sense, guides are expected to watch over the visitors with whom they go together. For example, one cannot collect plants or flowers, and cannot light a fire in the national park area. Besides, one is required to walk along certain paths, or to camp in the places that are already determined by the national park directorate. Monitoring is considered as an effective way of preventing any environmental harm that could be given by the visitors.

However, guides claim that the national park has created an environment where illegal hunting can be done much more easily, as local people such as forest workers, shepherds, peasants, and women are not there to monitor such acts any

[36] See Appendix K for a list of the national park guides.

[37] Macnaghten and Urry, *Contested Natures*, 123.

more. In this sense, Deniz compares Kaz Dağı National Park with Kruger National Park in South Africa:

> I mean there is Kruger National Park in Africa. Wild life, a huge national park. Now only animals live there, no illegal hunter can enter at any given time. Only, well, like the system here, the local people in Africa, people who know the place, act as guides for people who come for safaris. I mean the guide system has existed since many many years. And this is recently starting in Turkey.

Hunting has been customarily done in the Kaz Mountains long before the opening of the national park, but he argues that there are huge differences between the former hunters and the new ones.

> There were hunters who just did it for fun. There were those who went and fished with fishing rods. There were those who went and shot one pig and came back. There were men who did not sell the pig they shot. Now there are men who sell the fish they catch. There are men who sell the bear they shoot… I mean he sells one bear, his fur for five, six thousand liras. I mean, a man goes throws poison sells the fish…Those who regard the national park as business I mean they bludgeoned the villager. The villager was left out bro. The villager thought he would be protected. They thought the mountain is ours. Now he looks at Kazdağları from across.

He also thinks that detaching local people from the Kaz Mountains would turn the national park to a place belonging to the elite in the future:

> One day hotels will be built inside this mountain. By detaching people from here under the guise of a national park, by increasing the price over time, when it is turned into a place where only the elite can enter… I mean this mountain will belong to the special elite. I think that is the aim of the national park.

Besides, Can is critical of seeing nature as a capital. According to him, the main problem is approaching nature in this way:

> And the wrong thing is to look at this place with the perspective of capital, ok? How can you look at this nature as capital?... Wouldn't the person who sells water sell the mountain as well? So, water is the greatest life source, if there is no water there is nothing. Now you, the creek that flows here, that flows in abundance, where many people drink water, puts it into a pipe, sells it… And you can't even touch that water. What is the tree to him!

The establishment of national parks has also brought about the commodification of nature to some extent. In this sense, Neuman argues that the local Ju/wasi people

were banned from ranching after the opening of Serengeti National Park in Tanzania in 1951 because it was not appropriate to ecotourism.

> Economic development, such as ranching, was prohibited because it violated the imposed definition of "traditional" culture. The Ju/wasi would become, in essence, another tourist attraction –this in spite of the fact that far from being "primitive" or "traditional," they had been incorporated into the world economy in various ways for over a century.[38]

In this sense, the Kaz Mountains has also become a touristic nature reserve by prohibiting pasturing and forestry to rural communities. If we consider that both activities had been at the core of *Yörük* and *Türkmen* cultures for centuries, the national park means vanishing of a traditional culture in the name of nature protection and ecotourism. In this sense, the mukhtar of Tahtakuşlar states the following:

> Now the Kaz Dağı region, it extends from the sea to the peak of the mountain, I mean this natural, cultural, preserved area. Now a certain part of Kaz Dağı has been taken under protection. But under this protection, the place under protection follows an uninhabited settlement model. One without people, without livestock, without plateau tourism. Nature is left entirely on its own and protected with the preservation method, and this, what is done at Kaz Dağı, it has no financial contribution to the villages at the skirts of the National Park.

Not surprisingly, there is a tension between the national park directorate and villagers. In the eyes of villagers, the national park officers as the authorized actors of conservation are protecting the mountain by excluding them, who have been the genuine protectors all the time. The national park chef also seems to be concerned with those forest villagers whose lives are affected to the utmost due to the national park. In this sense, he recognizes the problems of forest villagers:

> Unavoidably of course the citizen has certain problems in this regard because we have taken under protection the places where he was born, grew up in, spent his childhood. Of course he can't cut wood from where he used to, can't pick pomegranates from where he used to. For instance like this… Inevitably livestock… we have to. I mean from the preservation area.

[38] Neumann, Roderick P. (2003), "The Production of Nature: Colonial Recasting of the African Landscape in Serengeti National Park," in *Political Ecology: An Integrative Approach to Geography and Environment-Development Studies*, Karl S. Zimmerer and Thomas J. Bassett (ed.), New York and London: The Guilford Press, 252.

Though he is aware of the losses that are experienced by the forest villagers after the establishment of the national park, the national park directorate does not offer any remedy for them.

> Now, the village inside the forest. Well, of course we can't let him graze his animals the way he wants. Agricultural land is inadequate. Stockbreeding opportunities are limited. Well, how will we maintain our citizens here? I mean what, which income will this sustain? It is necessary to present them with projects that can sustain their lives here somehow.

As a former chef of the national park at the Gelibolu Historical Peninsula, Ergün suggests that villagers should take a share from the national park revenues.

> Now is there a national parks law in Turkey! And also there is a special law for a single site in Turkey, that is the Gallipoli Peninsula Historical National Park. That law has introduced a share for villagers there from the national park revenue. So then what should we do? You should say that from the money you make from Kaz Dağı National Park, I will give say 20% to this village, to this legal entity. For instance, on the back side of Kaz Dağı on the Kalkım side there is foreigner hunting. No share from the foreigner hunting is given to the villagers.

Most importantly, the national park directorate could not establish close relationships with the villagers, and most of the villagers do not want to comply with the national park regulations after so many years. The national park directorate adopts the conventional green view that environmental literacy can convince people of the benefits of the national park. In this sense, the national park chef asserts the following as to their relationship with villagers:

> We try to ensure that our villagers have a close relationship with the national park to the extent possible. I mean at the end of the day this is a preservation area. We try to explain to the citizen that this is a protected area; that the legislation of this area is accordingly; that is to say it should not be regarded as one of the forests governed by a normal management; you know that the plants here are special, the animals here are special; its nature, flora, structure is different, we try to explain these to the citizens best we can.

At first glance, the environmental management adopted in the Kaz Dağı National Park can be considered as sustainable from an ecological point of view as the flora and fauna of the Kaz Mountains are protected in this way. Actually, "conservation objectives have become more complex as conservation has moved from single species conservation to an ecosystem approach that often limits use in these areas

by local people."[39] Thus rural communities living nearby the national park has had a serious setback to their livelihoods after the establishment of the national park. Pasturing and forestry, which have been practiced incessantly for generations, came to an end in the nearby forest villages. Not surprisingly, many villagers in the region have taken a critical stance towards the national park. In this sense, Nuri from Tahtakuşlar argues that:

> Until this 1993 Kaz Dağı used to be a shepherd's plateau. From Altınoluk to Akçay all here… They made it a national park they banned all the shepherds from the mountain. We can't protect the mountain and whatnot, that's mere talk. What happened when they banned them? People's art died here. People's art of livestock rasing, people's sustenance. What happened? Ayvacık, Ezine, Bayramiç, Çan shepherds were banished from this mountain. Then stockbreeding around this mountain died. What happened? It became dependent on the outside. The most extreme stockbreeding was on this mountain.

Especially pasturing almost expired in the forest villages around the national park such as Avcılar, Tahtakuşlar, Beyobası, Pınarbaşı, Ortaoba, and so forth. That is to say, villagers were deprived of traditional means of livelihood. The mukhtar of Yassıçalı talks about the effect of the national park regulations on raising livestock as follows:

> Here everything is economy. All people have is their animals, and the field, the groves. They'll raise goat, sheep, but now the plains are forbidden. Now if you say "the mountain is forbidden also"… Now, from our village a herd would come, a goat herd. If there are 100 households here, 90 had goats. You'd have one, he'd have two, she'd have three… There was a village shepherd. He would come in the morning. On that street where the village leads up to the mountain, everyone would bring and leave their goat there in the morning, the shepherd would take them, graze them in the mountain, bring them back in the evening. Come evening, everyone would milk their goats, put them aside. Thus it would go on. Now with that ban, all that's over.

In this sense, the mukhtar of Avcılar states the following:

> There were 500-600 sheep in our village… Used to graze in the summer. For instance they'd go up in the spring. In October, after the mating season was over as well, they would bring them. They had sheep folds here in the

[39] Hartter and Goldman, "Life on the Edge", 11.

> village, at the edge of the village. They'd put them in the sheep folds, tend to them with hay, forage in the winter.

In addition, he also claims that grazing did not give any harm to the forest; on the contrary, pine trees germinate abundantly in the forest areas grazed by flocks of sheep, according to him:

> For example 8-10 herds would go up to separate sections. I would graze mine in this segment, you would graze them in this segment. That way harmless on the mountain, the mountain is under protection. Since the sheep don't harm the mountain either, they just eat their grass there. Plus the sheep bury the fallen seeds, the seeds of pine nuts, as they trod around. There the forest blooms thicker, because its toenail buries these, as it steps on them it slides these. It makes the soiled part into grain, settles it, because they come and pass through the same place. It grows there. The sheep don't eat the pine tree. The forest grows thicker. This is certain.

Flocks of goat and sheep were brought to the pastures in the Kaz Mountains from the villages of Ayvacık in the west as well as from the villages of Bayramiç in the north. Thus the Kaz Mountains had been a meeting point for the stockbreeders for a long time before the banning of pasturing in the national park. The mukhtar of Yassıçalı tells the following in this regard:

> Then there were large sheep herds coming from the other side. I dunno know but maybe there were 20-30 herds. Only on that bare area up there, you know you went up to Sarıkız. In that area, up there, there were herds that came from the other side [Bayramiç], from Ayvacık. Now you completely banned them. They are harmful.

In this sense, Mustafa, the old villager from Pınarbaşı, also says similar things:

> They banned everywhere. There is that Gırangolu [Bayramiç], say Ayvacık, the goods of that side used to come to our mountain in the summer. For instance around 1000 sheep would come to graze to this side from there. They'd pass the summer season here.

Although the national park does not cover all the area in the Kaz Mountains, its effect has gone beyond its boundaries. As the pastures in which shepherds grazed the flocks were included in the national park area, the establishment of the national park has affected pasturing in the whole region. Therefore, the national park has had a devastating impact on pasturing made by the forest villagers at large.

Crop raiding by wild animals have been a common worldwide problem of local communities living in and around the national parks.[40] The exclusion of shepherds from the Kaz Dağı National Park also deteriorated the problem of crop depredation. In this sense, the mukhtar of Çamlıbel points out that shepherds prevented wild pigs from attacking to olive fields or fruit in villages, as they were planting a variety of fruit trees in the Kaz Mountains while they were pasturing there.

> For years herds grazed on these mountains, no plant grew extinct. Plus while shepherds were grazing sheep here on the mountains, mulberry trees, plum trees, apple trees were planted on the stream beds to protect wild life. Back then pigs wouldn't come down here. Now there is no fruit above, pigs come down… Well now you prohibited the shepherd from going there. And there used to be no fires there either. While there were shepherds there was no fire either because shepherds are the guards of the mountain, its natural guards. They protect life because they have animals there. But you put an end to all this.

After banning of the shepherds from pasturing in the national park, it seems that pigs come down to villages much more. Musa, a small farmer making olive oil producing in Ortaoba, asserts:

> There are many pigs. They break the pears, the figs a lot. They eat the olives and now when there is snow up in the mountain they come down all around here. We collect what remains.

However, hunting of wild pigs is forbidden strictly though they give harm to the crops of villagers. The mukhtar of Beyoba, which is nearby the national park, also states:

> Pigs come down of course, they do harm, how wouldn't they? But kill one and there is a fine. They are more valuable than us. Whatever is eaten is gone. Whatever is not eaten is harvested. The remainder is enough for us. I mean we share the produce.

Forestry was also practiced by many peasants in the forest villages located around the national park. After the opening of the national park, it also lost its importance

[40] See Hartter and Goldman, "Life on the Edge," 11-17. See also Anthony, Brandon (2007), "The dual nature of parks: attitudes of neighbouring communities towards Kruger National Park, South Africa," *Environmental Conservation*, 34 (3): 236-245.

to a great extent. In this sense, the mukhtar of Tahtakuşlar explains how things changed after the establishment of the national park:

> Before it was a National Park we were doing stockbreeding in the forest. We had plateaus, we were farming sheep and goats and livestock. And inside the National Park, inside the forest there was a production, there was forest work. There was a forest cooperative in our village. There was tree, wood business and forest fire teams would be established from these forest villages. Now these are gone also.

In this sense, the mukhtar of Mehmetalan also asserts that forestry came to an end after the creation of the national park.

> I mean now if it wasn't declared a National Park, 70 % of our village were people who made their livelihood from the forestry business… In 93 after Kaz Dağı was declared a National Park, forestry cannot be done at Kazdağları anymore, it is over.

After cuttings in the national park area were banned completely, livelihood options from the forest were limited substantially, and many rural households in the forest villages were affected in turn. In the past, several members of a household could work together because everyone would carry out different duties in the course of a forestry work. So there was a division of labor among the members of a single household. The mukhtar of Avcılar mentions it as follows:

> Look, back in the day there were lumberjacks. Then there were haulers, for example log haulers. Plus timber men were a separate group from the same family. Wood packers/wrappers were different, log packers/wrappers were different. Movers, truckers were different. So many different types of people were earning their bread. At least back then 150 households made their living of this place, easy.

Shepherds and forest workers were not the only groups that were excluded from the national park. Women villagers were also prohibited from entering into the national park to collect plants and cones. The customary activities of women were thereby brought to an end due to the national park management. In the following passage, the mukhtar of Yassıçalı questions the conservation policies of the national park in this regard.

> Now everyone's living space has been constricted. Now, people would go to pick tea leaves, oregano, linden, to the creek to collect linden. I don't know,

> to pick tea, especially to pick tea. So if this thing doesn't dry up then how is it drying up now.

Seher from Doyran thereby mentions that women cannot go to collecting mushrooms in the national park:

> There are morels on the mountain, there are mushrooms. When it's the season these grow in the national park. And people cannot go eat, collect not even a single one… They used to. Of course both the village folk and the city dweller would go and pick them… That side, that national park side mountainous, because it is marshy, there are a lot of mushrooms there.

In this sense, Fatma from Mehmetalan is also very critical of the national park regulations:

> Kazdağları became a national park, and life became a bit tougher for villagers. Because it's a national park, you can't pass at all from there. You can't bring wood. I mean the villager life is long over. They don't even let you collect pine cones.

In their ethnobotanical survey of medicinal plants in the Gulf of Edremit, Polat and Satıl put forward that women and elder people have more knowledge on herbs in comparison to men and the young.[41] Indeed, traditional knowledge on local herbs had passed to young generations through either women or elders. In this sense, Bryant argues the following:

> Also integral to the process of local women's empowerment is a greater recognition of their role as custodians of local botanical knowledge. This knowledge – passed down through the generations – has increasingly come to be concentrated with women who, after all, are on the environmental 'frontline' when it comes to family sustenance.[42]

Thus, acknowledging the role of women as custodians of local knowledge on herbs is considered as an integral part of their empowerment process by Bryant. Insofar as the Kaz Mountains Region is concerned, the empowerment of women in particular, and villagers in general lies in adopting a more participatory approach to the management of the national park which includes local people to at large.

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[41] Polat, Rıdvan and Fatih Satıl (2012), "An ethnobotanical survey of medicinal plants in Edremit Gulf (Balıkesir-Turkey)," *Journal of Ethnopharmacology*, 139: 639.

[42] Bryant, Raymond L., "A Critical Agenda for Change?" in Castree and Braun, 160-161.

In 2013, a group of mukhtars from the forest villages nearby the national park such as Ortaoba, Mehmetalan, Pınarbaşı, Beyoba, Arıtaşı, Tahtakuşlar, Kavlaklar went to Çanakkale to ask the Regional National Park Directorate for a revision of the national park territory. They suggested that the national park boundaries should be rearranged, so that the national park areas around the forest villages could be used by the villagers for pasturing, collecting firewood and plants. Actually, the demand of villagers in the Kaz Mountains Region is appropriate to the recent global attempts to redesign the national parks and protected areas.

> Faced with an overwhelming challenge to promote environmental protection while improving local lives and livelihoods across large or newly expanded protected areas, managers and agencies are increasingly turning to land-use zoning. Ideally, these zoning projects provide a means to balance conservation aims with economic development goals across large areas and among diverse stakeholders.[43]

Such a change concerning the national park boundaries is also proposed by the forest engineers in the national park directorate or the Edremit forestry directorate. In addition to providing rural communities with a living space, this change would also conserve the endemic Kaz Dağı firs on the northern side. In this sense, Ergün puts forward:

> However, it is necessary to make some changes in its boundaries. It is necessary to exclude certain areas from this Edremit side from the national park and take certain sections from Bayramiç, Kalkım, Ayvacık, especially from the boundaries of these three establishments and add them to the national park… I mean it is necessary to constrict it from the south and expand it a bit form the north. Why? There, for example Kaz Dağı fir, which is an endemic species, has extensions toward Kalkım and Bayramiç establishments. They are still outside the national park area.

The national park chef also asserts that the boundaries of the national park could be changed in order to give forest villagers some space around the national park. According to him, areas losing their national park status on the southern side could be compensated by including the land from the northern side.

[43] Naughton-Treves, Lisa, Margaret Buck Holland, Katrina Brandon (2005), "The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods," *Annual Review of Environment and Resources*, 30: 245.

> The boundary of the national park should allow for the villages to have a breathing space, at least when the citizen steps outside his house we don't say, "stop bro, this is a national park!"… move towards such a position through the political will, the Cabinet is also doing this, changing it. And the boundaries of the national park, there is no rule, no regulation that says this can't be changed. Everything is under the authority of the government and state. Even I mean in my opinion moving these sections to the north, and to compensate Kaz Dağı National Park from the north especially those northern parts where the Kaz Dağı firs grow, compensate from the back side. I mean that is what seems reasonable to me.

Ufuk, another forest engineer from the Edremit Forestry Directorate also acknowledges the problem of villagers concerning the boundaries of the national park, and suggests that they can be changed:

> Of course when declaring a place a national park absolutely one should not disregard the social…structure there. I mean when establishing its boundaries. If you are too close to one another people will be uncomfortable. There is such a reproach especially in the villages that remain in the national park. Of course the planning of all this can change… I mean those boundaries can change. I mean benefitting from it. Now Kaz Dağı is anyway a very special site with its own flora, endemic species… It is a place that should definitely be a national park but the boundaries of this national park—I am saying this for the slightly lower altitudes where the people live—could have been set at a little higher point.

It is clear that the activities of local people can be integrated into the national park through land-use zoning. If areas around forest villages are opened to the utilization of people, the national park will be extended to the northern side of the Kaz Mountains where the endemic species of the Kaz Dağı firs are abundant. Such compensation will also relieve forest villagers on the southern side as they will have enough living space around the national park. So both conservation of the Kaz Dağı firs and development of rural communities could be achieved to some extent. Therefore, adopting a community-based approach to the national park management, as already discussed at length in Chapter 2, could reconcile biodiversity conservation and rural development in the Kaz Mountains Region.

6.3. Ecotourism in the Kaz Mountains

The notion of sustainable tourism has been adopted worldwide by the tourism sector, local authorities, and environmentalists alike since the 1990s. Although "[a] single quantitative measure of sustainability in tourism remains elusive"[44], the definitions of sustainable tourism usually point out similar aspects. To begin with, The World Tourism Organization defines sustainable tourism as follows:

> Sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems.[45]

In addition to this, Holden mentions that the International Federation of Tour Operators (IFTO), in the Balearic Isles in the Mediterranean developed a sectorial project called ECOMOST (Ecological Model of Sustainable Tourism) in the early 1990s, which adopted the following definition of sustainable tourism: "the maintenance of a balance where tourism runs at a profit but not at the expense of the natural, cultural, or ecological resources."[46] In a similar vein, sustainable tourism is also defined as "tourism which is economically viable but does not destroy the resources on which the future of tourism will depend, notably the physical environment and the social fabric of the host community."[47] It is obvious all these

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[44] Buckley, Ralf (2012), "Sustainable Tourism: Research and Reality," *Annals of Tourism Research*, 39 (2): 534.

[45] WTO, WTTC and EC (1996), *Agenda 21 for the Travel and Tourism Industry: Towards Sustainable Development*, World Tourism Organization, World Travel and Tourism Council, and the Earth Council, USA, quoted in Holtz, Christopher and Stephen, Edwards (2003), "Linking Biodiversity and Sustainable Tourism Policy," in *Ecotourism Policy and Planning*, David A. Fennell and Ross K. Dowling (ed.), Oxon: CAB International, 41.

[46] IFTO (1994), *Planning for Sustainable Tourism: The Ecomost Project*, Lewes: International Federation of Tour Operators, 6, quoted in Holden, Andrew (2008), *Environment and Tourism*, 2nd ed., London and New York: Routledge, 165.

[47] Swarbrooke, J. P. (1999), *Sustainable Tourism Management*, Oxon: CAB International, 13, quoted in from Saarinen, Jarkko (2006), "Traditions of Sustainability in Tourism Studies," *Annals of Tourism Research*, 33 (4): 1124.

definitions take into account the environmental and sociocultural concerns as well as the sectorial interests.

In this sense, Saarinen asserts that there are three traditions of sustainability studies on tourism, namely, resource-based tradition, activity-based tradition, and community-based tradition.

> The resource-based tradition reflects the limits of the natural or original conditions of the related resources and the needs to protect nature (natural capital) and the local culture (cultural capital) from unacceptable changes caused by tourism activities. The activity-based tradition refers to the resource needs of the industry with respect to its present and future development, aiming to sustain the economic capital invested in tourism. The community-based tradition stresses the wider involvement and empowerment of various actors, especially host communities, in development by emphasizing the elements of social capital in a local context.[48]

The topography of the Kaz Mountains Region is an outstanding advantage in terms of tourism because one can easily carry out different kind of activities in a single day. Actually, the scope of touristic activities is not limited only to the sea, but it is also possible to engage in a variety of alternative activities such as trekking, having thermal baths, and visiting archaeological sites. In other words, sea tourism, ecotourism, health tourism, and culture tourism can be made in the region. According to the former mayor of Zeytinli, all towns in the region should act together in order to put forward a regional perspective taking into account these tourism alternatives.

> Now actually the most important sector is essentially tourism. It is the tourism sector. Why? Actually tourism has a very big potential. There is a serious potential with its olive, flora, the sea, Kazdağları, mythological assets, cultural assets…Edremit, there Kadıköy, Zeytinli, Akçay, Güre and Altınoluk should act together. It should put forth the region's outlook…by bringing together the assets of this region, the values of its local people, by joining forces to make this Gulf a … led by the tourism sector in the sense I mentioned…together with health, ecotourism, nature tourism. By bringing in also the sea and the thermal…but it doesn't happen…unfortunately.

Although tourism entrepreneurs argue that the region has not become a full-fledged tourism destination yet, the most promising sector seems to be tourism in the future.

[48] Ibid., 1131.

Currently, hotel tourism is considered as a better alternative to the second houses by the local actors such as municipalities and tourism entrepreneurs. In this sense, the mayor of Küçükkuyu asserts that they have to make a choice:

> Here we must make the following choice. Will it be a tourism resort town, secondary housing tourism town like Altınoluk, Akçay; or will it be teeming with hotels, motels, tourist facilities like Çeşme, Kuşadası? First of all this choice must be made. For me, right now, my preference is for this place to become a town with tourist facilities rather than secondary housing. Because when it is secondary housing people live here for three months, and it does not generate any profit. But when there are tourist facilities there are employment opportunities, it yields a lot of profit.

Tourism entrepreneurs are also interested in making investments in the region as it has a great potential for a variety of tourism activities. The head of the Association of Travel Agencies of Turkey (TÜRSAB) came to the region recently in order to investigate the prospects for tourism investments. In this sense, new hotels are being built in the region incessantly, which could turn the region to a destination in the future.

However, hotel tourism does not contribute substantially to the livelihoods of rural communities. Tourism entrepreneurs rather underestimate villagers, and usually limit their activities to specific locations. That is to say, hotel tourism favors an activity-based tourism instead of community-based tourism. As Burhan from the Adatepe Village asserts touristic benefits should spread over to the villages.

> Now, here, I mean everyone started, all the hotels, motels, etc., thinking let me do everything. What we have here is, we see tourism as a corridor. He brings the tourists somewhere. Makes them roam in his own corridors, on his own track. He sells everything on that track, in that corridor. Here the hotel keeper should make money from his hotel room. And what does the villager in the area do? He makes soap, olives, carpets, rugs, handcrafts. Both that tourism and the visiting tourists should be guided towards these products so that the local people can also benefit a little, so that some profit can be made together. It should not be one single boss in the corridor making all the money.

According to Buckley, "it is clear that mainstream tourism, like other industry sectors and the human economy as a whole, is far from sustainable."[49] Indeed, the

[49] Buckley, "Sustainable Tourism: Research and Reality", 534.

tourism sector has increased construction works considerably in the region, which poses a serious threat for the environment. Construction gained a momentum especially after the 1980s, and led to the replacement of many olive groves and agricultural fields by the touristic sites. Besides, tourism development in the region also led to environmental pollution in the touristic towns due to the infrastructure problems. "The carrying capacity of sewage disposal systems has been exceeded due to the rapid increase in the number of hotels and construction of second homes."[50] Such a tourism development also brought on an unwarranted use of the water resources because most of the secondary houses had opened their own artesian wells. It seems that the excessive use of water by the touristic sites especially in the summer season led to a certain decrease in the underground water resources. Therefore, population pressure can magnify in the future as to become a threat to the water reserves. There is an ever increasing migration to the region, and the construction of second homes seems to continue in the future. In this sense, Ercüment from Çamlıbel criticizes the municipalities severely:

> This started in the 70s. We used to come, back then it was more beautiful around here. But these last 10 years, 20 years it has been so fast. There is an unbelievable amount of migration, unbelievable level of bad haphazard construction, unbelievably bad municipal administrations, unbelievable municipal administrations. The things we all know, all the mayors are building contractors, look at the entire sea shore. All the mayors are either building material dealers or operators or I don't know what. They have taken hold of the lobbies and are doing politics. This is what they have turned the cities into.

Municipalities could be considered as one of the leading actors in this process because they were authorized to give permission to the construction of these second houses instead of olive groves. Currently, all the mayors are aware of the fact that sustainability can be achieved by prioritizing olive oil production and ecotourism. Yet, most of these touristic sites were built by cutting olive trees down in the recent decades. In this sense, the mukhtar of Tahtakuşlar tells:

[50] Tosun, Cevat and Alan Fyall (2005), "Making Tourism Sustainable: Prospects and Pitfalls," in *Environmentalism in Turkey Between Democracy and Development?*, Fikret Adaman and Murat Arsel (ed.), Aldershot: Ashgate, 253.

> By combining agriculture and tourism in such places, but not a massacre like this. I am very upset since the beginning, about the cutting down of these olive trees, about the disappearance of this nature. I go up on a hill at night and watch my own homeland. I look towards the mountain in order not to see. I mean if you see it at night what we have before us is a pollution of concrete.

According to local people, construction has also affected the climate. In this context, they assert that humidity is certainly higher than the past due to the destruction of olive groves in the plains along the coastal strip. If construction process goes on unceasingly, the region can have much more serious environmental problems in the future.

One of the most important issues raised by mayors as to sustainability was the foundation of a recycling facility for the whole region. However, local governments do not engage in the development of sustainability projects except in a few limited examples. That is to say, the attempts to handle sustainability through the implementation of projects are usually lacking in the region. Most importantly, mayors do not seem to recognize the necessity of integration of local actors in participatory decision-making processes. Therefore, sustainability was basically expressed in highly technical terms by local governments.

As resource-based sustainability tradition evaluates, "Tourism causes impacts, but in order to achieve further growth and development, individuals and actors will have to cope with the environment in a new and better way, such as by altering their behavior or number but not primarily the resource that is used."[51] To some extent, ecotourism could facilitate such a change because it is done by taking into account natural amenities and environmental conservation. In this sense, Barrow asserts that different zones must be identified in tourism areas according to their carrying capacities.

> Ecotourism must fit the carrying capacities (environmental, cultural, economic, or whatever) in the affected area. One strategy is to zone areas according to their sensitivity, so as to give maximum protection to pristine

[51] Jarkko, "Traditions of Sustainability in Tourism Studies," 1127.

> and vulnerable localities; buffer areas around these help to protect them from more intensive explotation in outer zones.[52]

The Kaz Mountains are also one of the important ecotourism sites in Turkey. Hence, Kelkit et al. suggests several measures to develop ecotourism in the region.

> Kazdagi…is a strong candidate for ecotourism in Turkey. However, it requires effective planning of resource use, protection of biodiversity, support of local economies, participation and consultations with local communities, development of appropriate stuff, and responsible marketing.[53]

Today, ecotourism is considered as the most viable option for the development of the region by almost all of the local actors. "The attraction of ecotourism for many administrators is that it can yield foreign exchange, has the potential to be sustainable and 'green', and can be established with reasonable investment and limited socio-economic change."[54] Hence, the mayor of Küçükkuyu argues:

> The latest rising trend in the world is ecotourism. We must establish this tourism in Kazdağları. But of course also supervising it, taking precautions. Against environmental pollution, I mean without causing any harm.

Certainly, the Kaz Mountains has a great potentiality for ecotourism. Erman, a retired academician from İstanbul, who runs a boutique hotel in the Yeşilyurt Village, states the following in this regard:

> I mean now the Kazdağları, I think in terms of the vicinity to be accentuated one of the most important potentials is Kazdağları. There are magnificent landscapes higher up. The nature is magnificent. The plant species and what not. This really should be protected. There are some very important assets. But there are also very contradictory things. For instance, you descend and there is a heap of concrete. You ascend and there is a magnificent nature.

The Kaz Mountain Hoteliers' Association[55] (KAZOD thereafter) is a professional association founded in 2008 which aims at protecting the Kaz Mountains while

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[52] Barrow, C. J. (2006), *Environmental Management for Sustainable Development*, 2nd ed., London and New York: Routledge, 338.

[53] Kelkit, Abdullah, A. Esra Ozel and Oner Demirel (2005), "A Study of the Kazdagi (Mt. Ida) National Park: an ecological approach to the management of tourism," *International Journal of Sustainable Development & World Ecology*, 12: 147.

[54] Barrow, *Environmental Management for Sustainable Development*, 340.

[55] *Kaz Dağı Otelciler Derneği* in Turkish.

developing it as an ecotourism destination. According to the head of KAZOD, who is also an hotelier from the Yeşilyurt Village, sustainable tourism development without disrupting the natural amenities is possible. He explains the objective of the association as follows:

> The primary objective of the association is firstly to protect and improve our namesake Kazdağları, which is the pioneering region of soft tourism in other words ecotourism in Turkey. But our aim is not to keep it as is while trying to protect it. Protecting it, but at the same time integrating it into the economy. Sustainable tourism, proving that it is possible to have tourism without destroying the environment, the environmental assets. That is the founding objective of the association. To show that tourism can be done in the region together with and without disrupting the ecological assets of Kazdağları, the rich fauna and the flora, their balance and the ecosystem.

In this sense, he sees construction as more dangerous than gold mining. With respect to construction, he remarks as follows:

> Not only gold mining, we are against all sorts of physical interventions that endanger the ecosystem of Kazdağları. It is not only about the gold mine. There could have been a chrome mine here as well. Not only that, we are against it even if they attempt to open a quarry here. Therefore, I don't think it is right to put the emphasis on the concept of gold mining… Among these physical interventions, neither gold nor copper or mine ranks first. Land development, second one is housing they should first look at that. First of all it is the settlements, construction. The most striking example is Altınoluk. Then of course who got the land development plans of local administrations there approved, whoever did that, they should first look at what they have brought about. How did they destroy those olive groves? And then they should worry about mining and what not!

To some extent, the development of ecotourism can prevent the further construction of new touristic sites instead of olive groves because ecotourism favors tourism practices which do not transform natural environment in an unsustainable way. Nevertheless, it can also increase pressure on the natural resources since human activities in the Kaz Mountains will proliferate in the meantime. In this sense, Necdet, the head of the Association of the Kaz Mountain National Park Guides, contends that the nature reserves must be better protected as ecotourism activities will be widespread among people at large.

> This thing called ecotourism is very much in fashion right now. In the future it will be even more in the limelight… Not only our Mount Ida National Park, it will be more popular in the entire country side, the mountain expanses. Therefore, we will have to better protect wild life, our natural habitat.

Currently, ecotourism activities are mostly limited to a few villages which are also inhabited by the in-migrants. Especially after the 1980s, lots of in-migrants from the metropoles such as İstanbul, İzmir, and Ankara settled down in the forest villages such as Adatepe and Yeşilyurt. These newcomers are mostly from the upper middle classes escaping from the bustling cities. While some of them are ex-professionals in their middle-ages who quitted their jobs to lead a natural living at the countryside, others are the retired urbanites settling down at the countryside. A common feature of these in-migrants is that most of them have engaged in ecotourism. In this sense, they run boutique hotels and pensions as well as cafes for ecotourists. In addition, some also produce niche products of olive and olive oil for consumers in the big cities.

In both of these villages, an extensive renovation of the old stone houses was undertaken by the in-migrants, which led to the protection of the traditional architecture. In this sense, the construction of new buildings is not permitted in Adatepe since it has been declared as a protected area. On the other hand, the traditional architecture has been protected in Yeşilyurt by the initiative of the tourism entrepreneurs without any help from the public agencies. The head of KAZOD asserts:

> Here, in this village, without any contribution or support from the state and local governance, only through the great struggle of me and my other friends we have a mission of protecting the architectural texture, the traditional buildings in this village and the outcome is evident. I think this is probably the only case where a civil initiative has realized this in Turkey, succeeded in such an effort.

Thus, both of these villages underwent a radical transformation due to ecotourism. Renovated stone houses, boutique hotels, elegant coffees and shops selling niche products can be considered as the symbols of this transformation. In both villages, certain cultural events also take place occasionally. Adatepe and Yeşilyurt are

thereby transformed by in-migrants not only in terms of physical environment, but also in terms of sociocultural environment. Not surprisingly, in-migrants consider themselves as the main agents of this change. Volkan, an in-migrant and hotelier from Adatepe, remembers the old days contemptuously:

> If you had come to this village in 92, as you were walking in the village your feet would be infested with fleas. Everywhere there were sheep… and here, we, I mean, what great courage, we saw that we could do tourism. Here we are in 2010, and you see such a beautiful village. Well-preserved, one where you can have a cup of tea at the village square, a place where I can sit right there.

Over the years, both villages have become significant destinations for ecotourism. Currently, one can frequently meet the tour buses in the village squares at any time. Especially, tourists also visit the Zeus Altar located in a hill nearby Adatepe, as they can see a panoramic view of the Gulf of Edremit. Apart from the daily tours, tourists also come to stay in the boutique hotels or pensions for longer periods. In this sense, Erman from the Yeşilyurt Village argues that there are two kinds of tourism in the region. One is sea tourism, and the other is mountain tourism or ecotourism.

> Now there are two types of tourism here. One is sea tourism on the shores below... And then there is mountain tourism, ecotourism... I mean the two are very different. The people the two appeals to are very different...People flood here from İstanbul on weekends in April, May. The months when our village is most crowded are April and May. Because, really, nature is very beautiful around then... The villagers are surprised. "Are these İstanbullites nuts? They travel so many kilometers. They stay just for two days and leave."... Then, therefore those who come here are not happy with all the construction below. But since they don't feel this in the villages, it is quiet here, calm.

It is clear that tourists looking for serenity come to these villages for spending their holiday. These are mostly urbanites that prefer to take a vacation in the countryside surrounded by the natural amenities. Moreover, tourists also come to these villages in winter. Vedat, another hotelier from Yeşilyurt, who is an in-migrant opening the first boutique hotel in the village in the early 1990s, states the following:

> The village is a well renowned village. The accommodation capacity is only 150 beds. Thus, at certain special times there is great demand but few beds... I mean they used to go to Abant. They used to go to Kartalkaya. People

> would go to Uludağ, but in the last ten, fifteen years, Kaz Dağı has become an alternative vacation destination in addition to these. Thus, for what do people come here? Well they come to rest. To hike in the woods. To repose. It is a different, unique place. It has become an alternative for winter.

Accordingly, boutique hotels and pensions founded by the in-migrants paved the way for ecotourism in these forest villages. Different ecotourism activities are more or less made by most of these hotels. In this sense, Volkan explains their activities as follows:

> In October we do a jujube harvest for instance. Then in November, December, mushroom collecting tours... Same goes for olive picking... according to the requests of our guests, we do things like going to higher villages to pick tomatoes, eggplants, beans from the field. Again we do ecotourism.

Evidently ecotourism has also created off-farm employment opportunities for the villagers in the boutique hotels and pensions owned by in-migrants. As some of the in-migrants do not stay in their houses for the whole year, and move to the cities in fall and winter seasons, villagers are also employed as caretakers of their houses in villages until they come again next spring or summer. In this sense, Salih from the Adatepe Village mentions:

> The villagers take care of their houses, their gardens; do their cleaning. So you know the villagers also make a few bucks.

Today, natives are much less in Adatepe in comparison to Yeşilyurt. In fact, there had been a massive outmigration from Adatepe to other towns and cities since the 1950s. The village had already been left to a great extent before the arrival of in-migrants in the late 1970s and the 1980s. In the past, it was even a bigger settlement than Küçükkuyu. In this respect, Salih recalls those times:

> So this was a village of 550 households, population of 2000. Above—I mean the current center is above—two bakeries, in addition a shoe store, barbershop, stores if you're looking for a store, five or six coffee houses, a reading room. A book published in İstanbul would find its way here. This is a highly literate village... The past was better!...Years when I grew up, I am talking about the 1960s, it was better for me.

In Adatepe, small disagreements between in-migrants and villagers also took place over raising animals in the village.[56] Villagers have customarily raised domestic fowl and other livestock, whereas urban origin in-migrants were not accustomed to living with these animals. Accordingly, Salih mentions that in-migrants could not bear to see any animals in the village:

> They didn't want sheep, they didn't want chickens. They didn't want donkeys to bray, dogs to bark... We had some difficulties, but we don't have that problem anymore... Then why did you come here? Go back to your İstanbul. You will see everything here; I mean this is a village.

Although villagers raise livestock or fowl to a lesser extent nowadays, it is rather related to the restraints imposed on them by the national park regulations as well as to the changing lifestyles of new generations of villagers.

On occasion, tensions also grew between villagers and in-migrants in the Yeşilyurt Village. The different interests of these two groups were even reflected in the former mukhtar elections in 2009. At that time, the conflict emerged as the mukhtar, who was a native supported by the majority of the villagers, wanted to replace the old historical road with a new one. In-migrants leaded by the tourism entrepreneurs opposed this proposal severely since tourists were wandering along the road, which was considered as historic. However, most of the villagers supported the mukhtar as the new road would make it easier to reach their olive groves. So both sides supported different candidates in the mukhtar elections. As a result, the old mukhtar was re-elected by most of the villagers against the candidate of the in-migrants, who was an hotelier. Soon after the elections, the old road was abolished, and a new road was built instead of it. Vedat states the following on this issue:

> We nicknamed it the Roman road at the time... An old road... The mukhtar opened those roads... so the villagers could go to the olive groves more easily, so that some lands, some lots of the villagers would become more valuable… the mukhtar opened those roads. They opened a road from there too. Thus the baby was thrown out with the bathwater.

[56] The same problem was also mentioned by villagers at Çamlıbel where in-migrants have been living.

In our interview, the mukhtar of Yeşilyurt did not mention about this specific event though he argued the pros and cons of the inmigration. He emphasized that the village houses were renovated, and there was liveliness in the village because of tourism. Yet, he also pointed that the new generation were influenced in terms of dress, and so on. Moreover, he was also critical of the incomers concerning cultural adaptation:

> The village folk, especially my people, are really honest, kind, I don't know, social. I mean it seems to me like they can't really get along with those who come here... In İstanbul, I don't know, there are apartment blocks... the size of my village. Here there are people who don't know their next door neighbor. Well, those people, when they come here, they don't even know to say hello on the street, because that's what they are used to over there. They can't adapt to the sociability here. Thus, he goes in and out of his house, comes and goes. Doesn't even greet people as he passes through the square. And that of course upsets the villagers a bit. I mean it upsets them a bit, but after a certain amount of time, one gets used to it. I mean everyone minds their own business.

Villagers in the Kaz Mountains usually call all in-migrants as *İstanbullu* without distinguishing between them. The term *İstanbullu* denotes an in-migrant regardless of whether that person comes from İstanbul or not. Even if one comes from another city in Turkey, he is still called as *İstanbullu*. In the eyes of villagers, the term signifies a distinct social group rather than positing a geographical location. Obviously, this is a way to demarcate the boundaries between natives and incomers. Thus, it helps them reassert their communal ties by constituting both themselves and others as monolithic entities.

There have been a large number of amenity migrants moving from the big cities like İstanbul, Ankara, and İzmir, and settling down at the countryside since the 1980s. Amenity migration has promoted ecotourism activities in the region considerably because in-migrants are mostly engaged in ecotourism activities in villages they have been living. Especially, the Adatepe and Yeşilyurt villages also set a precedent for other villages in terms of ecotourism. Today, ecotourism activities are increasingly adopted as an alternative livelihood by villagers in the region. Thus,

evidently, amenity migration has made the forest villages in the Kaz Mountains more open to ecotourism developments.

Obviously villagers have been engaged in ecotourism initiatives more and more. In this sense, there are small ecotourism initiatives such as boutique hotels, pensions, camping sites, and cafes run by the villagers in various forest villages. Besides, the young from the forest villages such as Mehmetalan, Tahtakuşlar, Avcılar, Pınarbaşı, and Kızılkeçili work as guides in the national park.[57] The young villagers are also employed in the ecotourism tours organized by the tourism agencies. In this sense, ecotourism can reverse the outmigration from villages to the nearby towns or the urban areas insofar as livelihood alternatives other than agriculture are made available for the young people.

The specific locations of the forest villages are also significant in terms of ecotourism. As forest villages are scattered throughout the Kaz Mountains, rural communities have many natural amenities around them. For example, there are several popular tourist spots located nearby the streams, which are mostly visited for picnicking and swimming by both tourists and locals. Although these sites are managed privately as they are leased to tourism enterprises under the long term provisions by the national park directorate, villagers living around these places also benefit from the tourism activities to some extent. In this sense, the locals from the Beyoba Village which is close to one of these sites called Hasanboğuldu have a stand for local products in order to make sales to the tourists visiting there. Moreover, some villages are also popular for daily excursions where tourists sit at village coffeehouses for food and beverages. The Kızılkeçili Village, which is close to Akçay, is one of those places. Thus, Aykut tells:

> Our village is one of those that has had its share of tourism. Well now this park area where we are is the most important showcase of our village. Guests coming from surrounding areas visit the village here for breakfast and as a rest stop. We have a monument tree below. There is an 850 year old monument tree; it has seen Byzantine. Since it is a registered tree, they come to see it. Below, the Çağlayan picnic area is one of the oldest picnic areas of

[57] See Appendix K for a list of the national park guides.

> the region. I mean people who live in the region, local and foreign tourists visit Kızılkeçili Village in this respect.

Currently, ecotourism activities are practiced much more in Mehmetalan and Avcılar in comparison to other forest villages nearby the national park because the two entries of the national park on the southern side are close to each one of these villages. In this sense, several pensions and camping sites were established in Mehmetalan in the recent decade, where many ecotourists come to stay. Besides, currently a project is also funded by the Southern Marmara Development Agency for developing home pensions among villagers in Mehmetalan.

On the other hand, in the Avcılar Village, ecotourism activities are rather limited to organizing daily tours in the national park. In this sense, there is a jeep-safari firm called Kaz Dağı Tours arranging excursions to several spots in the Kaz Mountains. So the mukhtar of the Avcılar Village asserts:

> Now there is economic development in mountain tourism... For example there are five, six jeeps in the village. They organize tours. Kaz Dağı Tours. They take people up the mountains.

The tourism agencies based in Altınoluk or Akçay also arrange ecotourism activities of guided jeep-safari tours in the Kaz Mountains. As profit seeking businesses, they seem to have no concern with including rural communities in these tours. In this sense, they do not even stop off in the forest villages where tourists could buy some goods. At best, their contribution to the village economy is the employment of villagers as tour guides. According to Necdet, these tours should also contribute to the village economy.

> Tours should also provide some contribution. Not directly to the park, but first, you know to the bazaar in the village or a market set up in the village, and the promotion, buying of the goods there, shopping, or the promotion of the village folk, the village there. I mean this is actually also something that is a part of ecotourism.

To some extent, ecotourism has been a contested field. Some scholars argue that the term ecotourism is loaded with the economic concerns rather than the ecological ones, and the prefix ‘eco’ appears as the successful indicator of selling.

> So let us reject the 'ecotourism' label as indicative of some imagined guarantee of ecological purity and innocence, a certification that the tourism experience concerned is in some way environmentally benign, educationally enlightening and locally focused. Let us instead concede that 'eco' sells…[58]

It is also contesting whether these activities can be considered as ecotourism or not. According to Ercüment, who is also a member of the KAZOD, the Kaz Mountains has been opened to mass tourism rather than ecotourism. He argues that their initial aim was to take back-packing groups on tours in the Kaz Mountains. Thus, he criticizes the tours made by the tourism agencies:

> We were talking about an original tourism, and as our association, the Kaz Dağı Hoteliers Association. We had aimed to host these backpacker, hiker groups, take them around Kaz Dağı. Yet, what has become apparent is that due to extreme pressure, we have once again opened Kaz Dağı to mass tourism. I mean Kaz Dağı is visited now, but it is visited in that sense which we did not intend for. Many companies have been established down there, they all have jeeps, they do safaris. They take people to the mountain in masses now, people who have nothing to do with the mountain but who say "I should go to Kaz Dağı once". They show them around in vehicles and bring them down. That's what it ends up being all about. This is a situation we don't want, and it also disturbs the mountain immensely.

Furthermore, he argues that the forestry agency did not lay the groundwork for mountain tourism or ecotourism.

> Camping sites were going to be constructed, people were going to be taken up to certain points and then be distributed based on their various interests. This wasn't done… It can't be done because the relevant departments of the Directorate of Forestry should undertake this organization… It must map, mark the mountain, open it to hikes… These are not done spearheaded by the directorate. We try to do it somewhat, grope around it. But we are faced with a system. That is, a system which says, "It can't be, you can't do it, not possible."

A new publicity office for visitors was founded in Zeytinli lately, where one can have information on the national park, and get some brochures and a small map of the national park, which simply shows the main routes, peaks, valleys, streams, camping sites, and so on. Those who wanted to visit the national park could also find guides there.

[58] Simpson, Ken (2009), "Exploding the Myth of Ecotourism," in *Ecotourism and Environmental Sustainability*, Jennifer Hill and Tim Gale (ed.), Farnham and Burlington: Ashgate, 235.

To some extent, the national park directorate seems to favor the development of a mass tourism in the national park. Routine daily tours by buses, cars etc. to the Sarıkız tomb[59] which is at one of the peaks of the Kaz Mountains are the most popular tours among the visitors, for they are commonly oriented towards there by the national park publicity office in Zeytinli. Though offering a wonderful panorama of the Gulf of Edremit, the land is barren there. These tours are also the most tiresome for guides, since they have already toured there too many times. Thus some of the guides are also keen on alternative nature tours. Can from Mehmetalan tells the following in this regard:

> For instance people will come here, enthusiasts. You know they'll say I want to shoot the Sarıkız tea, we'll show them around. Animal watchers will come, we'll let them watch animals.

In this sense, recently new hiking trails were created on the northern side of the Kaz Mountains with a project of the Bayramiç Provincial District sponsored by the South Marmara Development Agency:

> A project was completed, run by my district governor colleague who served before me in the South Marmara Development Agency… An effort pertaining to the formation and designation of hiking tracks, the promotion of these hiking tracks, their incorporation in the maps, and providing nature lovers and trekking fans with an alternative in this sense… Between the years of 2012-2013… There are several designated hiking tracks. I mean these are hiking tracks located mostly inside and around Ayazma. In the Kazdağları.

According to the long term development plan of the Kaz Dağı National Park, the national park area is divided into three different zones. First, there is an absolute conservation area which covers a substantial amount of the forests and the land in the national park. Second, there is a limited use area including the main routes, the hiking trails, the landscape watching spots, and the wild life observation spots etc. Third, there is a controlled use area consisting of the traditional use area where the Sarıkız festival takes place, the daily excursion spots such as Sutüven (Hasanboğuldu) and Pınarbaşı, camping sites, etc.

[59] The Sarıkız tomb is sacred for the *Türkmen* and *Yörük* communities in the Kaz Mountains Region.

Although the alternative hiking trails as well as the landscape watching spots, and the wild life observation spots were designated by the national park directorate, neither of them have been mapped by the national park directorate in Güre until now. Besides, there is not any booklet for visitors, which gives information on these alternative trails for hiking, or on specific spots for wild life watching or birdwatching. To a great extent, the national park directorate seems to underestimate alternative ecotourism activities such as hiking, camping, nature tours, and birdwatching up to now.

Even though ecotourism has become a popular term which has been articulated by almost every villager in the region, ecotourism in the Kaz Mountains has not been integrated with rural communities until now. In fact, "community-based ecotourism projects" are funded worldwide "to bring the benefits of tourism to local people, thereby encouraging them to preserve the biodiversity they have."[60] Nicholls calls this "conservation by distraction" as "it encourages people to take up alternative practices that are compatible with conservation."[61] Therefore, ecotourism could become a prospective alternative for the forest villages only if such projects are developed by the national park directorate, or other public or private agencies.

[60] Nicholls, Henry (2012), "The Conservation Business" in Jaime A. Seba (ed.), *Ecotourism and Sustainable Tourism: New Perspectives and Studies*, Toronto and New York: Apple Academic Press, 107.

[61] Ibid.

CHAPTER 7

ENVIRONMENTAL CONFLICT ON GOLD MINING IN THE KAZ MOUNTAINS REGION

7.1. An Overview of Environmental Conflict on Gold Mining

The transnational gold mining firms backed up by the host states considerably expanded their investments in the developing or less developed countries of Latin America, Asia, and Africa in the recent decades. Especially after the 1980s, the national mining industries were privatized in many countries, and comprehensive mining rights and privileges were given to the transnational mining firms all over the world in accordance with the neo-liberal restructuring policies.[1] Moving extractive industries to the periphery where environmental liabilities are minimal and where they can externalize environmental costs to a great extent has been a lucrative business for these companies which would have to comply with stricter environmental regulations in their own countries otherwise.

Moreover, gold mining also led to unrest among local people worldwide as gold mining extraction is usually made in resource rich areas such as mountains, forests, and riversides which are inhabited by the locals. In most cases, rural communities traditionally depending on the communally managed natural resources are deprived of their livelihoods due to gold mining. For example, a tailings dam was not constructed in the Ok Tedi copper and gold mine operating in Papua New Guinea since the early 1980s, which led to the destruction of traditional livelihoods of the

[1] See for a detailed discussion on such a transformation of the Peruvian mining industry, Bury, Jeffrey (2005), "Mining Mountains: neoliberalism, land tenure, livelihoods, and the new Peruvian mining industry in Cajamarca," *Environment and Planning A*, 37: 221-239.

indigenous people living there.[2] "Protests against the Ok Tedi mine began in the late 1980s as the trees along the Ok Tedi River became affected by pollution and gardens along the river floodplain were destroyed by mine tailings."[3] The Tambo Grande Project in Peru was also opposed by the locals, who were mostly farmers and peasants, after the launch of the project in 1996.[4] "Here environmental concerns are a matter of livelihood, rather than the *leitmotif* of the struggle."[5] Similarly, indigenous communities at the Huasco Valley, Chile opposed to the Pascua-Lama gold mining project in 2000s on the grounds "that the mining project and its impacts were excluding and denying a certain livelihood and identity attached to agriculture and water resources."[6] Clearly, concerns over the livelihoods and water resources have been the common motivation of local environmental movements against gold mining around the world.

In this respect, Martinez-Alier puts forward that movements against environmental threats to poor people emerged all around the world. He calls these movements as "popular environmentalism or livelihood ecology or the environmentalism of the poor"[7] Among others "these include movements of peasants whose crops or pasture land have been destroyed by mines…"[8]

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[2] See Kirsch, Stuart (2007), "Indigenous movements and the risks of counterglobalization," *American Ethnologist*, 34 (2): 303-321.

[3] Ibid., 305.

[4] Muradian, Roldan, Joan Martinez-Alier, and Humberto Correo (2003), "International Capital Versus Local Population: The Environmental Conflict of the Tamborande Mining Project, Peru," *Society and Natural Resources*, 16: 775-792.

[5] Ibid., 788.

[6] Urkidi, Leire and Mariana Walter (2011), "Dimensions of environmental justice in anti-gold mining movements in Latin America," *Geoforum*, 42: 688.

[7] Martinez-Alier, Joan (2002), *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*, Cheltenham, UK and Northampton, MA: Edward Elgar, 12.

[8] Ibid.

According to Leire and Walter, “"Water is worth more than gold" is becoming the common claim of many anti-mining movements in Latin America.”[9] The main reason behind this is the use of cyanide, which is a toxic chemical compound, in the extraction of gold. Cyanide heap-leaching technology is generally used in the open pits in order to extract gold ores.

> This lower-grade, open-pit mining produces less ore for the energy and waste consumed compared to underground mining. It also employs less people and is obviously less attractive to communities who stand to lose more of their otherwise productive land, and run a greater risk of airborne pollution.[10]

The gold extraction process is simply as follows: First, the rocks containing the gold ore is broken off from the larger mass, and pulverized by the machines. “Once the ore has been removed from large open pits and placed on lined leach pads in terraced piles, cyanide leach solution is applied to the ore through drippers. The gold-pregnant solution then flows to large ponds, where it is separated.”[11]

The accidents of cyanide spillages and leakages are numerous around the world, and mining firms were usually held accountable for these major accidents.[12] In this respect, the accidents related to tailings dams, which are cyanide containing waste slurries, are also common in the gold mining sector. “The number of tailings dam failures worldwide has steadily increased from 10 in the decade 1969-1979 to 21 in the decade 1989-1999. There have been nine major accidents involving cyanide worldwide since 1991.”[13] For example, the major cyanide spillages occurred at the Kumtor gold mine in Kyrgyzstan in 1988, the Omai gold mine in Guyana in 1995,

[9] Urkidi and Walter, “Dimensions of environmental justice,” 693.

[10] Whitmore, Andy (2006), “The emperors new clothes: Sustainable mining?” *Journal of Cleaner Production,* 14: 311.

[11] Bury, “Mining Mountains”, 230.

[12] For a chronology of cyanide spills and mine-related accidents in the developing countries see Kumah, Abraham (2006), “Sustainability and gold mining in the developing world,” *Journal of Cleaner Production,* 14: 319.

[13] Editorial (2006), “Disaster management as a tool for sustainable development: a case study of cyanide leaching in the gold mining industry,” *Journal of Cleaner Production,* 14: 230-233.

and the Aural gold mine in Baia Mare, Romania in 2000 amongst many others.[14] All of them led to environmental and health disasters in these countries.

Even though taking proper safeguards in the field can reduce the likelihoood of accidents, gold mining still poses a serious environmental and health risk. "The Pan American Health Organization (PAHO) maintains that the gold mining industry is directly responsible for the high levels of air and water pollution by toxic waste, and associated health problems in Latin America and the Caribbean."[15] In this sense, acid mine drainage is another possible risk which leads to the environmental pollution of the water resources.

> After gold extraction, the decomposition of sulphide minerals releases acid waters in the form of acid mine drainage. Such drainage…can contaminate nearby streams and ground water for centuries after a mine has closed. The formation of acid mine drainage is accelerated by high rainfall and high temperatures…The acids tend to leach heavy elements in tailings and mine waste dumps to produce toxic solutions which comprise heavy metals.[16]

Some scholars like Bebbington and Williams point out that a monitoring plan of the water resources is needed in order to detect the possible effects of gold extraction to the surface waters and groundwater aquifers.[17] In this sense, they propose a water monitoring plan for the Rio Blanco gold mining project in Piura, Peru, drawing on other models in place there, such as the Yanacocha and Antamina mining projects. According to them, "A well-designed and executed monitoring plan for water quantity and quality is critical to foster dialogue, consensus, and trust between the mine and the community."[18] Yet, the monitoring plans in these projects were not applied at the beginning. "In all cases, the monitoring plans were enacted after complaints were formally filed against mining companies by concerned

[14] Kumah, "Sustainability and gold mining in the developing world," 319.

[15] Ibid.

[16] Kitula, A.G.N. (2006), "The environmental and socio-economic impacts of mining on local livelihoods in Tanzania: A Case Study of Geita District," *Journal of Cleaner Production*, 14: 410.

[17] Bebbington, Anthony and Mark Williams (2008), "Water and Mining Conflicts in Peru," *Mountain Research and Development*, 28 (3/4): 190-195.

[18] Ibid., 192.

municipalities and citizens in response to perceived contamination problems caused by mining activities."[19] It seems that mining companies do not enact these monitoring plans on their own accord unless strong objections are made against their mining practices at the local, national, or global scales by concerned parties.

It is clear that gold mining poses a serious environmental risk to the natural resources, and thereby to the livelihoods of local people. The inequalities in the distribution of wealth and power is evident in gold mining struggles waged against the transnational gold mining firms and the developmentalist state by the local people and environmentalists. Despite important variations, environmental movements against gold mining have emerged all around the world in the recent decades in order to protect the integrity of ecosystem as well as the livelihoods of local people. The Kaz Mountains Region is no exception in this regard. In the following sections, the environmental conflict on gold mining in the Kaz Mountains is analyzed in detail by examining the environmental activism in the region at first, and then by discussing the different environmental valuations of local actors.

7.2. Environmental Activism in the Kaz Mountains Region

Gold mining explorations in the Kaz Mountains Region were started at different locales in the 1990s. These explorations undertook by the multinational gold mining firms led to the earlier attempts of environmentalists and municipalities to prevent gold mining in the region. Even though these attempts were rather sporadic at the beginning, they were the forerunners of a widespread environmental activism which would emerge a decade later.

The campaign waged against gold mining thereby began to emerge as early as the 1990s. In those years, local people, environmentalists, and municipalities were already protesting against the explorations of the multinational firms, albeit rather in a disorganized way. For example, initially local people opposed to the explorations

[19] Ibid., 193.

in the Küçükdere Village in Havran, and several demonstrations were made in the region against the establishment of a gold mining site there. Environmentalists from İzmir, who were active in the Bergama environmental movement, also gave support to the locals in Küçükdere at this period. "They also actively involved in the protest campaign waged against the operations of the gold-mining multinational Preussag in Küçükdere-Havran."[20] There were also meetings organized by the municipalities against gold mining in Küçükdere at that time. However, villagers ended their protests when material compensations were given in return for the opening of gold mine, and a gold mine was operated there after all. Naci tells

> The mining company goes to the village. One here, Büyükdere Village... "We'll buy ten trucks to your thing, your villagers will work with them," they say, "they won't be unemployed", they say. Everything is over. In Havran Büyükdere. All protests end within a minute.

Thus, gold extraction was undertaken in Küçükdere in the following years. In this sense, Haluk, a villager from Çamlıbel, argues about the gold mining site operating there as follows:

> There is no economic return for these places. What is its cost? There is pollution… There is no profit for that village either, there is no profit for Büyükdere Village. It ruined the mountain… the forest extending across perhaps 2000-3000 decares was destroyed as far as we can see. They're replanting trees etc., but no more… It destroyed the mountain, created new mountains from the soil it brought out.

In the middle of the 1990s, villagers in Evciler also opposed against the explorations at the site of Ayazma which is a natural site on the northern side of the Kaz Mountains managed by the national park directorate. At that time, villagers came together and marched to the exploration site where gold miners had already started to make drillings. Although this event took place almost two decades ago, its memories are still alive among the villagers living there. In this sense, Salim, a villager from Evciler, recounts those days:

[20] Ozen, Hayriye (2007), *Located Locally, Disseminated Nationally: A Discursive Analysis of the Case of Bergama Movement in Turkey*, the Department of Sociology, Middle East Technical University, unpublished Ph.D. thesis, 193.

> Here in the region it happened, in Ayazma... Ayazma is close to the water springs. And the company did not come again...They stayed for ten days that's it. One evening the villagers said we'll burn the machine. Anyway they brought down the machine at night and left.

In this respect, Nail, another villager from Evciler, also recounts:

> Years ago there was drilling, but entirely, that is the villagers objected strongly... I mean the villagers revolted a lot in this region. And after that they didn't come here.

Yet, environmental activism was not widespread among rural communities, and the mobilization of the masses was not achieved at all. Besides, the campaign was not publicized at a national level. Accordingly, environmental movement was not organized to a great extent, and environmental protests were rather sporadic in this initial phase. Massive environmental protests emerged later on in the second half of 2000s as gold explorations in the region increased considerably over the years. Therefore, these early sporadic attempts evolved into a prevalent environmental activism against gold mining only in the next decade.

In the recent decade, numerous licenses were given to the gold mining firms in order to make explorations and to extract gold in different places throughout the Kaz Mountains.[21] At the same time, many explorations were made at various locales, including the villages of Söğütalan, Bardakçılar, and Halilağa (Çan), Muratlar, Karıncalı, Zeytinli, Kuşçayırı (Bayramiç), Kirazlı (Çanakkale), and Bahçedere, Kısacık (Ayvacık).[22] This led a variety of local actors to come together against gold mining in the region. Therefore, the exploration of the significant gold reserves especially at many locales in the Biga Peninsula prompted serious environmental protests, and a strong environmental movement emerged in the region in the 2000s.

In this sense, environmental activism in the region gained momentum especially after the explorations were undertaken at the Bahçedere Village in the summer of

[21] *Cumhuriyet*, "Kaz Dağları Tehdit Altında," September 27, 2011.

[22] See Ilgar, Rustu (2008), "Kaz Dağı'nın üstü "Altın"dan kıymetli mi?" *Uluslararası Sosyal Araştırmalar Dergisi*, 1 (2): 175.

2007.[23] First, the mining firm had opened a new road to the exploration site, and explorations were started subsequently. As soon as news spread that gold mining exploration was made in Bahçedere, and that many beeches and pines were uprooted by bulldozers for opening road to the exploration site, a local resistance against gold mining was initiated in the region. Soon after this event, local actors came together in a meeting in Bahçedere, and they agreed to struggle against gold miners collectively. In a way, the resistance was started there. Obviously the Bahçedere event spurred the campaign against gold miners.

When another meeting was organized in a hotel in Küçükkuyu next month with massive participation, the news had already spread from the Kaz Mountains to Turkey. Soon there emerged a nationwide public attention on the issue because these events were largely broadcasted by the media. The campaign was popularized to a broader spectrum in this way, and a consensus was rather obtained in the public opinion concerning the environmental risks of gold mining in the region. Environmental movement in the region was thereby successful to publicize the issue nationally.

As a local ecological conflict has become a national concern in a very short time, a group of experts from the Ministry of Energy and Natural Resources were sent to the exploration sites in Bahçedere (Ayvacık), Söğütalan (Çan), and Muratlar (Bayramiç) in order to make investigations in October.[24] In a way, this was done to appease the local people. A week later, the then minister of the Energy and Natural Resources also visited the exploration site at Bahçedere when he came to the region for attending a panel, named "Mining, Tourism, and Environment in the Kaz Mountains" held by the Çanakkale Chamber of Commerce and Industry. Many actors involved in the conflict participated to this panel made in Çanakkale on 27 October 2007.[25] That is to say, minister, bureaucrats, local politicians, mayors,

[23] *Milliyet*, "Kaz Dağları delik deşik edildi!" October 17, 2007.

[24] *Radikal*, "Kaz Dağları'na resmi inceleme," October 17, 2007.

[25] *Milliyet*, "'Kaz Dağları ağlar'!" October 28, 2007.

foresters, professional chambers, non-governmental organizations, tourism entrepreneurs, agricultural producers, gold miners, and environmentalists, all came together at this panel. In the same day, a press release and a protest meeting was made in Çanakkale.[26] Erman from the Yeşilyurt Village, who attended to this panel as a tourism entrepreneur, asserts that the public agencies had to present the scientific analysis of water and air samplings of the former gold mining sites in Bergama.[27]

> I wanted to hear the following in that meeting. State officials should have stood up, said, "Look, we took samples from the soil a decade ago from Bergama"… Ten years have passed, gold has been prospected there for a decade. "The cyanide in the soil remained at I don't know 5 milligrams. So it doesn't do any harm to the soil." Now taking samples from the waters, and from the waters... Testing the water each year... "no way in the water... Here, we made the air I don't know what." Well, that's how it should be! I mean, science technology require this.

Most importantly, villagers faced with the possibility of opening up of a gold mining site next to their villages opposed to the explorations en masse. Especially, peasants in Bahçedere reacted against the gold miners after their water resources were contaminated during the drillings. In this sense, the Bahçedere villagers were concerned for the contamination of springs coming from the Kaz Mountains, on which their livelihoods depended completely. The mukhtar of Bahçedere asserts the following in this regard:

> We sat one evening in the village, the managers of the mining company, their men, company officials also came. They told us their intentions, like we are doing such and such research. What was going to happen began to unfold. The villagers objected and at the foot of this mine field, there are two, three even if you count the village center, three water springs… People were uneasy about these springs I mean. If we lose the water springs life ends for us.

The opposition against gold miners thereby involves both ecological and economic concerns. The meeting that took place between villagers and gold miners in

[26] *Milliyet*, "'Kaz Dağları ağlar!'" October 28, 2007.

[27] Gold production was started in the Ovacık Gold Mine in Bergama in April 2001. For a detailed discussion of the environmental movement in Bergama from the perspective of local activists, see Bilgen Reinart, Üstün (2003), *Biz Toprağı Bilirik*, İstanbul: Metis Yayınları.

Bahçedere at that time shows that the major concern for the villagers was the loss of water resources vital for their community to sustain their living. In this sense, Ali, an olive oil producer from Bahçedere in his middle ages, tells:

> We have water underneath the mine. They say there is the thing of mixing in the water. That is why we are afraid… We did not want it. Why would we want it? Counts of villages, mukhtars from this Edremit here to over yonder, this Bayramiç, mukhtars came from the places we went and what not. They came and went a lot.

Indeed, peasants in other villages also gave support to them at that time. According to Ali, no one did want to work at the explorations except a villager from Adatepebaşı:

> They were staying here. They were staying in the mine. They worked as guards for one year there. They looked for workers and what not. I mean both from that Adatepebaşı and from here. Did not go. One person went from Adatepebaşı.

It is clear that the employment prospects offered by the miners could not persuade the villagers at all. Thus, the mukhtar of Bahçedere asserts:

> "We'll employ workers from you here. We'll help your village" etc., etc. Like "We'll help with your small things"… They opened a road and began drilling. A month or so, in a swift manner with two machines… they drilled. "Let us first learn what's here, about this place, then we'll turn it into an operation permit. After we get our operation permit, our registration, we'll drill here more frequently, 300-350 drills", they said. Probably they couldn't get permission. This region objected anyway.

A new phase of environmental activism emerged after the explorations started in Bahçedere. The mobilization of rural communities was accomplished at this stage by environmentalists and activists. Protests first took place in Bahçedere in the summer of 2007. There was virtually an uprising of local people in the Kaz Mountains against gold miners in the following months. Massive protests were organized in the region until 2009. On 5 April 2008, a rally attended by thousands of people was organized in Çanakkale by the Kaz Mountain and the Madra Mountain Environmental Platform including environmental organizations, labor

unions, chambers, and other non-governmental organizations.[28] This was the biggest demonstration that took place against gold mining in Turkey until then. Local people at large were mobilized by the environmental and livelihood concerns, and a successful campaign was waged by the local actors on a regional and national level. Obviously, environmental campaign successfully exerted a pressure over the gold miners, and brought the explorations in Bahçedere to an end. Overall, this event became a turning point concerning environmental activism in the region since it began to lose its dynamism soon after.

Hurley and Arı argue that "mirroring processes of rural gentrification described for the American West and the British countryside," some of the in-migrants settled down in the region "have purchased and refurbished old farms or village houses."[29] In this respect, they further put forward that, "These changes point to the potential for amenity migrants and locals to mobilize in defence of a rural capitalism that draws on pastoral landscapes, remnant native forests at higher elevations in forest reserves and the national park, and environmental amenities of clean water and air." Thus, they contend that "amenity migration appears to be shaping the region's politics"[30] to a great extent.

Although it is true that many activists in the environmental campaign were in-migrants such as retirees and second-home owners, there were also local people leading the campaign waged against gold mining in the Kaz Mountains. Actually, almost any social group took part in the struggle against gold mining in this process. A variety of local actors such as environmentalists, local politicians, professional chambers, olive oil producers, tourism entrepreneurs, small shop owners, amenity in-migrants and villagers were involved in the campaign against gold mining. The inclusion of local elites such as mayors, olive oil producers, and tourism

[28] *Milliyet*, "15 bin kişinin Kaz Dağları isyanı!" April 5, 2008.

[29] Hurley Patrick T. and Yılmaz Arı (2011), "Mining (Dis) amenity: The Political Ecology of Mining Opposition in the Kaz (Ida) Mountain Region of Western Turkey," *Development and Change*, 42 (6): 1405.

[30] Ibid., 1411.

entrepreneurs certainly increased both the popularity and publicity of the environmental movement to a great extent. Especially olive oil producers and tourism entrepreneurs lobbied against the gold mining at the national level.

The municipalities had a significant role in the environmental movement from the very beginning. First of all, local municipalities came together under an umbrella organization called the Kaz Mountain and Madra Mountain Local Authorities Environmental Platform in 2007, which coordinated the campaign against gold mining among local authorities. After a while, the Kaz Mountain and Madra Mountain Municipalities Union was established in October 2008.[31] In the beginning, it totally comprised 25 municipalities. Different municipalities in Balıkesir, Çanakkale, and İzmir were included in the union. Today, there are less than 20 municipalities as the municipalities of small towns such as Altınoluk, Akçay, Güre, and so on were closed down due to the new municipality law.

The union of municipalities successfully conducted a campaign against gold mining over the years by bringing together a variety of actors from different origins. In this sense, local actors came together in the meetings and other activities organized by the platform. For instance, several meetings with olive oil producers were made in Küçükkuyu and Burhaniye in order to prevent the amendment of the Law No. 4086 protecting olive trees. Panels and seminars concerning gold mining were also often organized by the municipalities. In addition, the union also made workshops on the Kaz Mountains several times. Besides, they also gave technical and material support to environmentalists during this period. In this respect, they offered meeting places for local activists, or provided free transportation to the demonstrations.

The Kaz Mountains Protection Initiative[32] and the South Marmara Environmental Protection Association[33] (GÜMÇED thereafter) were two local environmental

[31] Kaz Dağı ve Madra Dağı Belediyeler Birliği, http://www.kazmad.gov.tr/?page=kurulus Also see for the member municipalities, http://www.kazmad.gov.tr/?page=uye_belediyeler1

[32] *Kaz Dağları Koruma Girişimi* in Turkish.

[33] *Güney Marmara Çevre Koruma Derneği* in Turkish.

organizations at the forefront of the environmental struggle against gold mining. Their constituency mainly consisted of amenity migrants settled down in the region, but there were also local people too. Their members gave support to these organizations on a voluntary basis. Environmental activism against gold mining initially flourished within the small circles of them. It is clear that environmental activism made a peak during this period largely through the efforts of these organizations. More crucially, they played an important role in the environmental mobilization of local people. Thus, these environmental organizations have been one of the main constituents of environmental movement in the Kaz Mountains Region.

The Kaz Mountains Protection Initiative was set up by the local activists during the campaign against gold mining. They organized successful protests against the gold miners especially in 2007 and 2008. It was a platform which consisted of a variety of actors such as grassroots activists, environmentalists, olive oil producers, tourism entrepreneurs, shop owners, and villagers. As an environmental platform, it brought together grassroots activists with moderate interest groups and rural communities. The most important feature of this initiative was its loose structure. That is to say, local actors with diverse interests came together around this platform with the aim of preventing gold mining explorations in the region. Thus, it was an environmental platform established by the participation of different local actors in the region.

They not only used common methods such as organizing meetings and protests, distributing leaflets, or opening a stand in the market place in order to gain publicity, but also utilized the new information technologies such as internet in an effective way for bringing together people. Most importantly, members of the platform were directly engaged in environmental activism on grassroots level. Aynur, one of the leading activists of the initiative at that time who is an in-migrant settled down in a forest village, states their difference from other organizations as follows:

> We were a rather dynamic group. We were an activist group. And when compared to other groups we were more you know, nonconformist. In

> Çanakkale there is Çanakkale Environmental Platform. Kazdağları and Madra Mountain Municipalities Union was founded… And on one hand was GÜMÇED.

In this sense, they can be considered as more radical compared to other environmentalist groups involved in the protests. That is to say, they did not hesitate to confront with any party supporting gold mining at that time. Thus, Aynur tells:

> We were saying such things that, sometimes, we could be outcast by all sides. I mean, for instance, the Minister of Energy is going to come to Çanakkale. A meeting is being organized at Kolin Hotel on this topic where miners will also partake. They also invited a representative from our association, we participated. They wanted one from Çanakkale Environmental Platform, they refused. And they said, "Let's refuse, let's go to Cumhuriyet Square, make a press statement". And we said, "No! We'll speak there, we'll say what we have to say. And we'll do our protest there." And we did.

They also confronted gold miners directly in the field. The success of the initiative was largely due to their competency to pursue direct action against gold miners as another leading figure, who is also an in-migrant like Aynur, argues:

> Organizers of the resistance also, it doesn't happen with those platitudes like "No passage to the mines, we are against this and that". The miner comes, brings the construction equipment; works at its will in many places. All around Turkey. It can't here. Why? Because we raided the miner. We raided them at the mountain. That's why they can't work here.

Furthermore, they achieved to get support from the local elites like mayors, local politicians, public authorities, and prominent olive oil producers and tourism entrepreneurs. The main reason for getting support from so many different local actors was due to their well-knit organizing. Aynur explains how they constructed good relations with public agencies and non-governmental organizations as follows:

> We always visited the public institutions, we informed them, asked for their support. The Forestry Head's Office, District Directorate of Agriculture, Chamber of Agriculture, Drivers' Chamber, City Council Members, all political party leaders, parties' provincial officials, we informed each and every one of them about every action we were going to take, we asked for a representative, we asked for support.

As the initiative was mostly formed by the locals, they were taken seriously by the people. Moreover, they became a significant voice of the people in this period.

Turgut, running a small olive and olive oil shop in Küçükkuyu, who was active in Kaz Mountain Protection Initiative during the campaign, points out that they were a local environmental movement:

> Some have motels, some have olive groves, others have shops around here. These people are people who have a say here; a say in the economy, a say here and there… Because we struggled with the people of the region, as people of the region… And when you are people of the region, they might regard an environmentalist group from the outside suspiciously, like "what are they doing here?". But when it is someone from the region, they say, "brother, look, this is what is happening". Then they get positive signals… I mean they say, "We won't allow it"… I mean they join us… I mean they need to be informed. It is necessary to discuss the pros and cons of the mine.

As another activist from Kaz Mountain Protection Initiative states, familiarity is significant at the local level for mobilizing people against gold mining. The initiative has been successful for the most part because its members were acquainted with the local people. They also went to many villages in order to give information to the peasants concerning gold mining. That was also effective in getting support of the villagers. In this sense, Aynur mentions:

> We went to the villages. In each village, one by one. Now one thing on its own is of course not important. The villager, what, coming all the way to Çanakkale and participating in a demonstration is not an indicator on its own. Are you going with him? That's important. It is expected for everyone to come. We didn't do this here. We didn't organize a panel discussion in Küçükkuyu and expect everyone to come to Küçükkuyu. We went to all the villages one by one and explained our concerns in village coffee houses. We looked them in the eye and spoke to them, got their support.

Besides, they were also advocated by other environmentalists outside the region. For example, environmentalists from İzmir, who were experienced in the struggle against gold miners from the Bergama case, as well as environmentalists from İstanbul gave assistance to them. According to Aynur, they were supported considerably by different groups:

> In that time, those slightly fatigued from the struggle, friends from the İzmir group also sort of remobilized. All together, we got great support from them. We used the great advantage of the Internet. Communication with those in İzmir, being in touch, receiving all sorts of support from there: in the technical sense, in the sense of accumulated knowledge. İstanbul Chamber of Engineers, etc.

Kaz Mountain Protection Initiative was effective in terms of organizing the protests against gold mining, creating a close bond between different local actors, and drawing support from other environmentalists. Thus, it succeeded in consolidating the position of local people against gold miners. Overall, they were one of the most successful organizations campaigning against gold mining attempts in those years. However, it was disintegrated in 2009, after the gold miners had left the southern side. Hence, the most active group came to an end after all.

Another environmentalist group campaigning against gold mining is GÜMÇED. They are organized in all of the towns around Edremit Gulf. Their agenda is a reflection of their activism in environmental issues. Their constituency mainly consists of retired in-migrants having second homes in touristic towns. Yet, there are also other voluntaries coming from different backgrounds such as professionals, villagers, and students. They are best known locally and nationally because of their activities against gold mining. Remzi, an environmentalist from GÜMÇED, states:

> The greatest perception of GÜMÇED, both in the Gulf and beyond is being a resistance organization against the mine pillage, primarily against the gold miners. And also one of the most experienced organizations in Turkey.

Their activities range from panels and conferences on the one hand, to demonstrations and meetings on the other. They also organized two petition campaigns, and collected 100,000 signatures from the Gulf of Edremit in each campaign. One of the petition campaigns was made in order to abolish the Mining Law No. 5177 in 2008, and the other one was made against the amendment of the Law No. 4086 concerning olive groves in 2009.[34]

> We collected signatures for the annulment of the Mining Law No. 5177. We sent it to the parliament, everywhere, to the State Council, to the Constitutional Court. And one under the name of "The Olive Cultivation Law should not be changed, our holy olive trees should not be forsaken"… We collected 100,000 signatures from this Gulf twice and took them all the way to Ankara, submitted them to all relevant institutions. We held demonstrations.

[34] *Radikal*, "Kazdağları'ndan 100 bin imza," March 27 2008.

In 2008, there was widespread support for the campaign waged against gold mining. He says that they even made meetings with hundreds of people in those days.

> In that period when miners were exerting great pressure, in a manner that Turkey also reacted especially with the awareness of Kazdağları, if we are to go back two years, as the GÜMÇED Gulf of Edremit Branch we brought to life a different form of organizing as an environmental association working in the entire Gulf. By initiating a petition against the mining law in the entire Gulf, by declaring everyone who assumed responsibility in that project a Beautiful Edremit Gulf Guard. That first day there were 720 people who attended the meeting there and signed the petition and took the file from us and worked to collect signatures throughout the Gulf. Later this army of volunteers expanded to 1000. I mean in that momentous period we organized meetings with 1000 people.

Thus, GÜMÇED declared local people taking part in the petition campaign during this period as the Guards of the Beautiful Edremit Gulf.[35] That was definitely an ingenious way of attaining the involvement of local people in the environmental campaign. Although there were so many people participating to their activities during the heydays of environmental campaign, there are approximately 100-150 voluntaries working actively today.

> And for today we have 100 to 150 very active people who work as the core team, all the time, that is to say even when there is no pressure from the miners, in a period when it is very hard to create public awareness, who continue to take action fearlessly and who succeeded in collecting again 100,000 signatures for the olive cultivation law last year.

Obviously, they are still the most organized and active environmental organization engaging in a variety of activities against gold mining in the region. They successfully appropriate the environmental symbols in their activities. One of the common images they use is the olive tree. "The sacred olive tree" is also used as a slogan in most of their flyers. Apart from gold mining, they are also concerned with other environmental problems as well.

> Here what I mentioned just now, trying to preserve this unique nature of the Gulf of Edremit for years. For example making the holy olive tree poster and explaining the importance of olives everywhere. We've organized many panel discussions about this. For example we have said shore of light sea. We have organized countless panels discussing infrastructure issues in face

[35] *Güzel Edremit Körfezi'nin Bekçileri* in Turkish.

> of sea pollution. For example we say Kazdağları. We have organized two international symposia about Kazdağları in collaboration with forest engineers. For example, we say olive wastewater. Olives' waste after it is pressed; about the measures to be taken so that it does not pollute the environment, we've held countless panel discussions about olive wastewater.

Thus they not only deal with gold mining but also attentive to various environmental issues in terms of olive oil production and touristic facilities. Along with this, their relations with rural communities are also intimate. For example, they even organized a protest together with villagers against a mobile phone station in the Kızılkeçili Village. As a result, the station was deconstructed after massive protests in 2008. In this sense, Aykut from Kızılkeçili tells:

> Now as I've said GÜMÇED association is the most active and dynamic association in this region. There was a base station problem in our Kızılkeçili Villge two three years ago… Together with the community living in Kızılkeçili Village, GÜMÇED ran these protests, rallies. And a first was achieved in Turkey. This base station was shut down, removed from its location… I mean… an intellectual village, open to working in integration with civil society organizations. Just as long as it is guided properly, I mean taking the right positions.

Villagers also gave support to the environmental campaign against gold mining. Especially, they participated to the meetings and rallies as well as other activities. Further, some of them also became members of local environmental organizations. To give an example, Raziye is a woman villager from Doyran, who is a member of GÜMÇED. She was very active in the campaign against the gold mining. She mentions on how she went to the local villages for the petition campaign of GÜMÇED.

> We just collected signatures. Signatures, they gave signatures saying we object. We explained the situations. But now, there is this, our mountain here, you know. Like this, we were a bit higher. Because that Bayramiç side remains a bit lower the water goes that way. And if there was also a drilling here… if this was taken we could've remained without any water. Our water can also be drawn there. It can also be polluted. We explained these to those villages. Then they were happy to give their signatures. They didn't object at all.

During this campaign, she visited many villages, and explained the risks of gold mining to peasants in order to win them over. In these visits to the forest villages in the Kaz Mountains, she says that all villages supported their campaign except one.

> On the other side there is… there is Güzelköy, Uzunalan, Duztaşı. They gave without any hesitation… We went all the way there. We came back. And we went around in these villages. We also took the positive ones from these villages. I mean it was very positive, many signed.

Thus concerns over the loss of water resources and rural livelihoods led to a general restlessness among rural communities in the region. Many villagers participated to the protests at that time in this regard. For instance, a mukhtar from a forest village states:

> We contributed to this through petitions, collecting signatures from our villagers, sending them to relevant departments. We went to rallies, demonstrations. We resisted…. We have an awareness for environmental rallies… My entire village went.

On the other hand, another mukhtar points out that some of the villagers gave support to these protests without any environmentalist or livelihood concerns. He questions the participation of the villagers from his village to the rally held in Çanakkale in 2008 in the following way:

> They fill up the buses from here and go, I mean wherever there is a thing… For example the year before last they had a big rally in Çanakkale. I mean there is participation in those… Look, I'm coming. I am your man.

To some extent, the patronage relations are also influential in the countryside. That is to say, some of the villagers could attend to these environmental protests as they expect material interests from the local politicians. In this sense, a villager from Yassıçalı also argues:

> I mean maybe he doesn't know why he is going there. I mean so there'll be a crowd.

However, when villagers weighed the opportunities of gold mining against the risks of it, the former seemed insignificant in comparison to the latter. Evidently, the likelihood of the contamination of water resources, and of losing their livelihoods based on agriculture, pasturing, and forestry spurred them on to oppose gold

mining. Accordingly, the environmental campaign showed that rural communities could be mobilized massively in response to the threat posed by gold mining to their immediate living environment.

Besides, tourism entrepreneurs and olive oil producers were also active in the campaign waged against gold mining. Both groups especially emphasized the importance of conserving natural resources like forests and watercourses as well as of protecting environmental amenities such as clean water and clean air in order to sustain ecotourism and olive oil production in the region. Hence, they employed some tactics against gold miners. For example, olive oil producers have successfully lobbied against the amendment of the Law No. 4086 which protects olive fields. In this sense, Naci, an olive oil producer and merchant from Edremit, states the following:

> Our National Olive Cultivation Council (UZK) President, various company representatives and we had many efforts wondering how we can affect this thing, whether we can stop it. Thankfully our MPs in Ankara supported us too. What a struggle, what a pursuit. We are saying it should not happen, they are saying it should. Like this, on both sides for years we have been in a… Mining lobbies whenever they get an opportunity they bring the draft law. We raise a huge racket… At any rate it doesn't happen. Six months, a year goes by. The mining law is brought up again. I mean neither we nor do they get tired but they just don't want to give up. Of course, there is very serious amount of money behind this thing, serious vested interests, deposits. But the state must review both the mining law and the olive cultivation law. It should not allow our olive groves to be destroyed for this 2% share.

According to this law, any facility around olive groves up to 3 kilometers is prohibited except the olive related industry. In this sense, an environmentalist from Mehmetalan, who is also a member of GÜMÇED, asserts:

> Well, now, until now, anyway hundreds of mines have obtained registration permits around the olive groves in Kazdağları and Madra mountains and perhaps even inside the groves. But these have got the permit, perhaps the management will also get the Environmental Impact Report, but the olive law presents an obstacle before them.

Tourism entrepreneurs were also significant actors affecting the trajectory of the campaign. First of all, they also lobbied for the abolishment of gold mining projects

on the southern side of the Kaz Mountains. Moreover, they successfully used their networks in the national and local media in order to form a public opinion against gold mining at a national level. Some of them even made presentations on the risks of gold mining in the forest villages in their vicinities. In this sense, Volkan, the hotelier from Adatepe Village, mentions:

> We did presentations in the surrounding villages, villages near the mine, be it in this village, Adatepebaşı Village, Bahçedere Village, be it Boztepe, Çetmibaşı, I mean in the five six villages in the area. We brought mining engineers to these presentations.

Obviously there was an outburst of activities concerning gold mining during this period. The environmental movement in the Kaz Mountains organized many protests and meetings as well as press releases and petition campaigns. Moreover, many seminars, conferences, and workshops were also organized in villages and towns with the participation of academics, experts, environmentalists, and local people. All of these activities certainly helped to increase the awareness of local people on the environmental risks that gold mining posed to the environmental, economic, and sociocultural assets of the region.

A wide coalition of local actors succeeded in retreating gold miners after all. There are several reasons behind the success of local actors. First, a mutual solidarity between a variety of local actors was successfully constructed that led to coming together of different local actors around a common objective. Second, the mobilization of local people was achieved by the environmental organizations through the use of multiple strategies such as demonstrations, press releases, petition campaigns, and village meetings. Third, local actors were successful to publicize the campaign against gold mining at a national level through the media. Fourth, local elites such as olive oil producers and tourism entrepreneurs successfully lobbied against gold mining in the corridors of power. Overall, environmental activism became so prevalent that gold miners were forced to withdraw from the southern side of the Kaz Mountains. Today, there are no explorations on the southern side. In this sense, the head of KAZOD, who was also

active in the campaign against gold mining, does not see an immediate threat concerning gold mining:

> Anyway the presence of such a danger in the busiest part on the southern skirts of Kazdağları is currently not imminent. But against any company the people will anyway show their reaction. Nobody doubts that.

Yet, if one considers the Kaz Mountains Region as a whole, things become much more complicated. As Fuat, another hotelier from the Yeşilyurt Village, states in the following:

> One thing bothered me but there was a lot of discussion about this side of Kaz Dağı. But there is also the other side of Kaz Dağı. There is the northern side. There wasn't much discussion about the northern side.

Meanwhile, explorations have continued at an increasing pace on the northern side of the Kaz Mountains Region. In the recent decade, numerous drillings were made especially at the Ağı Mountain and the Katran Mountain. In fact, explorations were started at the Ağı Mountain earlier in the middle of the 1990s, and they have continued until recently.[36] In this sense, a local hunter from the Bayramiç Hunting Club asserts that so many exploration activities were made in the region:

> That excavation I saw, I mean it is not a simple thing compared to those mining excavation sites. They attacked that area a lot. In that Karaköy side I saw it on all the mountains. Holes have been drilled on all hills. All are marked. Flattened with diggers...somehow. There is also a lot in Karaköy. Also a lot on that Kızılelma side.

The gold and silver reserves were found out at the Ağı Mountain and the Katran Mountain, which are considered as the extensions of the Kaz Mountains.[37] According to the environmental impact assessment reports, cyanidation leach milling technology would be used in the open pits in order to extract gold and silver

[36] "Since the involvement of Cominco in the property in 1995, a total of 365 drill holes totaling 56,506.60 meters have been drilled…Since the involvement of Alamos in the property in 2010 until February 28, 2011…a total of 113 drill holes totaling 17,160.90 meters have been drilled." See Ferrigno Denis et al. (2012), *NI-43-101 Technical Report Kirazlı & Ağı Dağı Gold Project*, 104., http://www.alamosgold.com/mines-and-projects/ development-projects/agi-dagi-turkey/default.aspx

[37] See for an examination on geomorphology of the northern side of Kaz Mountains. Koç, Telat (2007), "Kaz Dağı Kuzey Kesiminin (Bayramiç-Çanakkale) Jeomorfolojisi," *Coğrafi Bilimler Dergisi*, 5 (2): 27-53.

ores.[38] Moreover, a tailings dam would be constructed at the mining site.[39] As Hurley and Arı argues, "the state leaves itself sufficient room within other areas of the region, namely in forest reserves and in unprotected, non olive-producing areas, to realize mineral extraction and expanded foreign investment earnings."[40]

There are many forest villages in the vicinity of the gold mining site planned to operate at the Ağı Mountain in the coming years. Especially, the Kızılelma and Söğütalan villages, which are located at the Ağı Mountain, are the closest settlements to the project site. "Söğütalan and Kızılelma are the villages closest to the Ağı Dağı Project site, at about 1 km and 1.5 km distance respectively from the nearest project unit."[41] The villages of Karaköy, Zeybekçayırı, Eskiyayla, Ozancık, Bardakçılar, Bilaller, and Cicikler are also some of the other forest villages near the Ağı Mountain and the Katran Mountain.[42]

Çanakkale Environmental Platform[43] has been the most active environmental organization campaigning against gold mining on the northern side of the Kaz Mountains. The Platform was founded by the participation of professional chambers and other non-governmental organizations in Çanakkale in 2004. It leads the environmental struggle waged against gold mining in the province of Çanakkale. It

[38] In this sense, a multinational gold mining company called Alamos Gold Inc. plans to extract gold and silver in the following years. "Alamos acquired 100 % of Agı Dagı and Kirazlı (which operates under Kuzey Biga Madencilik, a wholly-owned subsidiary of Alamos), from Teck Resources and Fronteer Gold (now Pilot Gold) in January 2010. The Biga district features a number of high-sulphidation epithermal gold and associated porphyry-gold deposits, drawing comparisons to world-class districts such as Yanacocha in Peru and the Mulatos district in Mexico (where Alamos operates the Mulatos Mine)." See Profile (2011), "Alamos Gold: The 'Biga', the better", Mining Journal special publication- Turkey, 10

[39] Yavuz, Cavit Işık and Coşkun Bakar (ed.) (2013), *Türk Tabipleri Birliği Kaz Dağları ve Çanakkale Yöresi Madencilik Girişimleri Raporu*, Ankara: Türk Tabipleri Birliği Yayınları, 67-70.

[40] Hurley and Arı, "Mining (Dis) amenity", 1411.

[41] Ferrigno Denis et al., *NI-43-101 Technical Report*, 41.

[42] Apart from Karaköy, which is in Bayramiç, all of these villages are in Çan. See Table 14 in Appendix E for the population statistics of these villages as well as others.

[43] *Çanakkale Çevre Platformu* in Turkish.

also deals with other environmental problems, i.e. thermic power plants. In this sense, they organize meetings and protests as well as panels and conferences on these issues. In addition, the platform also uses legal action as a strategy in order to stop gold mining in the region. So they sued for the cancellation of the gold mining projects in the Çanakkale Provincial Administrative Court. This strategy can be considered as successful up to now because the court cancelled environmental impact assessment reports[44] of several gold mining projects in the region in December 2013.[45] Fikret, an environmentalist from Çanakkale Environmental Platform, claims the following concerning the north-south division:

> We don't distinguish between the south and north anyway. From the outset we have been carrying out the struggle together. Those who want to make this superficial distinction, companies and whatnot intervened a lot. We constantly rejected that. This thing is a whole. I mean there can't be, there is no such thing like saving half of Kazdağları and forsaking the other half. If the north goes, the south will also be affected.

In the region, water resources are the utmost concern for both the environmentalists and local people. The Ağı Mountain is a site providing drinking water to many villages and to the town of Çan. Most importantly, the basins of both Skamenderes Creek (*Karamenderes*), which supplies the water reserves of Bayramiç Dam and further runs to Kumkale where it empties into the sea at the Strait of Çanakkale, and of Koca Creek (*Kocaçay*), which is also called as Çan Creek as well as Biga Creek after uniting with other creeks and flowing north where it discharges itself into the Marmara Sea near Karabiga, are exactly where the mining site is planned to be made in the future. In this sense, the technical report prepared for the mining company also states that the basins of Skamenderes Creek as well as Koca Creek are included in the project area:

> Surface water flows observed in the surroundings of Ağı Mountain are Koca Creek which has a main flow direction of southeast-northwest and Menderes Creek which has a main flow direction of east-west. Large portion of the project area is located in Koca Creek Basin. However, there are some brooks

[44] Environmental impact assessment report is *Çevre Etki Değerlendirme (ÇED) raporu* in Turkish.

[45] See the news from the daily journals, *Hürriyet*, "Doğanın zaferi," December 13, 2013, and *Birgün*, "Kazdağları altın madenine kapalı," December 13, 2013.

> which show discontinuous flows from Babadag locality and feed Menderes Creek.[46]

Obviously, there are many small tributary brooks that feed these creeks in the vicinity of the project area. Moreover, there are springs in the Ağı Mountain providing water to many villages as well as Çan. That is to say, water resources could be contaminated if a gold mining site operates at the Ağı Mountain. In this sense, Fikret states:

> For instance this Ağı Mountain is a 900 some meter high mountain. The drinking and utility water of 26-27 villages goes through that mountain. This is the mountain the gold miners will destroy. Part of the water from the fresh water fountains in the town center of Çan also goes through there, comes from that mountain.

In this respect, the technical report also affirms that Ağı Mountain provides drinking water for a variety of settlements:

> Four springs located in the western edge of the planned Deli Dag open-pit [a locale at the Ağı Mountain] are currently providing water to 23 villages…This water network is named 'Group Water'. In addition to Group Water sources, there are others springs that supply water to the villages of Söğütalan and Kızılelma. It is also known that water from another source (Aksu spring) is transported by a pipeline to the town of Çan.[47]

Moreover, the report also acknowledges that gold mining will affect water resources. "At Ağı Dağı there are several springs that will be impacted by mine development…The Etili group main water depot, which has a capacity of 14 L/s, is located within the footprint of the north waste rock facility…and the Bardakcilar (1 L/s) and Kizilelma springs (2 L/s), are within or adjacent to the Deli open pit footprint."[48] However, no monitoring plan for water quantity and quality has been proposed by the gold mining firm up to now.

Bayramiç Dam fed by waters from Skamenderes is about 20 kilometers to the project site at the Ağı Mountain. In this sense, the technical report contends that

[46] Ferrigno et al., *NI-43-101 Technical Report*, 325.

[47] Ibid., 326.

[48] Ibid., 291.

"Ağı Dağı project is located within the subwatershed of Bayramic reservoir which is used for irrigation (92%), power generation (4%) and drinking water (4%) purposes." Besides, it also asserts that Bayramiç reservoir "has protection zones according to the Water Pollution Control Regulation (WPCR), 2004, No: 25687…The Ağı Dağı project area is located in the Far Distance Protection Area-B"[49]

According to the Chamber of Turkish Doctors, the Ağı Mountain and the Kirazlı Village region, where gold mining sites are planned to be established, feeds the water reserves of many settlements including the center of Çanakkale. That is to say, they are very important water basins. The Environmental Commission also asserts that the water reserves of Atikhisar Dam, which the city of Çanakkale uses, are fed by the subsurface and surface waters in those areas.[50]

On the contrary, the representative of the mining firm claims that the gold mining sites at the Ağı Mountain and Kirazlı are related with the water basins of neither Bayramiç Dam nor Atikhisar Dam. In addition, he also states that a new dam would be constructed close to the Ağı Mountain by the General Directorate of State Hydraulic Works (DSİ thereafter)[51]:

> Over there it is not Atikhisar's or Bayramiç's drainage basin…There DSİ has plans anyways… They have plans of building a dam there…On the surface waters there a dam will be built that will meet the drinking water need of both the company and the people in the region, the drinking water need of close to 30 villages.

[49] The report further argues that "Far Distance Protection Area-B [is defined by WPRC as follows]: Buffer zone from middle distance protection area [which is 1000-2000 m buffer zone] to the catchment boundary of the reservoir…According to the WPCR: Wastewater generated by activities must be discharged to the outside of watershed…or recycled in the process…In this area, landfill and waste disposal sites can be established after the approval of MoEUP. [the Ministry of Environment and Urban Planning] The Ağı Dağı project will not generate process wastewater and will not include on-site burial of wastes. Ağı Dağı project is designed in compliance with the above requirements." Ibid., 325.

[50] Yavuz, Cavit Işık and Coşkun Bakar (2013), *Türk Tabipleri Birliği Kaz Dağları ve Çanakkale Yöresi Madencilik Girişimleri Raporu*, Ankara: Türk Tabipleri Birliği Yayınları, 86.

[51] *Devlet Su İşleri* in Turkish.

Likewise, the technical report also asserts that Altın Zeybek Dam will be constructed on a local creek, namely Bıçkı Creek:

> The Altın Zeybek surface water reservoir will be constructed on Bıçkı Creek (Altın Zeybek), 1.5 km upstream of Zeybekcayir village close to the Ağı Dağı project site. Reservoir water will be pumped to the Kirazlı and Ağı Dağı water tanks…Primary water source of Altın Zeybek Dam is Bıçkı Creek and its Patlak Creek and Karga Creek tributaries…Mine process water to be met from Altın Zeybek Dam is currently projected to be approximately 90 L/s…"[52]

Moreover, the report also explains "community water treatment facilities" of the dam as follows:

> Potable water to be supplied to Terzialan town and villages should meet appropriate standards. Preliminary testing shows that water from the reservoir will meet the Turkish water quality standards for potable water. Physical and chemical properties of water will be further investigated during final design stage and required water treatment facilities will be planned.[53]

During drillings, water resources coming from the Ağı Mountain were contaminated. İhsan, a villager from Kızılelma, asserts the following in this regard:

> It flowed chalk white. Nobody could drink it. They could neither give it to their animals, nor drink it. I mean you even hesitated to use it.

The contamination of water resources were also evidenced by the water analyses made by the district health directorate in Çan. In this sense, İhsan further says:

> When the waters are analyzed they constantly come out bad. The health clinics do it. They came and did it step by step... The surrounding villages' waters are also bad. The water of 26 villages came out bad for instance. The water of surrounding villages also goes from here. The water goes from Ağı Mountain to Çan's other villages, to 26-27 villages. All of them came out bad. It also goes to Çan's center, that also came out bad... I mean there are neighborhood fountains at Çan. Besides the municipality's network water. Fresh water. Those also came out bad. Well, it is not even necessary to say it. I mean if you are disturbing the source of the water, it is obvious it will come out bad. I mean it is not necessary to do an analysis.

[52] Ferrigno et al., *NI-43-101 Technical Report*, 292-293.

[53] Ibid., 294.

Yet, mukhtars of these villages hesitated to come together with environmentalists from Çanakkale Environmental Platform after all. When the platform attempted to make a meeting with the mukhtars, most of them did not participate to this meeting on the water resources. In this respect, Fikret says the following:

> We said let's bring together the mukhtars of those 26 villages. We had a hard time bringing them together. I mean, one day, how many people came? Seven, eight mukhtars came. Because all of them should come running. The water became turbid during the drilling, got polluted. They know that as well. Still now when you are going to do such a thing, the political power hurls threats at the villages, the mukhtars. The governorship here hurls threats at the mukhtars. They threaten them saying "Don't interfere. Don't meddle with these things". And the mukhtars are ignorant men, they are all intimidated.

In the recent years, rather small scale protests were made in the region by the environmentalists. Among these, in the summer of 2012, the protest meeting organized by the platform in Etili, where the mining company is based, was participated by many people though.[54] A local politician from Bayramiç mentions the following in this regard:

> In Etili we organized a rally too. We organized one in Çanakkale too. We organized one here too… In Karaköy as well we got together, organized a rally. Between Karaköy and Çan's Kızılelma Village. There on a hill like this. They had even made a pond and what not. They filled that with the waters. And that blew up and the things scattered around. Must have been two years I think. The Mayor of Çanakkale had come there too.

Although villagers protested against gold mining at environmental impact assessment meetings made in Karaköy and Kızılelma, their participation to these demonstrations organized by the environmentalists were generally low. According to the socioeconomic baseline field survey made by the gold mining firm in 2010 in villages in the vicinity of the project site at the Ağı Mountain, "Respondents in the larger settlements of Etili and Söğütalan identified labor as their first economic activity; while the respondents in other villages [such as Karaköy, Kızılelma, Bilaller, Cicikler, and Göle] identified either animal husbandry or agriculture."[55] It

[54] *Hürriyet*, "Çevrecilerden Kazdağları için Miting," June 3, 2012.

[55] Ferrigno et al., *NI-43-101 Technical Report*, 332.

is clear that the establishment of gold mining in the Ağı Mountain could generate unfavorable environmental conditions for rural communities in the long run especially in terms of agriculture and pasturing. Nonetheless, the platform could not succeed in mobilizing peasants against gold mining. Some villagers in Karaköy, Kızılelma, and Söğütalan have even supported gold mining due to material stakes. In this sense, Fikret states:

> The village becomes one body, one fist. After a while the mining company enters. They employ 20 people from the village. They are all poor villagers there. Then the village is divided in two sides. We do so many trainings. We work so hard to win over those villagers. When they show the money, some of the people change for money, change their opinion.

Moreover, Semih, an environmentalist living in a forest village on the northern side of the Kaz Mountains, claims that peasants were silenced over the contamination of water resources by means of bribery.

> They silenced some of the villagers with money because in the chemical research, in the preliminary research they use some chemicals. Those chemicals have mixed in the creek and the creek... The sheep, the goats which have drunk the water died. A lawsuit was being initiated about this. Some things were being initiated. Immediately the mining company paid them off plenty. Silenced the villagers in Karaköy.

Obviously, environmental activism against gold mining lost its dynamic to a great extent over time. There are several reasons behind this. First, the struggle against gold mining seems to be divided geographically. Environmental organizations like GÜMÇED on the southern side, and Çanakkale Environmental Platform on the northern side have waged their campaigns discretely. Furthermore, in-migrants could not play a leading role this time as they are mostly settled on the southern side. Second, the cohesion of the local actors was dissolved over time. The leading activists in Kaz Mountain Protection Initiative were withdrawn from the struggle as the initiative was disorganized after the retreat of the gold miners from the south. Besides, tourism entrepreneurs also seem to lose their interest on the campaign waged against the explorations on the northern side, since they are appeased by the withdrawal of the gold miners from the southern side. In addition, the municipalities on the northern side did not actively involve in the campaign like their counterparts

on the other side except a few municipalities such as Çanakkale and Bayramiç. Third, the environmental movement in the Kaz Mountains has been virtually ineffective to publicize the campaign on a national level this time. Lastly, the locals did not become an integral part of the environmental movement on the northern side. Çanakkale Environmental Platform could not get the support of local people in this regard. Villagers could not also knit together as their fellows did on the southern side. Rather, they are split over the extraction of gold mining. Even though the majority of the villagers are against gold mining, a small group of villagers backed by gold miners favors the extraction of gold mining since they expect material gains from operating of a gold mining site in the coming years. Certainly, a coherent local pressure group hardly ever emerges at the countryside if villagers are once divided against themselves. Overall, it seems that environmental activists in the Kaz Mountains failed to develop a strategy concerning the whole region.

7.3. Gold Mining: Challenging Sustainability in the Kaz Mountains

It has been a contested issue among local actors whether gold mining presents a challenge to sustainability or not. Broadly speaking, there are two conflicting standpoints concerning gold mining. Opponents assert that gold mining pose a serious environmental threat for the ecosystem and livelihoods of the people in the region, whereas supporters regard it as contributing to the economic development of the region with no serious environmental harms. In this sense, one of the disagreements between environmentalists and gold miners has been over the nature and extent of the environmental effect of gold mining. According to the gold miners, the effects of gold mining are both limited and periodic. Thus, the representative of the mining form states the following:

> Gold mining is actually not very different from other types of mining. Only the part of mineralization of gold is different. The gold mine looks no different from a quarry… In gold mining, companies take away about 40-50 tons of material in fifteen years in this region… Gold mining also leaves episodic impacts on the region… There won't be harm in gold mining, there will be impact… Anyways, the companies determine its impact with

> scientific reports, ÇED that is Environmental Impact Assessment reports… There will be a topographic change. For instance that is the biggest impact. I mean let's say if there is a hill there, the opening of that hill… Afterwards it shall be closed. The gold beneficiation site becomes a new hill in the same manner. That too is forested again, reintroduced to nature.

In addition, he explains the process of gold mining planned to be made in the region in the following way:

> What Kuzey Biga Mining Company will do is open-pit mining… In open-pit they first strip the earth of the site where they will operate, the vegetation soil… The rocks they dig, the financially viable ones they take to what we call the crushing, sifting units where they break them down to the size of pebbles… Think of a place like a soccer field. That place is first flattened out. Below it is closed with membrane. It is first paved with clay. I mean so that it is made impermeable… On top of that you lay the pipes. Between the pipes there are drainage layers. On top of that you line up these valuable rocks, the ore ones. Once you line them up anyhow on top of that when you give 1.2 per thousand cyanide water after it combines with the gold, at that point its level of cyanide is anyways not that much, it mostly disappears. Because cyanide changes form. They, through pipes, the waters are collected in another place at about 2-3 meters. From there those waters come directly to the carbon units. There they are combined with carbon. I mean that inert waste turns into active carbon there. Again cyanide is added to the water there. The water is again returned to the system. The water there rotates… In carbon chambers with activated carbon it transmits the gold on solid rock to water. That is the technique. It is first liquefied. From that liquefied thing it is again transformed into the solid form, into what we call the carbon coal. Later that is burned, and after it is burned it turns into what we call dore bars.

Moreover, he also claims that environmentalists are wrong about certain issues such as the evaporation of the cyanide or acid mine drainage which can be solved easily in his view.

> What confuses people most today or one of the things that those environmentalists are wrong about is that they add lime to prevent cyanide from vaporizing… By adding the ordinary lime they regulate the water's Ph.… Cyanide vaporizing, formation of acid rains is out of the question… Acid rock drainage, companies declare this anyway in the geological studies they have done, when it will occur or not, on which rocks it will occur or not. Its precautions are also very simple… I mean under it first of all they place rocks that don't have acid generation potential for instance… They squeeze the acid generating rocks on the top in the middle somewhere and then in the closure plan they set up an afforestation system that will enable the rainwater to flow without coming into contact with that area… One other misunderstanding is that they say 100 tons of water for 1 ton of soil. That is

> not how it is. It is like an aquarium. A closed system. They give the cyanide water. Produce the gold. Extract the gold from that water. Give that water back to the system.

Accordingly, he contends that gold mining can be made with appropriate techniques and careful management.

> Now the gold mine also has risks. The quarry also has risks. It cannot be said that there is a risk-free job at any mine. This is only something that can be managed… Anyways companies study the plans of the place where they will do heap leaching or dam or this or open-pit for ten years, fifteen years. I mean right now let's say we have been studying the Ağı Mountain for fifteen years. Teck has studied it, another company studied it before then… That is the aim of drilling anyways… Why is drilling done? Where is the ore? Likewise, where is the place to do heap leaching? What is the ground, the rock formation like there? Are there fault lines? That is how the heap leaching areas are selected. It is the result of those geotechnical drills that reveals where the ground is strong within its own ÇED area… Later on they also open observation wells around the place where they will do that heap leaching.

On the contrary, environmentalists put forward that gold mining poses a serious risk for the integrity of ecosystem as well as the health of people in the Kaz Mountains. Fikret from Çanakkale Environmental Platform argues that acid mine drainage is inevitable in gold mining, and also that the tailings dams which would be constructed in gold mining sites are not secure at all.

> Even if we were to put aside other hazardous heavy metals that cyanide releases such as arsenic, there is the formation of acid rock drainage… I mean you have such a problem when you dislocate so many rocks… Moreover, they will build tailings dams. There is no waste treatment system in mining. There is tanking in miners' terms. I mean in those tailings dams they will supposedly tank loads of heavy metal, cyanide wastes and whatnot. The bottom of the dam will be lined with an impermeable layer. They say we will stretch a membrane and whatnot. But that dam will stay there for hundreds of years. Shelf life of membrane is at most twenty years. It doesn't even last twenty years. There, in Uşak Eşme, in Erzincan Ilıç membranes ruptured in four five years.

Besides, Fikret explains the devastating effects of gold mining on environment as well as agricultural production as follows:

> Over here almost all of them are surface mining. When you do surface mining all the forest trees on the surface will be cut down. Inside the

> mountains they will dig 600 meter wide 400 meter deep hell holes. They will extract the ore in those holes, ground them. A part of it they will discard saying it is not usable. A part of it they will treat with cyanide and after extracting that little bit of gold, silver, they will again toss it around there, to nature. Thus and so the forests, our source of water will perish. Plus they will pollute the waters. All of these heavy metals will seep into the underground waters and surface waters, contaminate them. Plus they spray cyanide to do cyanide leaching, they spray it with water. For 1.5 grams of gold they will contaminate and use 2 to 3 tons of water. Look now see the dimensions of the catastrophe. The air is being polluted. The underground and surface water is being polluted. With all its peach, cherry, apple, olive growing in the environs, this entire area is a very important agricultural production center. A production begot by availing the boons of Kazdağları. Everything will perish in this region because of these gold monopolies.

In this sense, the local politician from Bayramiç also points out that there are serious risks of gold mining not only for Bayramiç but also for other places far away.

> This gold mine has a special quality. This is processed onsite… The rock is turned into dust on site at the gold mine. The grounded rock is dropped into the water in the pools. Then its mud sinks to the bottom and its water on top is removed again. Cyanide is added. Gold is obtained by electrolysis… This time its mud is stored. It has cyanide of course… Now this is poison. What are you going to do with this? You store it there. I mean you cannot take this anywhere… Well then where will the water go when it rains? "Well we will install a membrane beneath it." What they call membrane is you know something with tar. And it can be punctured! Pal, if there is a hole like this on the membrane it will tear away from that anyways. Now the dam overflows. There is an earthquake. Now look they say it will evaporate. 30% will come back down. The vapor that goes up in the day comes down at night through dew—where there is an abundance of water there is dew… The water that Kazdağları yields it goes from here to all the way to Bandırma, on that side there is the Greek Islands, Lesbos, over here our Bozcaada, we give water all the way to those places…Therefore, especially in this region of ours, in a region where fruit growing is very widespread, it shouldn't be done at all.

Environmentalists claim that the tailings dams are unsafe in the long run because the tailings could seep into the surface and groundwaters through the punctures of jeomembrane, which is used as a layer above the soil for storing waste slurries. Obviously, if such a leakage takes place, it will be detrimental to ecosystem and people. Accordingly, they contend that cyanide using will led to air pollution and the contamination of water resources as well as the destruction of forests. Thus,

they have environmental, health, and livelihoods concerns over the impacts of gold mining.

Furthermore, some of the foresters contend that gold mining activities disrupt ecological processes in mountain forests. In this respect, a forest engineer from the Bayramiç Forestry Directorate argues that gold mining is not in congruence with the sustainable forest management:

> I mean whatever mine it might be ultimately you are removing the existing forest flora and trying to reach the mine underground. Where is the sustainability? The tree got old, aged, grew older. There it dried up or really became suitable for natural rejuvenation, you rejuvenated it. In its place, a new tree growing in the same place, from the seeds of the same origin. This is sustainability all right. These mining fields interrupt this sustainability like corrosion, like a parasite. You leave no trees in that field. They open up a road there to a certain level. A place where its waste is collected, where you get the organic soil, where the waste is stored. All of these are disruptions to a normal sustainable forest structure. But there I'm telling you when evaluating these should be considered very carefully. The realities of a country, the financial profit it yields. In exchange perhaps you can finance afforestation somewhere else ten times the size of this area. But this is not merely the cutting of the trees there, when you do it somewhere in the middle of that entire Kaz Dağı range, you know, when you make a small stain in the lung, how that will hurt the whole, maybe damage the entire structure.

Furthermore, there is also a group of people, who thinks that gold mining could be made with appropriate techniques in areas other than the Kaz Mountains. In this sense, they contend that gold mining activities should be done in more desolate areas which do not have a rich biodiversity like the Kaz Mountains. Thus, they favor gold mining extraction on the condition that it is done in areas which are ecologically less important in terms of flora and fauna. In this sense, Ergün, the forest engineer from the Edremit Forestry Directorate, asserts that gold mining should first be made in another place if there is a gold mining reserve there:

> I mean in Kazdağları there are mining activities that might become a problem in the coming years. Although it is not possible in the national park zone. Many parts of our Kazdağları are in a condition befitting the national park. I mean the fact that it was not registered does not necessitate that area to be destroyed through mining. Surely we must work our mines, extract our mines but if the same mine has a reserve in another part of Turkey then I think it would perhaps be wiser to start from there first. For instance, they say the

> gold reserve in Kırşehir is higher. Well I think it should first start from there. I mean this place should be considered only when our need reaches its utmost.

In this sense, the district governor of Bayramiç also thinks along the similar lines:

> Definitely there will be mining in Turkey too, like there is across the world. I mean it is an activity that has always been done for centuries. It will continue to be done. But this should be conducted in the manner that causes the least harm to the environment. When issuing a mining license anywhere one should consider the matter with a fine comb. After it is issued its conditions should be inspected very strictly. And if there is an alternative, I mean let's say if there is the same mine somewhere else where it may cause less harm to nature and the environment, the needs must be met through that mine first. This region in that sense is truly one of the precious sites of Turkey, in fact of our globe. Well, miners too, I mean like it or not, however much attention they might pay, at the end of the day they are trying to unearth something. In any case I mean they turn the place upside down… But of course you know national economy, in terms of mining too, I mean if we have certain underground assets, if there is need to make use of them, these should be gauged very carefully I think. I mean when making choices at the point of grave importance it should be evaluated very carefully.

According to Martinez-Alier, there are different valuations of ecological conflicts. He argues that "whenever there are unresolved ecological conflicts, there is likely to be not only a discrepancy but incommensurability in valuation."[56] He further adds that, "The conflicts might arise because of the existence of different values but also because of different interests."[57] The same holds true for the Kaz Mountains. In the region, one can also see these different valuations of gold mining as well as different interests of the local actors to the utmost. To give an example, the conflict between olive oil producers and tourism entrepreneurs on the one side, and gold miners on the other also stems from different interests of these parties that are reflected in their different environmental valuations for the most part. In other words, the former wants to preserve olive trees and natural amenities since their living depends on them, whereas others want to extract gold which is more valuable in their eyes than olive groves, forests, or any other natural amenities.

[56] Martinez-Alier, *The Environmentalism of the Poor*, 98.

[57] Ibid..

Besides, the local elites such as mayors, olive oil producers, and tourism entrepreneurs as well as environmentalists and local people also oppose to the gold mining on the grounds that neither the country nor the local people will benefit from the economic advantages of gold mining. Moreover, some of the environmentalists also think that the extraction of gold mining in these circumstances is an exploitation of the natural wealth of Turkey. Both GÜMÇED and Çanakkale Environmental Platform base their arguments on a nationalist rhetoric in this regard. Thus, Fikret from Çanakkale Environmental Platform argues:

> Forests are gone. Waters are polluted. Agriculture fields are gone. Already at the drilling stage the villagers' animals got poisoned, sick, the children got diarrhea. People who used to drink the water of their own village had to drink bottled water because their water was contaminated. It does severe damage already at the drilling stage. These will happen if there is mining in the future as well. Ultimately what will we gain? Only they will give the state the state's share. How much is this state's share? Supposedly they made it 4%. But if you process the gold onsite then 2%... Now who is the buyer who is the trader here? The actual companies are international gold monopolies… This state's share means nothing. All the produced gold will be taken abroad because the final refinery process is done in Switzerland… I mean all this massacre of trees, water pollution, those wastes, all of that will stay here. They will take their gold and go.

In a similar way, Remzi from GÜMÇED also states the following:

> Can you imagine, I mean for gold, for 5 grams of gold, destroying, crumbling 999 thousand 995 grams of 1 ton, smashing it to smithereens in order to get 5 grams of gold so very brutally and doing this for money, for a mine that is not at all necessary for the sustenance of life, simply for power and money they are prepared to sacrifice our mountains, forests, waters, all our riches on the surface of the earth… Laws are being issued in order to give these mines to them with 2% shares the way imperialists want it. This is a testament to the power of imperialism. It is very significant.

The local politician from Bayramiç also argues that royalty payments are so low in Turkey:

> The actual company is foreign. Especially the Canadians. These are big foreign companies, trusts… I mean I think Turkey became a colony. I can't wrap my mind around it. I mean like this for 2% or something no one would give such a thing no way!

Thus, foreign ownership of the gold mining firms and lower royalty payments to the state seem to be one of the objections to gold mining by some of the local actors. In this sense, Duygu et al. asserts that this is a nationalist rhetoric expressing "dissatisfaction with the distribution of expected benefits rather than concerns about the environmental impact of gold mining"[58] Yet, it is hard to make such a differentiation between these two aspects because concerns over the economic distribution are rather mixed with concerns over the environmental impact of gold mining. Actually, environmentalists and local people are imbued with a strong sense of distrust both on protecting the ecological integrity of ecosystem, and on achieving economic development through gold mining. In this sense, Nail, a villager from Evciler, asserts the following:

> We believe it'll be affected very negatively and I mean we see it. We believe our waters will be polluted with the drilling they do, I mean we see it. The things they are doing are not done in a safe manner. Our state is allowing these but it is destroying our own country… So and so company has come from abroad and will prospect for gold here. Ok, bro, it will, but these people, so much livestock, are the lives of these worth nothing? The great Kazdağları. It doesn't just provide water to Evciler, Bayramiç, Çanakkale… Animals will come carry these wastes, birds will come carry them. Isn't it a pity for this country? There are many gold mine facilities that have been built in the past in this country. What has the state earned from any of these, what has our country gained I mean?

Semih asserts that nature protection is seen as backwardness in Turkey, whereas opening up to tourism or mining is seen as an economic advance and progress:

> I mean all the Aegean and Mediterranean seashore towns went through such a transformation over the past two decades. And this is gradually moving inland. I mean in Turkey because environmentalism in terms politics unfortunately ranks very low in terms of political significance, nature has no power in the face of neither tourism nor even the mines. I mean not the protection of the environment, but the opening up to tourism or increasing the mines is regarded as a financial move, even as progress. Perhaps protecting the environment is seen as reactionary because when it is geared towards stopping then this is named or regarded as reactionary. It is even said to be a conspiracy sometimes. Such actions are called conspiracy by politics,

[58] Avcı, Duygu, Fikret Adaman, and Begüm Özkaynak (2010), "Valuation Languages in environmental conflicts: How stakeholders oppose or support gold mining at Mount Ida, Turkey," *Ecological Economics*, 70: 232.

> by the present government. Unfortunately we don't have this awareness in Turkey.

The liberalization of economy led to the enactment of the Mining Law No. 3212 in 1983, which removed the restrictions on foreigners to make explorations and producing of mines.[59] In this sense, foreign investment in gold mining has been considered as promoting economic growth on a national scale by the successive governments since the 1980s. Besides, the mining sector is usually seen as contributing to the exports of the country. Thus Duygu et al. put forward that, "Governmental agencies refer to the necessity of utilizing underground resources in the course of development, calling attention to the country's current account deficit and foreign direct investment requirement."[60] In this respect, the district governor of Edremit also claims that gold mining means development:

> Its destructive power is blown out of proportion. It's become fashionable to object. This is not a subject to be addressed with this rationale… You know how we say gold will destroy olive farming and tourism. Well, what I am saying is our knowledge on whether or not it will cause this destruction is very insufficient. I believe that there are very big objections supported by very insufficient information here… If this will destroy our tourism, our olive trees, the quality of our olives, our oxygen source, then of course I am also against this… Highly likely these things don't have the potential of causing any trouble… We can generate a high income with this also and it might not cause damage to the environment like we think. This probability should be considered… See, it means the development of this country.

Miners also claim that gold mining would bring economic growth on a regional and national scale. In this respect, the representative of the gold mining firm puts forward that they pay substantial amounts in order to rent the forest area from state:

> The company, anyways, let's say it is going to open a 10 hectare forest land, from the start it anyways pays the price of the amount of trees there for the 10 hectares worth of trees. After that every year it pays its rent corresponding to the amount of trees there…I mean these are very huge numbers… It reaches 70-80 million dollars a year… These things are not so simple in

[59] Kaya, Selahattin (1996), "Açılış Konuşmaları," in *Türkiye'de Altın Madenciliği: Potansiyel, Ekonomi, Teknoloji, Yasal Boyut*, Güven Önal, Ekrem Yüce, and Sabri Karahan (ed.), İstanbul: Yurt Madenciliğini Geliştirme Vakfı Yayınları, 57-58.

[60] Avcı, Adaman, Özkaynak, "Valuation Languages in environmental conflicts," 232.

> Turkey… When you rent a place on the forest land, the money they give for rent is much higher than the state's share.

It is commonly argued that gold mining investments, which are done in less developed regions, will bring dynamism to that region beginning with the exploration period, and business enterprises that are opened up will form the nucleus of new attraction zones and will contribute to the construction of relevant industries in the region.[61] Likewise, the representative of the mining firm also argues that gold mining spurs economic growth in the region. Thus he explains the potential economic impact of gold mining as follows:

> There if one company alone is going to make a 1 billion dollar investment it means it will create an economy. I mean if it is going to employ around 600 people, if it is going to give vocational training to around 600 people. I mean this is only the people working in the mine. If you are going to employ 600 people for instance you are going to need transportation to take 600 people to and from work. If it is going to support the secondary sectors connected to it. For example the transportation sector, clothing, food at the site…As their purchasing powers change in the villages connected to it…We have contributed to the village through the employees. I mean if you further diversify, encourage the investments in the village, you further encourage that village, everyone working in agriculture. You enable them to invest. You diversify the grocer, the shopkeeper of the village.

Although he claims that gold mining will create employment opportunities for the local people, and will thereby encourage villagers to make investments, the local politician from Bayramiç depicts a completely different picture in this regard:

> It does not do them any good. They think they will hire workers. What workers are they supposed to hire? It will be dug with big loaders, excavators… Would tractor drivers be employed? Those tractor drivers and whatnot are for show. The soil carried by the tractor, a tractor would take a bucket of it and go. They move it with 50 tons worth of trucks. Plus they are special trucks that work in the mine. Huge trucks… I mean you know what they will do for that village? At the most they will hire one or two people. Station them as guards… I mean so that no one will enter that area. No way! What truck, they would not even hire a driver.

In the technical report, it is stated that, "To bring sustainable development into the community, Alamos worked with local communities and local governments and

[61] Önal, Güven, "Genelde Madenciliğin, Özelde Altın Madenciliğinin İnsan Yaşamı ve Ekonomideki Önemi," in Önal, Yüce, and Karahan, 57-58.

supported them with social projects and financial assistance."[62] In this respect, the projects and assistances of the company are listed as:

- Forestation on the road between Etili-Söğütalan. 2,000 pine saplings were planted by Etili Forestry in the name of KBM [Kuzey Biga Madencilik]
- Support for installing central heating system in the school
- Construction and renewal of village houses and schools
- Garbage collection partnership with local authorities
- Support for the village festivals
- Repairing two fountains
- Provide excavator for various issues
- Restoration of Mosques
- Renewal of Imam's Houses
- Renewal of health facilities
- Cyanide brochures prepared
- Printing calendars[63]

On this point, the technical report seems to take it for granted that the activities done by the gold mining firm can be considered as a part of sustainable development. As discussed by Kumah, according to a survey made on the largest gold mining companies around the world, a quarter of these mining companies "incorporated the terms 'sustainable development' in their corporate literature, and that only one company in the survey indicated that health, safety and sustainable communities are the most important areas of sustainability."[64] In this respect, it seems that mining company also uses the sustainable development notion as a part of their corporate literature.[65] The mining company seems to be interested in socioeconomic and community issues as well as forestation of an area in line with the suggestion that "Gold mining corporations in the developing World must build

[62] Ferrigno et al., *NI-43-101 Technical Report*, 360.

[63] Ibid.

[64] Kumah, Abraham (2006), "Sustainability and gold mining in the developing world," *Journal of Cleaner Production*, 14: 319.

[65] In this sense, Kumah states that, "Hilson surveyed the world's 20 largest gold mining companies, and indicated that generally, each has taken an active interest in dealing with regards to the environmental impacts of their operations but that socioeconomic and community issues receive less attention. See Ibid.

strong relationships with communities that host the mines. Effective communication between mines and communities will ease tension and promote confidence and trust."[66] Evidently, the mining company made these investments in forest villages in order to get support of the locals. For example, Mehmet, an old villager from Kızılelma, states:

> Well, they made a very big investment to our village. I don't know, they changed the window frames of the mosque, changed the frames of the village coffee house, they changed the plaster and the roof of the village house. They built a garage [for the] tractors. Then they built a dairy. Then they built a water fountain. They bought two tankers, water tankers you understand? One of them is pressurized, for fire extinguishing. The other one is to carry water.

Besides, the mining firm has appropriated a substantial amount of funds for social projects and assistances in forest villages in the recent years. In addition to these social projects, they also organized tours to the other gold mining sites in Turkey in order to show the villagers that gold mining could be done safely without giving harm to environment:

> We took 350 villagers to Bergama and Uşak. There, from Karaköy, Kızılelma, Söğütalan, Karaibrahimler, Cazgirler, Yukarı Şapçı. We took them from all those places. That is why we are so comfortable in the villages… For example in Kışladağ Bekişli there is only one road between the village and the mine—moreover it is heap leaching, I am talking about open-pit, I mean the place where the cyanide is distilled. When we went there our villagers said, "We will talk with the villagers here". We said, "Fine, talk". The men were watering their cows there. Cows are at least drinking water from the creek. And right now it has been seven eight years the one in Uşak. They got off, asked the men. "Did anything happen to your cows here?" they said. I mean they all laughed.

According to Avcı et al, "Mining companies have been prospecting in the region from time to time for over a decade now, and their claims that they have earned the support of at least a part of the rural population does seem substantiated."[67] Actually, it seems that some of the locals in forest villages support gold mining because of business and employment prospects. In this respect, they also assert that

[66] Ibid., 322.

[67] Avcı, Adaman, and Özkaynak, "Valuation Languages in environmental conflicts," 232.

supporters are rather rich villagers who do not make irrigated farming and expect benefit from gold mining:

> More interestingly, supporters of the project were in a higher income bracket in comparison to those opposing it…These findings suggest that a particular part of the rural population – male, not engaged in irrigated farming, and earning a higher income – expects to benefit from the business and employment opportunities gold mining may create. Although relatively small, this group seems to be powerful in virtue of their higher incomes. It appears that the mining companies, as they themselves also claim, have secured the support of this influential group at the local level.[68]

First, there is a small group of villagers favoring gold mining since they will have material stakes from the establishment of a gold mine. Transportation is one of the promising businesses in this regard. Even a transport cooperative was founded by the well-off villagers lately. The representative of gold mining firm states the following on this issue:

> Transportation cooperative was established in all these villages, moreover jointly. Ağı Mountain Transporters Cooperative was founded for example. They have a place in Etili. There they also have a place in Kızılelma. There Karaköy, Söğütalan, Karaibrahimler, Cazgirler, Kirazlı. They have members in all these villages. Around 30. They bought a digger. They bought transportation vehicles. I mean they bought it all.

That is to say, a group of villagers expect to benefit from the supplementary works related to gold mining. For example, during drillings, some are hired by the mining firm as they can use their tractors for carrying water from the nearby creeks, or for bringing other materials to the exploration sites. Moreover, others could look sympathetically to the opening of a gold mining as either a member of their household or relative has been employed by the miners. Besides, some villagers are also the informants of gold miners in villages. Especially these last ones completely take sides on behalf of the gold miners in any case. For instance, Cengiz, such a villager from Karaköy, tells:

> I don't know anymore, but if that mine does not open I don't know, the situation of this village is very shaky I mean. Zero money this year from production. I mean except the expenses. Whatever production you've got,

[68] Ibid., 233.

> vegetable gardening, fruit growing. I mean the fruits are still here. They incurred a ton of expenses but the fruits are still here. No buyers.

He seems to believe that gold mining would not bring about environmental devastation at all:

> Now if the mine becomes operational, now what will happen? …We said it, right, they'll take it in the way that does the least harm… There they'll take from one side, fill from the other. I mean they'll plant trees. Doing it everywhere at once, that won't happen I mean. That's… the promise they made.

Cengiz also thinks that young villagers will be retired from working at gold mining at the Ağı Mountain. Indeed, his son has been working at the drillings made in different locales for many years now. Yet, he also recognizes that there is not any future at the countryside for the later generations if a gold mining operates there:

> Boys will get their retirement from there. Anyways now those coming after that should think of something else. They should go to Europe. They should go someplace sound.

It is striking that the fierce opponents of gold mining at the beginning could become the devoted supporters later on, and vice versa. For example, in Kızılelma, some villagers including mukhtar who seemed to be against gold mining during the environmental impact assessment meetings eventually ended up being ardent supporters of gold mining. On the other hand, others like the mukhtar of Karaköy who were in favor of gold mining at first could become the fervent opponents of gold mining over time. In this sense, a local from Karaköy argues:

> In Karaköy a group of people, now, those who wanted it a lot at the beginning could not benefit from the gold mining companies. Now they don't want it. A group in Karaköy wants it. 35 people from Karaköy work in the gold mine. That means 35 people get a salary of 1500 liras each. The economy of the village grew. No one wants to, excuse me, but no one wants to go do this or that in the field ok. Sees it as a job with social security. We cannot claim otherwise. But we cannot mortgage our future either. I mean today we can save the day for ourselves. But, I, the fruit my child will eat tomorrow! We must be aware of the value of our agricultural lands.

Second, there is also a group of villagers who worked during the explorations. Many workers were employed at various locales during the drillings which has been

continuing for almost two decades now. According to Halil, a young villager from Karaköy who worked at the explorations at the Ağı Mountain and Katran Mountain, there were approximately 40-50 people from Söğütalan, 20-25 villagers from Karaköy, and less than 10 people from Kızılelma that were employed during the explorations. Obviously, gold mining explorations have become a significant means of livelihood especially for the young people in the recent years. Nevertheless, they are not as enthusiastic as villagers from the first group with respect to the establishment of a gold mining. In other words, they rather consider that there are both the pros and cons of gold mining. Halil tells the following on this issue:

> Well now it will also harm the village. Maybe it will also have benefits. I mean it goes both ways. It'll be beneficial and it'll be harmful… We grow apples. What we put in, I mean our profit does not cover our expenses. People lose money. What to do in this case? Well, he'll seek another solution. Now I am young. What do I do if I can't earn money in the village? I'll go somewhere else. There are many who go anyway.

Indeed, there is an outmigration from these villages as the vast majority of young people cannot make a living from agriculture at all. Not surprisingly, gold mining has become a decent alternative for some villagers in these circumstances. That is to say, they prefer to work at gold mining as there are no better alternatives. Undoubtedly employment opportunities offered to them are influential on the perception of villagers. Those villagers working at the drillings can rather look at more sympathetically towards gold mining, and they are thereby inclined to see environmental threats more modestly. For instance, Halil believes that gold mine would run firmly, and the area would be greened after it would be closed down:

> It will close it. It will smooth out its ground… I mean however it was when he first got there. Now, the planted trees he must inevitably clear-cut them. Again you are done. Whatever there was underground you took it. He will close it again with diggers. They will plant trees, leave it.

Yet, Halil also seems to be more unbiased than the other supporters concerning the dangers of gold mining. In this sense, he thinks that there is always a risk concerning the gold mining site.

> There is a risk no matter what… Let's say something really happened in those open pools. Let's say it exploded or there was a leak. What happens? I don't know nature got poisoned, the village, animals or the villager himself is harmed. You'll do harm no matter what because this thing you call cyanide is a toxic substance.

Even though these young workers are aware of the risks of gold mining, they do not see any problem working there. Actually, they take it as an opportunity to make their living. However, they are not as enthusiastic as villagers from the first group with respect to the establishment of a gold mining. That is to say, they are not in favor of gold mining unconditionally, and some can even be critical of gold mining to a degree. Overall, the supporters of gold mining usually underestimate the risks of gold mining in contrast to their fellow villagers. Therefore, these villagers regard gold mining as creating economic growth since they expect short-term financial gains from gold mining.

In both Karaköy and Kızılelma, villagers seem to be divided amongst others in terms of gold mining. However, this is more evident in Karaköy. For example, there are two village coffeehouses in the small village square. While supporters go to one of them, which is called as the miners' coffeehouse by villagers, opponents go to the other one.

Certainly villagers in Kızılelma are more concerned with the risks of gold mining because they will be the most effected community if a gold mining operates in the Ağı Mountain. Thus even workers employed by the mining firm at the drillings are much more circumspect in terms of gold mining. Hasan, such a worker from Kızılelma, clearly acknowledges that gold mining would be detrimental to their village.

> Well now of course this will be harmful but we can't know if it'll do any good. But it'll do harm. If you ask how will it do harm? We are anyway at the skirts of Ağı Mountain. If there is excavation above me… it will harm me because we know these excavation works ourselves. When you open the smallest quarry…it harms the near vicinity. If nothing else there is the dust. It spreads around, even if it does nothing else. Our Ağı Mountain is anyway a water spring. I mean it is something like a water tank. Honestly I don't know how this can work out?

Moreover, he is also aware of the possible destruction that would be given to the forest though the mining firm does not give any information to them on these issues.

> For instance, we do forestry. Now to tell you the truth, clear-cutting this completely...is that how they'll do it? They'll do that and destroy it completely?... Well, at the moment there is no one informing us as such… I mean how will it happen, how will it go? I mean there is no one telling us.

Muradian, Martinez-Alier, and Correo searching on the stakeholders' positions on different issues concerning the Tambogrande Mining Project in Peru, put forward that "people believe that the economic benefits and environmental burden of the mining project are unfairly distributed between the mining corporation, the central government, and the local population."[69] This can also be asserted for the gold mining projects in the Kaz Mountains Region. Likewise, local people also believe that while burdens fell on them, benefits are reaped by the gold mining company. In this sense, İhsan from Kızılelma puts forward that there must be a compensation of the villagers.

> Why am I against the mine? The main reason is this. My life will be gone, the boss's pockets will fill. Well bro, we have to reach an agreement somewhere. Either you'll do your research properly, you'll get your mine properly without doing me any damage. You'll use such a technology. Or however much you value the worth of my life at, you will pay me that price. That's my argument for being opposed to it. Personally I mean. Because one, you are trading on both my life and the life of the next generation. You are limiting their living conditions. I mean you are confining me to an open prison, or you are saying leave this place. Why should I leave this place? Why did you come? Well then, you'll pay the price bro. They are attempting to kill us without paying the price. And I mean we are saying, "Our life has a price." There can only be a deal if you pay this.

Yet, it is contesting whether local people will approve the gold mining projects if material compensations were offered by the mining firms or state agencies. Especially, local actors such as olive oil producers, tourism entrepreneurs, and peasants will not agree on such a solution. That is to say, the conflict in the Kaz Mountains cannot be reduced to the distributive effects of gold mining. Obviously other aspects of the conflict need to be further clarified in this regard.

[69] Muradian, Martinez-Alier, and Correo, "International Capital Versus Local Population," 787.

First, the Kaz Mountains Region is a special place for most of the local people whether they are environmentalists, activists, in-migrants, tourism entrepreneurs, shopkeepers, olive oil producers, fruit producers, forest workers, or peasants. Environmentalism in the region is strongly connected to knowing a place as Devall argues. "The more we know a place intimately, the more we can increase our identification with it. The more we know a mountain or a watershed, for example, and feel it as our *self*, the more we can feel its suffering."[70] Thus the sense of belongingness is significant for many people positing themselves against gold mining. In this sense, another local hunter from the Bayramiç Hunting Club states the following:

> This greenfinch is an animal that moves a lot according to weather conditions. It nestles someplace else when there is a southwest wind. It stays somewhere else when there is a northeast wind. When there is frost, when the weather is frosty, look, it is somewhere else. It is different when it is snowy. And they say the best meteorology in this world is this animal. Today it is abundant here. And then you'll look, it has left, there is snow. Now we are here this week. The wind is southwest. In southwest wind, there is no hunting here. What'll we do? Something else. And we'll look, suddenly, there is the mining company. "Do not enter! Do not do this and that." What'll happen this time? The forest is our forest. I was born and raised in Bayramiç. I was here before them. How will this be, how? I'm asking I mean, I'm asking those in charge.

Hurley and Arı argue that "these 'environmentalist' discourses are shaped by 'ecological science' and particular notions about landscape and environmental quality that map onto the very natural amenities valued by in-migrants seeking a better quality of life."[71] Indeed, to some extent, environmentalist concerns are associated with a particular view of natural environment as natural amenities. In this sense, Ercüment, the pension owner from Çamlıbel, criticizes gold mining as follows:

> Now a mining law has passed. It has legalized prospecting in forest areas. Only the olive groves, you know, there were some protests, they've been salvaged we say. But at the moment we are saying here Kazdağları the apple

[70] Devall, B. (1990), *Simple in Means, Rich in Ends: Practising Deep Ecology*, London: Green Print, 52, quoted in Sutton, Philip W. (2004), *Nature, Environment, and Society*, New York: Palgrave Macmillan, 101.

[71] Hurley and Arı, "Mining (Dis) amenity," 1411.

> of our eye. Our air, our water depends on it we say. Now mines will be opened, holes will be drilled, it'll be all dust and fumes, pits will be opened. Be it coal, gold, silver, everyone will look for their own fortune and our Kaz Dağı will become a construction site. What can I do here? I mean how can I say its air is clean, its nature is like this and that now? How can I live at peace with Kaz Dağı? How will I inspect whether the water is polluted or not? How can I tell people come here, this is a spot of paradise? How will I be sustainable? So I'll deplete the mountain, but my skills are, well, I can pick olives, collect mushrooms. Let me preserve the mountain as it is. Let me cut trees in a certain amount but still produce. Let me protect its flowers, insects, let it be my refuge. Because that is my background. As I am thinking these things, now there are at least 100 permits already issued. I mean it will turn into a construction site all of a sudden.

Today, environmental concerns on the natural resources are prevalent among local people. The overwhelming majority of the people in the region consider gold mining as bringing about a variety of ecological risks. Most commonly, they assert that gold mining poses a serious risk for water resources and forests in the Kaz Mountains. Even though most of the mukhtars hesitated over taking action on the contamination of their water resources during the explorations, water resources is a matter of the utmost importance for local people in the region. In this sense, the objection of many villagers to gold mining primarily rests on the risk of losing their water resources. For instance, the mukhtar of Karaköy opposes gold mining on the following grounds:

> Gold mining would finish off our lives. Now in the place where the gold mine is currently located, there is the collective water source of sixteen villages. A very large water spring. I mean it provides drinking water to sixteen villages. A natural spring. An underground spring. This gold mine is on this spring. These guys will completely destroy this spring. I mean they'll destroy this. Can they bring back this water spring and put it back there? Yeah, they can put the soil. And they can plant the pines also. But they can't bring the water spring back there. Just like Africa became a desert, these men will turn this place into a desert. Well you came and destroyed one water spring. I came and destroyed one water spring. Well, can there be life where there is no water?

Such an environmental destruction posits a much more immediate threat for the villagers living in the Kızılelma Village because it is located right on the skirts of the Ağı Mountain, and is one of the closest villages to the gold mining site. That is to say, it would be effected to the utmost in comparison to the other villages. Apart from environmental and health risks, a gold mining site established at the Ağı

Mountain could certainly pose a serious risk for villagers in Kızılelma in terms of landslides. In this sense, villagers could even need to be transferred to another place if a gold mining operates in the Ağı Mountain in the future. Mehmet, the old villager from Kızılelma explains the effects of gold mining as follows:

> Since this filth is thrown here, this here will be filled. This whole place will turn into a scarp, I mean all these places. Then these waters coming from above, from the mountain will all be gone. Our water spring comes from approximately 150 meter under the mountain. Well now these 500 meter drilling… See the drilling goes under our water. Well… will this water be any use to us? Anyway now… okay the water is gone.

Environmentalists and local people opposing to gold mining also put forward that the contamination of water resources could affect a much broader area in the Biga Peninsula. An apple producer from Yassıbağ says the following in this regard:

> Kazdağları is the… well the paradise of this region… of Turkey… well the things of those working in Kaz Dağı, you know those mine things… the mine… it mixed into the Bayramiç Dam. When it mixed what happened? It was over. All the way from Bayramiç to the Ezine Plain, to the Kumluca Plain, the water is supplied from this dam. This country is being poisoned.

Seyfi, a villager from Kızılelma, states that it will give a variety of harms to the environment:

> It will do all sorts of harm to the nature. I mean how will it do harm? The forest will be cut. In the simplest sense oxygen will be gone… Then the soil will slide. These will slide down to here. The soil will slide. There'll be noise. There'll be dust. What more harm do you want?

Ferhat, an activist from Karaköy, points out to the destruction of forests which are vital for the livelihood of rural communities as well as to the dangers of cyanide for fruit producing on the one hand, and for people and animals on the other:

> Now first of all our forests will be destroyed, that's one. I mean, I mentioned before, everyone brings mushrooms. Now they go collect mushrooms. 2 liras, 3 liras, these mushrooms are bought. You can't collect those mushrooms. Well those who have goats, sheep take them to graze. Well you won't be able to go there. That's two. I mean in the following stages gold will be prospected with cyanide. We know what sort of a trouble cyanide is more or less. And here, we, well, all the people here make their living by growing fruit …80 years ago gold was dug up at Balya. People are still dying, animals are dying. We see it I mean. We watch it. We watch it on the

> news as well. When they begin to mine for gold with cyanide these will be trouble for us.

Water resources and forests are of vital importance both for the ecosystem and livelihood of the local villagers. Most of the villagers thereby look to the issue from an ecological as well as a livelihood perspective. That is to say, they are aware that their livelihoods depend on utilizing the natural resources in a sustainable way. In this respect, they distinguish that gold mining could pose a serious threat to the environment and to their living. Then, such a prospect of environmental threat led villagers to oppose gold mining severely. The gold mining in Bergama also set a precedent for them. They usually take the Bergama case as the exemplar of environmental degradation brought on by gold mining. The head of an agricultural development cooperative in a forest village, argues:

> Honestly why are we against the gold mine? For instance, just to get a gram of gold they will further destroy our nature you know. Our waters will die. For instance, our waters come from Kazdağları...For instance, we have merchants coming from Bergama… The guys did a naked walk, they did this and that but they couldn't succeed. "Now", the guys say, "we have no such thing as olives". I mean well, here is now our source of livelihood. First thing is fruit production. Plus it happened with this cyanide. It also mixed into our waters by now. If we don't have that either, then what? Anyhow this migration… take us from the village to someplace else… it must. I mean here our livelihood here comes from Kazdağları.

As agriculture, pasturing, and forestry are contingent on natural environment, the prospect of endangering these livelihoods has been the primary motivation of peasants for opposing gold mining in the region. In this sense, Nail from the Evciler Village states the following:

> It will affect the region's population very very much because it is a region that secures its livelihood entirely from fruit growing. There are also parts that do stockbreeding. But well, when there is poisoning the folk will become completely unable to sell this fruit. Hungry, hungry, the folk will starve I mean. I mean it's like the region's people are being shoved towards utter starvation at the moment. As long as these facilities are allowed, the region's population is being done for, it is dying. This region will die out completely. Because at the end of a cyanide poisoning how will we sell the apple we produce? This apple for instance we send to İstanbul, we send abroad… There'll be residue on our apple this way. Where will we sell this to?

The majority of villagers in the Derekolu Region are against gold mining since they think that it would bring about environmental as well as economic destruction. It is clear that most of the villagers do not believe in the capacity of mining company to do environmentally friendly mining. Hence, local people in the Kaz Mountains also expressed similar arguments to the local activists struggling against gold mining at La Puya, Guatemala: "there are no overall or long-term benefits of a mine that will cause significant environmental degradation, threaten local water supplies or compromise land that is intended to be passed on to future generations."[72] Knowing that there cannot be life without water, local people see gold mining as devastating to their living. In this sense, the mukhtar of the Çamlıbel Village objects to the gold mining in the Kaz Mountains as follows:

> Well now if it is harming nature, I am saying it shouldn't be done… But now you give permission to the mine, you squander the mountain, but here you begrudge your citizen two or one pine cones. The man goes ahead and burns down, destroys the forest there. He cuts it down with machines, throws it out, opens a road from there… I swear it won't do the country, or this place any good. There is no sense in finishing off Kazdağları just so some folks can make money off it. I mean here in the Gulf, not one single young person will be able to benefit from it… Now cyanide will be used there. Maybe it'll destroy the underground waters… Anyway here, in this region, water is limited… Can there be life without water? What'll you do then? I mean everybody has to leave this place then.

The environmentalism of the poor, or livelihood ecology to borrow Martinez-Alier's terms, is "growing out of the complaints against the appropriation of communal environmental resources and against the disproportionate burdens of pollution, may help to move society and economy in the direction of ecological sustainability."[73] In this respect, most of the local people also question development policies pursued by the state agencies from a sustainability perspective. In this sense, Ercüment also challenges development policies as follows:

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[72] Pedersen, Alexandra (2014), "Landscapes of Resistance: Community Opposition to Canadian Mining Operations in Guatemala," *Journal of Latin American Geography*, 13 (1): 202.

[73] Martinez-Alier, *The Environmentalism of the Poor*, 270.

> There is also Çan Hydroelectric Power Plant behind Kaz Dağı. The coal dust spread from that, the fumes from the smokestacks anyway harm the ecosystem… On top of that if it turns into this with these activities. It's not just Kaz Dağı, the same thing goes for Madra, in Efemçukuru of İzmir, in Uşak Eşme, I don't know… In those mountains of Artvin. Well, while these developed countries are further limiting these types of activities, I mean while they are taking decisions not to do these in their own countries; countries like ours which pass laws so easily and meet their demands so readily will be left in a bind. How will we then be able to speak of sustainability? What sort of future plans should I be making when there are such risks? Then it means I can't devise plans.

It is clear that the reactions against the mining projects are manifold and often conflictual. In the northern part of the Kaz Mountains different alliances have emerged among the local inhabitants in support or against, but the cleavage among supporters and opponents seem to remain in the future. These are basically relying on material interests and claims for power and prestige.

Yet, the majority of people do not give their consent to the mining projects in the Kaz Mountains. Moreover, local people and environmentalists in the Kaz Mountains are in favor of a participatory and deliberative decision process "where local values and interests were not relegated to technical and economic criteria, and the community had the right to reject a mining project."[74]

Therefore, the conflict could not be solved by technical solutions or material compensations alone. There are technical solutions offered, but it seems even more important to consider socio-cultural and socio-ecological dimensions while attaining sustainability of environment and rural communities. Thus, it can be argued that livelihoods cannot be understood only from a technical and instrumental perspective but should also be considered from a sustainability perspective which takes into account socio-ecological dimensions and the integrity of the ecosystem.

[74] Urkidi and Walter, "Dimensions of environmental justice," 693. See similar arguments for local environmental movements in Latin America. Ibid.

CHAPTER 8

CONCLUSION

In this dissertation, I have analyzed the role of local actors for attaining sustainability in the Kaz Mountains Region. I have argued that prospects for sustainability in the region are contingent on the positions of local actors in the fields such as agriculture, forest villages, the national park, ecotourism, and gold mining as well as on the interactions between local actors and environment in these fields. Accordingly, I have contended local agency can bring about sustainability insofar as a holistic, participatory, and bottom-up perspective is adopted by the actors in these fields.

In this sense, I have also illustrated that sustainability is constituted by socio-economic and socio-ecological dynamics taking place on local, national, and global scales. Thus, I have also elaborated that development policies, agricultural developments, environmental arrangements, national park regulations, and transformations led by tourism and mining are significant as to determining the trajectory of sustainability in the region.

Throughout this study, an actor-oriented approach to sustainability was used by drawing on studies by Becker et al. and Long. In this way, this study has explored whether socio-economic and socio-ecological transformations in the Kaz Mountains Region promote sustainability or not. Thus, the regional particularities of the Kaz Mountains have also been depicted to a great extent. Overall, I have delineated the trajectory of sustainability in the Kaz Mountains Region by introducing local actors into the sustainability discussion.

I examined the aforementioned fields by taking into account the perspectives of multiple agencies. That is to say, I discussed these fields at length by introducing practices and experiences as well as perceptions and knowledge of local actors.

Moreover, I have also demonstrated unsustainable practices and experiences of local actors to highlight "social conditions and causes of non-sustainability."[1] Accordingly, this dissertation has shown that local actors by holding different positions and by interacting with other actors within these fields are important constituents of sustainability in the Kaz Mountains Region.

In this sense, I made field research in the forest villages and towns in the Kaz Mountains, and used qualitative and ethnographic research methods of in-depth interview, participant observation, and oral history. I preferred the qualitative research methods because they are most appropriate for my actor-oriented approach according to which it is crucial to understand the perceptions and experiences of local actors.

In this dissertation, it has been suggested that sustainable development discourse emerged as a result of international conferences and summits laid the foundation for global environmental governance. Yet, the liberal environmentalist and managerialist approach of global environmental governance grounding sustainable development discourse on economic efficiency and institutional control has been questioned thoroughly.

In this respect, I have drawn attention to the significance of local communities and rural livelihoods for achieving sustainability on a local scale. Thus, it has been argued that "conservation and preservation of environmental systems, resources, and landscapes is commensurate with community sustainability and the protection of livelihoods."[2] I have also indicated the significance of agroecological development in accordance with environmentally friendly agricultural practices.

As discussed in Chapter 5, nomadic populations traditionally lived in the pastures in the Kaz Mountains where they appropriated natural resources and made animal

[1] Becker, Egon, Thomas Jahn, and Immanuel Stiess (1999), "Exploring Uncommon Ground: Sustainability and the Social Sciences," *Sustainability and the Social Sciences*, in Egon Becker and Thomas Jahn (ed.), London and New York: Zed Books, 10.

[2] Robbins, Paul (2004), *Political Ecology*, Malden, MA and Oxford: Blackwell Publishing, 147.

husbandry or forestry in order to make a living. Their traditional livelihoods such as pasturing and forestry made them to depend on the natural environment to a great extent. In other words, they had a subsistence economy, and relied on the natural resources and the natural products for the most part. Until the 1980s, bartering and local markets were such institutions that linked the economy of the southern side with the northern side of the region.

Apart from ecological and natural aspects, the transformation of environment is also related to human activities in many ways. In this sense, human activities such as agriculture, pasturing, and forestry have also brought about a transformation of the natural environment in the Kaz Mountains Region. Overall, subsistence livelihoods in forest villages did not have adverse impacts on ecosystem in the long run as ecosystem has the inherent capacity to recover itself under moderate appropriation as stressed in Chapter 5.

Rural communities are no more subsistence communities in the traditional sense. There is an ongoing migration from forest villages to towns and cities as well as an in-migration to these villages which led to the diversification of rural livelihoods as well as dissolving of the closed-knit structure of rural communities. It is clear that rural communities in the Kaz Mountains have undergone a transition process since the 1950s, and there are considerable economic and sociocultural differences in comparison with the past.

As one can no more make a living either from pasturing or forestry due to the regulations implemented by the national park, agricultural production has become much more significant especially in the forest villages on the southern side. Currently, small olive groves or fruit orchards seem to remain the only agricultural assets for many households. According to olive oil producers, farmers making olive oil farming should be given price supports at least equal to their fellows in the Mediterranean countries of Spain and Italy. Moreover, they also assert that agricultural development cooperatives and TARİŞ should play a marketing role. In this respect, as elaborated in Chapter 4, place-based marketing strategies could be

developed by these cooperatives emphasizing the distinctiveness of olive and olive oil produced in the Kaz Mountains. Besides, organic olive oil production could also be promoted on a regional scale by TARİŞ. However, the current institutional structure of TARİŞ is not appropriate to follow such policies on a local scale.

Traditionally, small peasantry has been the prevalent type in the Kaz Mountains Region. Obviously, smallholders will hold an important position in terms of sustainable rural livelihoods. Today, the indigenous dynamics of petty commodity production still play an important role in olive oil and fresh fruit production. Yet, the abolishment of agricultural price supports and subsidies in a market where the production costs rise much more than the prices of agricultural commodities seem to make small producers vulnerable to the fluctuations of the market.[3] In this sense, most of the small farmers depend on off-farm incomes, family labor, or borrowing in order to survive in the market.

Agricultural policies favoring agribusiness initiatives rather than the small peasantry have underestimated the significance of the small peasantry in the recent decades. Even though the regional development agencies give substantial supports to the farmers on a project basis, the majority of villagers lack the necessary economic and cultural capital in order to apply for such projects, and it is mostly big farmers utilizing from these funds. Thus, agribusiness initiatives, which are supported generously, could take over the place of small farms in the future.

Furthermore, development policies in Turkey are also oriented towards supporting the agro-industrial model. That is to say, they favor corporate farms over family farms. In accordance with this, they also promote intensive farming to a great extent. "The link between the expansion of industrial agriculture and the growing use of pesticides is also clear."[4] Pesticides and fertilizers led to the killing of insects, predators, and birds as well as to the contamination of water resources and the

[3] Cf. Aydın, Zülküf (2005), *The Political Economy of Turkey*, London and Ann Harbor, MI: Pluto Press, 177.

[4] Hossay, Patrick (2006), *Unsustainable: A Primer for Global Environmental and Social Justice*, London and New York: Zed Books, 211.

decrease of soil nutrients in the long run. Clearly, excessive use of pesticides and fertilizers in farming has been one of the serious environmental problems in the region. Especially, bird species have decreased considerably by the overuse of pesticides. Besides, the overuse of fertilizers also led to the land degradation and the contamination of water resources. The productivity of the land has been lost to a great extent due to these agricultural practices. However, farmers continue to use fertilizers and pesticides in order to not confront with substantial decreases in agricultural productivity. In other words, most of the villagers justify chemical use in agricultural production insofar as they get more harvest. Obviously, producing for the market deters the peasants from following ecological alternatives. But agricultural policies not considering sustainable farming can bring about a decline of the agro-ecosystem in the long run. It is clear that promoting environmental friendly production techniques among the local producers could prevent land degradation, soil erosion, aquatic pollution, and loss of biodiversity. Especially, public agencies should put forward a regional perspective in order to spread agroecological farming methods among the small farmers. It seems that only through approaching the matter from the broader perspective of the multifunctionality of agriculture, development policies could provide for necessary changes in terms of sustainable farming in the Kaz Mountains.

Ecological initiatives pursue an agroecological model in the region which "aims not only to celebrate cultural and natural diversity but also to progress it and materialize it in new social and natural forms."[5] The alternative production methods such as permaculture and organic farming are used by these initiatives along with traditional ways of farming. Even though these ecological initiatives are small closed communities of in-migrants, who are mostly urbanites escaping from metropoles, they are involved in multiple interactions with villagers. First of all, they utilize the traditional agricultural knowledge of local farmers. Moreover, they also collect seeds from those peasants still cultivating natural seeds in their fields,

[5] Marsden, Terry (2006), "The road towards sustainable rural development: issues of theory, policy and practice in a European context," in *Handbook of Rural Studies*, Paul Cloke, Terry Marsden and Patrick Mooney (ed.), London: Sage Publications, 206.

and promote the use of natural seeds among local producers too. To a lesser degree, some also try to foster sustainable agricultural practices among villagers by informing them on ecological production methods. Thus, their relations with rural communities more or less facilitate agroecological practices at the local scale.

In this sense, ecological initiatives collaborate with rural communities not only on agricultural practices or seed varieties, but also on food provision. In this way, food sovereignty can be attained by constructing ecological markets and alternative food supply networks at the local and national scales. To some extent, unsustainable production and consumption practices imposed on villagers can be eliminated through such cooperation among these groups.

Developing sustainable agriculture among small farmers has not been the priority of these initiatives in the Kaz Mountains. In this sense, they can try to develop farmer-to-farmer approach at a local scale which is adopted worldwide by non-governmental organizations of agricultural development through integrating local knowledge and farmer generated technologies into small scale farming.[6] Without doubt, ecological initiatives in the region can present an agroecological alternative to the existing agro-industrial model by building on their relations with rural communities. Therefore, cooperation and solidarity between these two groups need to be firmly established in order to achieve sustainability on a local level.

Nevertheless, rural communities depending on environment for their living have usually been blamed for environmental degradation all around the world. "Small forest farmers have long been regarded as villains in accounts of forest clearance."[7] Besides, pasturing has also been associated with the environmental problem of overgrazing.[8] Villagers in the Kaz Mountains are no exception in this regard. They

[6] Holt-Gimenez, Eric (2010), "From Food Crisis to Food Sovereignty: The Challange of Social Movements," in Fred Magdoff and Brian Tokar (ed.), *Agriculture and Food in Crisis: Conflict, Resistance, and Renewal*, New York: Monthly Review Press, 216.

[7] Adams, W.M. (2009), *Green Development: Environment and sustainability in a developing world*, 3rd ed., London and New York: Routledge, 254.

[8] Ibid., 228-233.

are also held accountable for the environmental degradation by the national park agencies and foresters. That is to say, the former activities of peasants such as opening of agricultural fields by clear-felling forest areas and pasturing are seen as leading to deforestation and overgrazing respectively. Moreover, collecting of medicinal plants by women has also been considered as an unsustainable utilization posing a risk for the endemic and rare plants. Thus, conservation policies aiming to protect the flora and fauna of the Kaz Mountains led to the establishment of the national park.

In this way, the Kaz Mountain was turned into a national park where it is forbidden to follow economic activities. The nearby forest villages experienced drastic changes in this regard. The establishment of the national park effected rural communities socio-economically as well as socioculturally. First and foremost, it meant the abolishment of the living space of rural communities in the name of conservation. Obviously, this also impoverished peasants more as they were deprived of their basic livelihoods. Hence, it resulted also in increased migration of the youth from forest villages. It seems that the national park accelerated the transformation of rural communities. Overall, it has disrupted the traditional way of living entrenched in the rural communities.

In this sense, the suggestion of villagers concerning the boundaries of the Kaz Mountain National Park, which could be a remedy for the rural communities to some extent, has not been taken into consideration at all by the national park authorities. In fact, this has also been suggested by the national park head and foresters from the Edremit Forestry Directorate. In this sense, Ergün states the following:

> Now the village folk can't enter. Well they'll graze their livestock, they can't. They'll buy tents, they can't. I mean we call it production surplus, they'll buy dry twigs for their ovens, they can't. They can't produce and make money… Can't collect their flowers, oregano, mint. They are always in the forest. Therefore, they object, protest.… There are areas without villages from the peak of Kazdağları toward Kalkım, Çan, Bayramiç, Ayvacık that can be declared as national parks. It is useful for the national park to shift it

> toward that region a little and narrow the lower parts close to the village. I think this is a measure that should be taken for Kaz Dağı National Park.

Even though officials are aware of the situation, no measures have been taken in order to compensate for the losses of villagers up to now. In this sense, land-use zoning could also be used as an effective method for enabling peasants to make pasturing in areas near their villages. However, rather than developing such projects, villagers have been excluded from the national park to the utmost. That is to say, the foresters as well as the national park officers do not recognize the benefits of integrating conservation policies with the livelihoods of rural communities. It is clear that this ongoing conflict concerning the national park would not persist any longer if a more inclusive environmental management was implemented by the national park directory.

As discussed in Chapter 6, community-based environmental management instead of fortress conservation model has begun to be implemented in many national parks around the world as a way to protect biodiversity through local participation. As local people in the Kaz Mountains also traditionally pursued a pastoral life, nature conservation could be much more easily entrenched in rural communities. In this sense, local people can even be turned into stewards of nature, as Bryrant puts forward: "In the Third World this often involves converting indigenous people living in, or adjacent to, biodiversity 'hotspots' – such as tropical forests or coral reefs – into stewards of these localities, which Escobar dubs "reservoirs of value."[9] Indeed, this is an important aspect in terms of nature conservation. Only if local people are considered as important actors in terms of community management of natural resources, then they can play a significant role as to the conservation of nature reserves.

However, this can only be achieved by establishing friendly relations between rural communities and the national park authorities. In order to establish such relations,

[9] Bryant, Raymond L. (2001), "A Critical Agenda for Change?" *Social Nature: Theory, Practice, and Politics,* in Noel Castree and Bruce Braun (ed.), Malden and Oxford: Blackwell Publishers, 163.

the socio-economic and sociocultural needs of rural communities should also be taken into account. In this sense, Nuri from Tahtakuşlar argues:

> First this olive cultivation which is on the decline should be saved. Then these hills should be irrigated. There should be sustainable things. Stockbreeding should be revived. And these national parks called Kaz Dağı should be reequipped in accordance with a national park awareness. While equipping these we have to also save community cultures, community faiths.

Yet, the national park management underestimates rural communities to a great extent. Until now, no project on local communities has been designed by the national park directorate. In this sense, the livelihoods of rural communities concerning the Kaz Mountains must be recognized at first. The national park directorate could develop "designs and plans that effectively conserve biodiversity while protecting the territorial sovereignty of local inhabitants."[10] Thus, villagers can be integrated into the national park through creating a bunch of livelihood options for them in accordance with nature conservation.

In this sense, ecotourism comes to the fore as one of the important livelihoods that can be integrated with nature conservation. There are both advocates and non-advocates of ecotourism in the region. Tourism entrepreneurs and most of the villagers consider ecotourism as an appropriate form of tourism empowering rural communities and protecting rural environment, while some of the environmentalists utterly reject it as another form of consumerism. Nevertheless, it is clear that ecotourism has been understood by both sides as "trendy, catch-all word applied to almost any activity that links tourism and nature."[11] Thus, ecotourism has become the motto of locals in the recent years.

Yet, ecotourism initiatives led by in-migrants have been limited to a few villages such as Yeşilyurt and Adatepe up to now. To some extent, forest villagers in other settlements also benefit from ecotourism as they either run small ecotourism

[10] Zimmerer, Karl S. (1994), "Human Geography and the "New Ecology": The Prospect and Promise of Integration," *Annals of the Association of American Geographers*, 84 (1): 113.

[11] Sharpley, Richard (2009), *Tourism Development and the Environment: Beyond Sustainability?*, London and Sterling, VA: Earthscan, 21.

enterprises, or are employed by such businesses. There are also many guides working in the national park. Yet, ecotourism activities have not become prevalent among villagers until now, since villagers lack the necessary economic and social capitals in order to be engaged in ecotourism. Moreover, ecotourism projects concerning the national park have not been developed by the public agencies in collaboration with rural communities. In this sense, the mukhtar of Tahtakuşlar envisions a tourism development appropriate to the region as follows:

> I mean with facilities where you don't see anything if you look, but where you can see many things once you enter… With tourism, but when doing this tourism not by pillaging the 10 decare, 50 decare lands to big tourism companies like the five star hotels in Antalya. I mean simple, wooden, stone type, single story. Hiking tracks, hunting tourism, eco-mountain tourism, I mean the state should enable the development of these by giving incentives to the people of this region.

Forest villages scattered around the national park could benefit from a variety of ecotourism activities concerning the national park if an inclusive approach to ecotourism is adopted by the national park directorate and tourism entrepreneurs. In this way, developing alternative ecotourism projects among rural communities could also accomplish the conservation of environment through community participation. Despite occupying significant social positions, neither national park officials nor tourism entrepreneurs seem to be interested in promoting such projects.

Yet, currently rural communities are rather deprived of their traditional livelihoods such as pasturing and forestry since they are excluded from the Kaz Dağı National Park. Moreover, historical communal rights of rural communities over natural environment were also abandoned completely in order to constitute special, private rights on behalf of gold mining firms. Thus, gold mining activities seem to establish exclusive land-use practices on behalf of gold miners. In this sense, Aslı from Buğday Association tells the following:

> Miners can dare decide to open a mine here only in one way, that is when the life here disappears. That is, if there is no people left here who will put up a resistance. As long as there is a people here who needs that which is above the ground more than the miners who need what is beneath it, the miner cannot come here! I mean as a rule of nature he cannot come here. No such

> niche can be opened here. It won't even cross his mind. But only when the reality here, the life, the olive, that which is above ground becomes worthless in the people's hearts, minds, consciences, then the miner will come, the woodsman will come. I mean everyone will come then. Therefore, always further nurturing the entirety of life here, I mean our relation with the villagers is somewhat in that direction.

Studies on environmental activism show that environmental protests in the Southern countries are related to the local unrest about the use of natural resources to a great extent.[12] Gold mining explorations in the Kaz Mountains also led the emergence of a widespread environmental activism lately. Massive environmental protests were seen in the region especially after 2007. In the heyday of the campaign waged against gold mining, local people coming from different backgrounds were mobilized against gold miners largely through meetings and demonstrations organized by local activists and environmental organizations. Thus, local people ranging from in-migrants and environmentalists to olive oil producers, tourism entrepreneurs, and villagers also came together during this campaign. But the environmental movement in the Kaz Mountains lost its dynamic after massive environmental protests slowed down after they had peaked in 2008. Moreover, the solidarity of local actors was also dissolved over the years. Especially, local elites such as tourism entrepreneurs are not interested in continuing the campaign against gold mining explorations in the northern side of the Kaz Mountains. They seem to be conciliated after the retreat of the gold miners from the southern side. On the other hand, olive oil producers are still engaged in efforts to prevent the amendment of the Law No. 4086 concerning olive groves, which would allow gold mining activities in olive groves.

In this sense, the environmental organizations led their campaigns discretely as they are divided geographically, and environmentalists could not develop a strategy for the whole region. Recently, Çanakkale Environmental Platform has waged the environmental campaign against gold mining on the northern side. Despite

[12] Harvey, David (1999), "The Environment of Justice," in *Living with Nature: Environmental Politics as Cultural Discourse*, Frank Fischer and Maarten A. Hajer (ed.) Oxford: Oxford University Press, 184.

frequently organizing protests and meetings, they could not popularize the issue on the national scale as well as they could not mobilize the villagers on a local scale. The lack of in-migrants in the northern side also seems to have an adverse effect on the environmental campaign in this regard. Yet, the cancellation of the environmental impact assessment reports of several gold mining firms in a lawsuit filed against the gold mining projects by the platform could be considered as a partial success of the environmentalists.

As the environmental conflict on gold mining in the Kaz Mountains clearly shows, there are primarily ecological, health, and livelihood concerns of the local people. In this sense, all of these aspects are intertwined with each other. Peasants usually confront with gold miners if they perceive an immediate danger to their water resources and livelihoods. That is to say, they oppose gold mining as they could not risk the contamination of their water resources on which their livelihoods depend. However, villagers could also compromise with gold miners insofar as gold mining offers them employment and business opportunities. These kinds of compromises were made by villagers of Karaköy, Kızılelma, and Söğütalan in the northern side of the Kaz Mountains where explorations were made recently. A small group of villagers in these villages has supported gold mining primarily due to material stakes. Thus, villagers in these places hold ambivalent positions towards gold mining.

In spite of this, gold mining activities are mostly considered having environmentally devastating effect on the sustainability of water resources, forests, and ecosystem of the Kaz Mountains by the majority of the locals. It is clear that gold mining could pose an environmental risk on a regional scale although gold miners claim that the safety measures would be taken at a maximum level. In this sense, any development project adopting the precautionary principle of sustainability supposes that any risk on the ecosystem should be avoided beforehand, "not await conclusive proof of a major crisis before taking action."[13] In the face of such a serious threat, local people

[13] Hossay, *Unsustainable*, 211.

as well as environmentalists argue that development projects should be designed by keeping this point in mind.

This dissertation makes a contribution to the current environmental sociology studies by offering a social trajectory for analyzing sustainability. It also shows the significance of local agency in terms of sustainability by introducing an actor-oriented approach. The perceptions, experiences, and practices of local actors concerning sustainability are seldom studied in sociological studies.

It also contributes to rural sociology and sociology of development studies by introducing a sustainability perspective concerning rural communities through focusing on the socio-economic and socio-ecological transformations that these communities have undergone. Such a perspective also shed lights "on the way livelihoods are challenged and violated on a more general and regional scale by modern forms of development practice..."[14]

There are also limitations of this thesis. First of all, small scale hydroelectricity plants are planned to be established on several creeks coming from the Kaz Mountains. In this sense, lately there emerged several protests against the establishment of these hydroelectricity plants. The challenge of small scale hydroelectricity plants on sustainability was not included in this analysis. In this sense, the energy dimension of sustainability needs to be further clarified. Besides, the gender dimension has not been investigated at length in this study. In the interviews made with women daily life experiences, attitudes towards nature, and the division of labor showed great variety from men. Thus, it seems that analyzing gender can bring on new perspectives in terms of sustainable livelihoods as well as cultural sustainability, and participation of women in decision-making processes. Lastly, the cultural dimension such as folklore, artisans, music, and food has also been missing from my analysis to a great extent.

Today, the significance of local participation and local knowledge in terms of sustainability has been recognized by development experts, policy makers, and

[14] Robbins, *Political Ecology*, 190.

environmental protection agencies worldwide. That is to say, overlooking these aspects in policy making has become much more disputable than it was yesterday. In this sense, this dissertation has shown that sustainability can be achieved in the Kaz Mountains only by pursuing agroecological development, community-based environmental management schemes, and inclusive ecotourism activities on a local scale. Besides, integrating local participation into decision-making processes of development projects is also vital for sustainability since these projects can shape the future trajectory of local people as well as ecosytems. In this way, local actors could become the agents for sustainability. Thus, sustainability in the Kaz Mountains Region can be attained if people have a greater say on their environments.

Therefore, local actors can be considered as the main constituents of future sustainability designs The Kaz Mountains are more than a geographical space or natural environment for local people. It is also an economic, social, and cultural landscape for most of the locals. Incorporating the place-based and community-led approaches into development projects seems to be vital in order to follow sustainable livings in the Kaz Mountains. After all, attaining sustainability can be critical for ensuring future generations a decent living in the Kaz Mountains.

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APPENDICES

APPENDIX A

INTERVIEW QUESTIONS

1. INTERVIEW QUESTIONS IN TURKISH

- İnsan ve doğa arasında sizce nasıl bir ilişki var?
- Küresel çevre sorunları yerel düzeyde nasıl bir risk oluşturuyor?
- Çevre sorunlarının çözülmesi için ne tür bir yaklaşım izlenmesi gerektiğini düşünüyorsunuz?
- Teknoloji kullanımı çevreye zarar veriyor mu?
- Kalkınma sizce ne anlama geliyor?
- Ekonomik gelişme ile çevre koruma arasında bir uyuşmazlık görüyor musunuz?
- Bölgenin nasıl bir kalkınma modeli izlemesi gerektiğini düşünüyorsunuz?
- Sürdürülebilir kalkınmayı nasıl tanımlıyorsunuz?
- Küreselleşme ve sürdürülebilir kalkınma arasında sizce nasıl bir ilişki var?
- Sürdürülebilir kalkınmanın gerçekleştirilmesi için her ülke kendine özgü bir model mi izlemeli?
- Sürdürülebilir kalkınmaya yönelik nasıl politikalar uygulanmalı?
- Sürdürülebilir kalkınmanın gerçekleşmesinde sosyal adaletin yeri nedir?
- Sürdürülebilir kalkınma hedefinin gerçekleşmesinde STK'lar nasıl bir rol oynamalı?
- Yerel Gündem 21'den haberdar mısınız?

- Gelecekte bölgede sürdürülebilir kalkınmanın gerçekleşme koşullarını nasıl görüyorsunuz?
- Bölgede ne gibi çevre sorunları yaşanıyor? Bu sorunlar nasıl çözülür?
- Çevre sorunlarının teknolojik gelişmeler yoluyla çözüleceğini düşünüyor musunuz?
- Çevreyle ilgili mevcut yasal düzenlemeler Kaz Dağı'nın ekosisteminin korunması için yeterli mi?
- Belediyelerin uyguladığı şehir planlamasını nasıl buluyorsunuz?
- Ne tür bir planlamanın ve kentsel tasarımın sürdürülebilir olduğunu düşünüyorsunuz?
- Bölgenin turizm potansiyeli yeterince değerlendiriliyor mu?
- Bölgenin ekolojik ve kültür turizmi gibi alternatif turizm olanakları sürdürülebilir bir şekilde nasıl geliştirilebilir?
- Bölgedeki turizm faaliyetlerinin Kaz Dağı'nın ekosistemine ve deniz ortamına nasıl bir etkisi oluyor?
- Kıyı şeridindeki yapılaşma doğal çevreyi, tarım arazilerini ve zeytinciliği nasıl etkiliyor?
- Sizce yapılaşma uzun dönemde bölge ekonomisine yönelik bir tehdit oluşturuyor mu?
- Tarımsal üretimin, toprağın ve suyun korunmasının geleneksel yolları hakkında ne düşünüyorsunuz?
- Yerel bilgi nasıl değerlendirilebilir?
- Milli Park'ın bölgeye ne gibi etkileri oldu?
- Kazdağı'nda uygulanan orman yönetimini nasıl buluyorsunuz? Sizce sürdürülebilir orman yönetimi uygulanıyor mu?
- Bölgedeki madencilik ve altın arama faaliyetleri hakkında ne düşünüyorsunuz?
- Altın madenciliği bölgeyi nasıl etkiler?
- Altın arama faaliyetlerine karşı herhangi bir girişiminiz oldu mu?

2. INTERVIEW QUESTIONS FOR VILLAGERS IN TURKISH

- Köyünüzdeki yaşam kalitesi hakkında ne düşünüyorsunuz?
- Geçmişe kıyasla ne gibi değişiklikler oldu?
- Göçün köye nasıl bir etkisi oldu?
- Köyünüzde nesiller arasında nasıl farklılıklar var?
- Köyünüzde eski kuşaklardan aktarılan hangi gelenekler yaşatılıyor?
- Eskiyle kıyaslarsanız köydeki insanların yaşam tarzlarında nasıl bir değişiklik oldu?
- Üretim ve tüketim alışkanlıklarında herhangi bir değişiklik oldu mu?
- Köyünüzdeki insanlar geçimlerini nasıl sağlıyorlar?
- Köyünüz hangi sektörlerde bölgenin yerel işgücüne katkı sağlıyor?
- Köyünüzdeki toprak dağılımı nedir?
- Köyünüzde topraksız köylü var mı?
- Uygulanan tarım politikalarını nasıl buluyorsunuz?
- Kırsal kalkınma projelerinin herhangi bir faydası oluyor mu?
- Tarımsal desteklerin yeterli olduğunu düşünüyor musunuz?
- Tarımsal krediler yeterli mi?
- Kırsal ekonominin çeşitlendirilmesi sizce nasıl sağlanır?
- Köyünüzün ortak mülkiyetinde olan herhangi bir arazi var mı?
- Köyünüzde tarımsal ürünler açısından kendine yeter bir üretim yapılıyor mu?
- Köyünüzün ihtiyaç duyduğu kaynaklar ne ölçüde çevre kasabalardan/köylerden sağlanıyor?
- Bölgede monokültür tarım yapılmasının ne gibi etkileri oluyor?
- Bölgede yapılan zeytincilik ne durumda sizce?
- Zeytinciliğin gelişmesi/iyileştirilmesi için üretim sürecinde nasıl değişiklikler yapılmalı?
- Organik zeytinciliğin geleceğini nasıl görüyorsunuz?

- Organik tarımı modern tarımla karşılaştırırsanız avantajları/dezavantajları nedir?
- Tarım arazilerinin sulama imkanları nasıl?
- Köyünüzde zeytincilik dışında ne tür tarımsal faaliyetler yürütülüyor?
- Geçmişte üretilip bugün üretilmeyen ürünler var mı?
- Eski kuşaklardan size aktarılan geleneksel tarım yapma biçimleri var mı?
- Üretim sürecini anlatır mısınız?
- İşgücü ihtiyacınız nedir?
- Bölge dışından işgücü kullanıyor musunuz?
- Mahsulünüzü nasıl satıyorsunuz?
- Ürünleriniz pazarlanmasında herhangi bir sorunla karşılaşıyor musunuz?
- Ürünlerinizi Tariş ya da herhangi başka bir kooperatif aracılığı ile satıyor musunuz?
- TARİŞ'in sağladığı imkanlar nasıl?
- Geçmişe göre TARİŞ'in sağladığı imkanlarda nasıl değişiklikler oldu?
- Köyünüzde hayvancılık yapılıyor mu?
- Hayvancılık geçiminize nasıl bir katkı sağlıyor?
- Kadınların günlük yaşamdaki rolü nedir?
- Kadınların üretimdeki yerini kısaca anlatır mısınız?
- Köyünüzde kadınlar kışlık yiyecek hazırlıyor mu?
- Zeytinyağı, yoğurt, peynir gibi ürünleri kadınlar mı üretiyor?
- Bu ürünlerden ihtiyaç fazlası üretip satıyor musunuz?
- Hangi ürünleri pazardan temin ediyorsunuz?
- Avcılık yapıyor musunuz?
- Geçmişle karşılaştırınca hayvanlarının sayısında ve türlerinde herhangi bir değişiklik oldu mu? (Olduysa) Bunun nedenini neye bağlıyorsunuz?
- Bölgedeki turizm faaliyetlerinin köye katkısı oluyor mu?
- Köyünüzün turizm potansiyeli nasıl değerlendirilebilir?
- Milli Park'ın bölgeye ve köyünüze ne gibi etkileri oldu?
- Milli Park olmadan önce orman arazisini nasıl kullanıyordunuz?

- Milli Park köyünüze ekolojik turizm açısından herhangi bir katkı sağladı mı?
- Köyünüzde ormancılık önemli bir geçim kaynağı oluşturuyor mu?
- Ormandan nasıl faydalanıyorsunuz?
- Kadınlar ormandan şifalı bitkiler, kozalak ya da odun topluyor mu?
- Ormanlık alanların tarıma açılması gerektiğini düşünüyor musunuz?
- Bölgedeki madencilik ve altın arama faaliyetleri hakkında ne düşünüyorsunuz?
- Köyünüzde ya da yörenizde altın arama faaliyetinde bulunuldu mu?
- Altın arama faaliyetlerine karşı herhangi bir girişiminiz oldu mu?

3. INTERVIEW QUESTIONS IN ENGLISH

- What kind of a relationship is there between man and nature?
- What kind of risks do global environmental problems pose at a local level?
- What kind of an approach should be adopted in order to solve environmental problems?
- Does technology use give harm to environment?
- What does development mean to you?
- Do you see any conflict between economic growth and nature conservation?
- What kind of a development model should be pursued in the region?
- How do you define sustainability?
- What kind of a relationship is there between globalization and sustainability?
- Should each state pursue a genuine model in order to realize sustainable development?
- What kind of policies should be put into practice in terms of sustainability?
- What is the role of social justice for realizing sustainability?
- What kind of role should non-governmental organizations play in order to realize sustainability?
- Are you informed of Local Agenda 21?
- What are the prospects for the realization of sustainability in the region?
- What kind of environmental problems are experienced in the region? How can these problems be solved?
- Do you think that environmental problems can be solved via technological developments?
- Do you think that current environmental regulations are adequate for the conservation of the ecosystem of the Kaz Mountains?
- What do you think about the urban planning of the municipalities?
- What kind of a planning and urban design is sustainable?
- Do you think that the tourism potential of the region is utilized sufficiently?

- How can alternative tourism possibilities such as ecotourism and culture be developed in a sustainable way?
- How do the tourism activities in the region effect the aquatic resources and ecosystem of the Kaz Mountains?
- How does construction effect natural environment, agricultural areas, and olive farming?
- Do you think that construction pose a threat to the regional economy on the long run?
- What do you think about the traditional ways of agricultural production, soil and water conservation?
- How can local knowledge be utilized?
- What kind of impacts did the national park have on the region?
- What do you consider on the forest management in the Kaz Mountains? Is sustainable forest management applied?
- What do you think about gold mining and explorations in the region?
- Would gold mining contribute to the region?
- Do you think that gold mining pose an environmental risk?
- How would gold mining affect the region?
- Did you involve in any activity against gold mining explorations?

4. INTERVIEW QUESTIONS FOR VILLAGERS IN ENGLISH

- What do you think of the quality of life in your village?
- What kind of changes took place in comparison to the past?
- What is the effect of migration to the village?
- What kind of differences are there between the generations?
- Which traditions inherited from the older generations are lived on?
- How did the way of living of villagers change in comparison to the past?
- Are the any changes in production and consumption habits?
- How do people make their livelihood in your village?
- In which sectors does your village contribute to the local labor force?
- What is the land distribution in your village?
- Are there any landless peasants in your village?
- What do you think of the agricultural policies?
- Do you benefit from the rural development projects?
- Do you think that agricultural supports are sufficient?
- Are the agricultural credits sufficient?
- How can rural economy be diversified?
- Are there any land as the communal property of the village?
- Are there self-sufficient production in your village in terms of agricultural products?
- To what extent are resources provided from the local towns/villages?
- What is the effect of monoculture agriculture?
- What is the state of olive farming in the region?
- What kind of changes should be made in production process in order improve olive producing?
- How do you see the future of organic olive oil production?
- If you compare organic oil production with conventional farming, what are the advantages and the disadvantages?

- Are there irrigation facilities of the agricultural areas?
- What kind of agricultural activities are pursued in your village other than olive farming?
- Are there any agricultural products that were produced in the past, but are not produced today?
- Are there any traditional agricultural practices that are inherited from the older generations?
- Would you explain the production process?
- What is your labor force need for harvesting?
- Do you employ labor force out of the region?
- Where do you sell your product?
- Do you confront with any marketing problem of your products?
- Do you sell your products via TARİŞ or any other cooperative?
- How do you consider the opportunities granted by TARİŞ?
- How did the opportunities of TARİŞ change in comparison to the past?
- Is pasturing done in your village?
- How does pasturing contribute to your livelihood?
- What is the role of women in everyday life?
- Would you tell briefly the role of women in production?
- Do women prepare winter foodstuff?
- Do women produce yoghurt, cheese, and so on?
- Do you produce these products for the market?
- What kind of products do you provide from the market?
- Do you make hunting?
- If you compare with the past, are there any changes as to the animal species? What is the reason behind this?
- Do tourism activities contribute economically to your village?
- How can the tourism potential of your village can be utilized?
- What is the effect of the national park to the region and to your village?
- How did you use the forest area before the establishment of the national park?

- Are there any contributions of the national park to your village in terms of ecotourism?
- Is forestry an important livelihood in your village?
- How do you utilize from the forest?
- Do women collect any plant or fuelwood from the forest?
- Do you think that forest areas should be opened to agriculture?
- What do you think about mining and gold mining explorations made in the region?
- What is your opinion on the latest change of mining law?
- Did any gold mining exploration take place in your village or locale?
- Did you involve in any activity against gold mining explorations?

APPENDIX B

LIST OF INTERVIEWEES

Number of Interviewees	Name	Gender - Male(M) Female (F)	Place	Education : Primary School Secondary School , High School, Univesity , Master, Doctorate	Origin/Office/Occupation
1	Burhan	M	Adatepe	University	Olive Producer
2	Volkan	M	Adatepe	University	Hotelier
3	Salih	M	Adatepe	Primary School	Villager/Café Owner
4	-	M	Adatepebaşı	-	Head of the Adatepebaşı Village Development Cooperative
5	-	M	Ahmetçe	Primary School	Mukhtar
6	-	M	Ahmetçe	High School	Olive Producer
7	-	M	Akçay	University	Mayor
8	-	M	Altınoluk	University	Mayor
9	-	M	Altınoluk	University	Chair of Altınoluk TARİŞ Olive Cooperative
10	-	M	Altınoluk	-	Chair of Altınoluk Agricultural Sales Cooperative
11	-	M	Altınoluk	-	Chair of Altınoluk Aquaculture Products Cooperative
12	Remzi	M	Altınoluk	University	Environmentalist from GÜMÇED

13	-	F	Altınoluk	University	Environmentalist
14	-	M	Arıtaşı	Primary School	Mukhtar
15	-	M	Arıtaşı	-	Villagers/ Olive Oil Producers
16	-	M	Avcılar	High School	Mukhtar
17	Kazım	M	Avcılar	-	Head of the Avcılar Village Development Cooperative
18	-	M	Ayvacık	University	Mayor
19	-	M	Ayvacık	University	Forest Engineer/Chef Ayvacık Forestry Directorate
20	-	M	Ayvacık	-	Agriculture Technician, Ayvacık District Directorate of Food Agriculture and Livestock
21	-	M	Ayvacık	University	Veterinarian, Ayvacık District Directorate of Food Agriculture and Livestock
22	-	M	Bahçedere	Primary School	Mukhtar
23	Hayri	M	Bahçedere	Primary School	Olive Oil Producer
24	Ali	M	Bahçedere	Primary School	Olive Oil Producer
25	Aslı	F	Bahçedere	University	Environmentalist from Buğday
26	-	M	Bayramiç	University	District Governor
27	-	M	Bayramiç	University	Local Politician
28	Kerem	M	Bayramiç	University	Forest Engineer/Chef Bayramiç Forestry Directorate
29	Kamil	M	Bayramiç	-	Agriculture Technician, Bayramiç District Directorate of Food Agriculture and Stock Raising

30	-	M	Bayramiç	-	Veterinarian Technician, Bayramiç District Directorate of Food Agriculture and Stock Raising
31	Hakan	M	Bayramiç	-	Chair of the Bayramiç Chamber of Agriculture
32	-	M	Bayramiç	-	Chair of Bayramiç Agricultural Sales Cooperative
33		M	Bayramiç	-	Local Hunters from Bayramiç Hunting Club
34	-	M	Bektaş	High School	Mukhtar
35	-	M	Bektaş	Primary School	Villager/ Tourism Entrepreneur
36	-	M	Bektaş	Primary School	Villagers/ Fisher and Mason
37	Orhan	M	Bektaş	University	Environmentalist
38	-	M	Bektaş	University	Amateur Fisher
39	-	M	Beyoba	Primary School	Mukhtar
40	-	M	Beyoba	Primary School	Villager/Forest Worker
41	-	M	Beyoba	Primary School	Young Villagers/ Seller in Local Markets and Forest Worker
42	-	M	Büyükhüsun	Primary School	Mukhtar
43	-	F	Büyükhüsun	Doctorate	Environmentalist
44	-	M	Çamcı	University	Mukhtar
45	-	M	Çamcı	High School	Villager/Foreman
46	-	M	Çamlıbel	-	Mukhtar and Villagers
47	Haluk	M	Çamlıbel	-	Guide
48	Ercüment	M	Çamlıbel	University	Tourism Entrepreneur
49	Onur	M	Çamlıbel	University	Mechanical Engineer
50	-	M	Çamlıbel	Primary School	Villager

51	Fikret	M	Çanakkale	University	Environmentalist from Çanakkale Environmental Platform
52	-	M	Çanakkale	University	Representative of Gold Mining Firm
53	-	M	Çavuşlu	-	Mukhtar
54	Erhan	M	Çırpılar	-	Head of the Çırpılar Village Development Cooperative
55	-	M	Daloba	Primary School	Old Villagers
56	Seher	F	Doyran	Primary School	Villager/Environmentalist
57	-	M	Edremit	University	District Governor
58	-	M	Edremit	University	Mayor
59	-	M	Edremit	University	Director of Edremit Forest Directorate
60	Ergün	M	Edremit	University	Forest Engineer/ Edremit Forestry Directorate
61	Ufuk	M	Edremit	University	Forest Engineer/ Edremit Forestry Directorate
62	Hamdi	M	Edremit	University	Head of the Kaz Mountain National Park Directorate
63	-	M	Edremit	University	Director of Edremit District Directorate of Food Agriculture and Livestock
64	Taner	M	Edremit	University	Agriculture Engineer, Edremit District Directorate of Food Agriculture and Livestock
65	-	M	Edremit	-	Veterinarian Technicians, Edremit District Directorate of Food Agriculture and Livestock
66	Selim	M	Edremit	University	Director of Edremit Olive Production Center
67	Nazım	M	Edremit	University	Officer from Edremit Chamber of Agriculture
68	-	F	Edremit	High School	Chair of Edremit TARİŞ Olive Cooperative

69	-	M	Edremit	-	Chair of Edremit Agricultural Sales Cooperative
70	Necdet	M	Edremit	University	Head of the Kaz Mountain National Park Guide Association
71	Harun	M	Edremit	University	Factory Owner
72	Naci	M	Edremit	-	Olive Producer/Merchant
73	-	M	Evciler	Master	Chair of Evciler Agricultural Sales Cooperative
74	Faruk	M	Evciler	-	Head of the Evciler Village Development Cooperative
75	Salim	M	Evciler	Primary School	Fruit Producer
76	-	M	Evciler	Primary School	Foresters
77	Nail	M	Evciler	High School	Villager
78	-	M	Güre	University	Mayor
79	-	M	Güzeltepe	-	Pasturers
80	-	M	Hacıarslanlar	Primary School	Mukhtar
81	Gani	M	Hacıarslanlar	Primary School	Old Villager/Pasturer
82	-	M	Hacıarslanlar	-	Villagers
83	Jane	F	Havran	Doctorate	Emanetçiler
84	-	M	Karaköy	Secondary School	Village Mukhtar
85	Ferhat	M	Karaköy	-	Villager
86	Cengiz	M	Karaköy	-	Villager
87	Halil	M	Karaköy	-	Worker
88	Süleyman	M	Karaköy	-	Old Villager
89	İhsan	M	Kızılelma	University	Villager
90	Seyfi	M	Kızılelma	Primary School	Villager
91	Hasan	M	Kızılelma	-	Worker
92	Mehmet	M	Kızılelma	-	Old Villager

93	Aykut	M	Kızılkeçili	-	Villager
94	Kemal	M	Kızılkeçili	University	Olive Oil Producer and Factory Owner
95	-	M	Küçükkuyu	University	Mayor
96	-	M	Küçükkuyu	University	Forest Engineer/ Küçükkuyu Chef, Ayvacık Forestry Directorate
97	-	M	Küçükkuyu	-	Chair of Küçükkuyu TARİŞ Olive Cooperative
98	-	M	Küçükkuyu	University	Chair of Küçükkuyu Aquaculture Products Cooperative
99	Turgut	M	Küçükkuyu	High School	Shop Owner/ Environmentalist
100	Engin	M	Küçükkuyu	University	Olive Oil Producer, Factory Owner, and Merchant
101	Rıfat	M	Küçükkuyu	University	Olive Oil Producer
102	Tolga	M	Küçükkuyu	University	Environmentalist
103	Murat	M	Küçükkuyu	High School	Environmentalist
104	-	M	Küçükkuyu	University	Organizer
105	-	M	Külcüler	-	Mukhtar
106	-	M	Mehmetalan	High School	Mukhtar
107	Yaşar	M	Mehmetalan	High School	Head of the Mehmetalan Village Development Coo.
108	İbrahim	M	Mehmetalan	Secondary School	Builder
109	Can	M	Mehmetalan	High School	Guide
110	Deniz	M	Mehmetalan	High School	Guide
111	Songül	F	Mehmetalan	-	Restaurant Owner
112	Fatma	F	Mehmetalan	-	Villager
113	Zelha	F	Mehmetalan	-	Villager
114	-	M	Ortaoba	-	Mukhtar
115	Bekir	M	Ortaoba	-	Villager
116	Musa	M	Ortaoba	-	Villager
117	-	M	Pınarbaşı	-	Mukhtar

118	Yusuf	M	Pınarbaşı	-	Forester
119	Mustafa	M	Pınarbaşı	-	Old Villager
120	Veli	M	Sazlıköy	Primary School	Old Villager/Pasturer
121	Caner	M	Sazlıköy	University	Environmentalist
122	-	M	Serhat	-	Mukhtar
123	-	M	Serhat	-	Villagers
124	-	M	Tahtakuşlar	High School	Mukhtar
125	Nuri	M	Tahtakuşlar	High School	Retired Teacher
126	-	M	Yassıbağ	-	Villagers
127	-	M	Yassıçalı	Secondary School	Mukhtar and Villagers
128	Murtaza	M	Yassıçalı	Primary School	Old Villager
129	-	M	Yeşilyurt	Secondary School	Mukhtar
130	-	M	Yeşilyurt	University	Head of the Kaz Mountain Hotelier's Association
131	Vedat	M	Yeşilyurt	University	Tourism Entrepreneur
132	Erman	M	Yeşilyurt	Doctorate	Tourism Entrepreneur
133	Fuat	M	Yeşilyurt	University	Tourism Entrepreneur
134	-	M	Zeytinli	-	Mayor
135	-	F	Zeytinli	-	Chair of Zeytinli Agricultural Sales Cooperative
136	Arif	M	Zeytinli	University	Olive Oil Factory Owner and Merchant
137	Aynur	F	A forest village	University	Environmentalist
138	Semih	M	A forest village	University	Environmentalist

APPENDIX C

MAPS

Biga Peninsula

Kaz Mountains Region

APPENDIX D

PHOTOGRAPHS

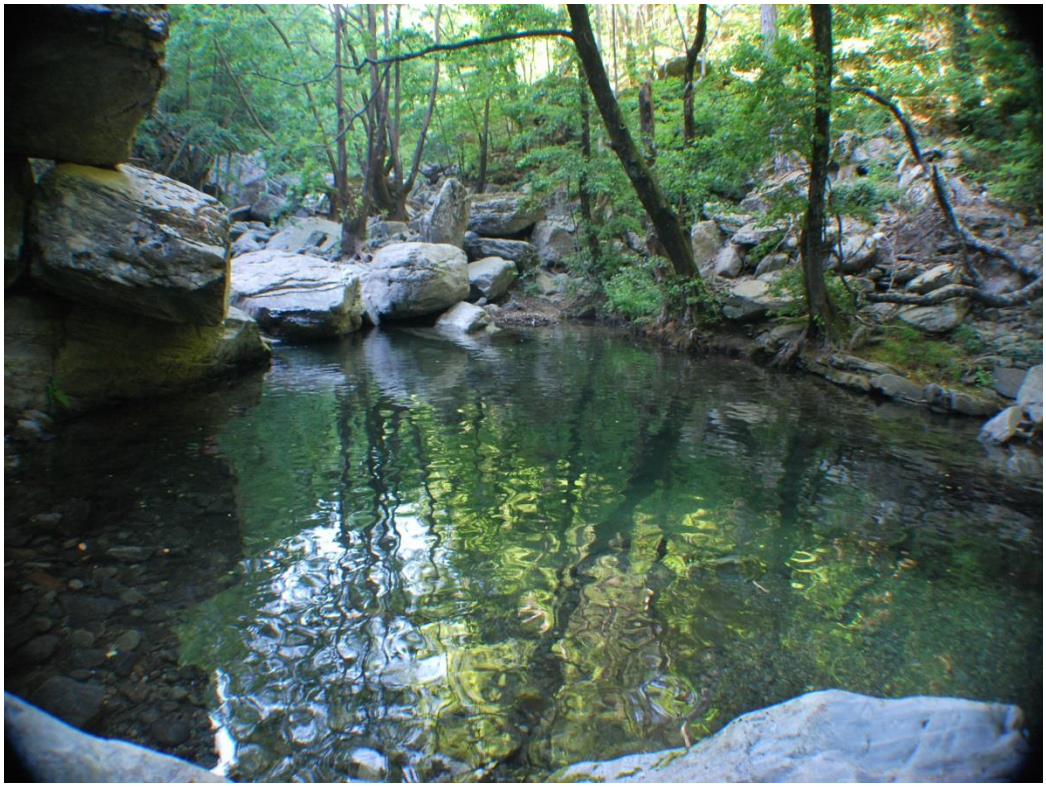
Kaz Dağı National Park

Kaz Dağı National Park

Black Pine Trees in Kaz Dağı National Park

Kaz Dağı Fir

A Pond in Kaz Dağı National Park



A Pool in the Kaz Mountains for Forest Fires

A Butterfly in Kaz Dağı National Park

The National Park Promotion Office in Zeytinli

Sarıkız Peak in Kaz Dağı National Park

Sarıkız Fest

Villagers in their Traditional Dresses at Sarıkız Fest

Panaroma from Zeus Altar in Adatepe

Olive Groves and Touristic Sites

Poles sold in Zeytinli during harvest

A Villager Harvesting Olive with Pole in Pınarbaşı Village

Olive Groves in Mehmetalan Village

A Villager harvesting olive with machine in Mehmetalan Village

Women picking olives scattered on the soil in Mehmetalan Village

Villagers going back to their houses after harvesting in Pınarbaşı

An Olive Oil Sack weighing about 100 kilograms

An Olive Oil Factory during Harvest in Zeytinli

A Women Villager in Bektaş Village

A Village Coffehouse in Sazlıköy

Çamlıbel Village

A Stand Selling Natural Products in Çamlıbel Village

Timber Piles in the Kaz Mountains

A Clear-Felled Area in Çavuşlu Village

A Creek on the Northern Side of the Kaz Mountains

Bahçedere Village

Adatepe Village

A Touristic Coffehouse in Adatepe Village

An Old Olive Oil Pressing Machine in Adatepe Village

Yeşilyurt Village

A Boutique Hotel in Yeşilyurt Village

A Souvenir Shop in Yeşilyurt Village

A Poster in Yeşilyurt Village: "Life has more value than gold in the Kaz Mountains"

A Permaculture Garden of an Ecological Initiative in Küçükkuyu

APPENDIX E

POPULATION STATISTICS OF TOWNS AND VILLAGES

Table 1. Population of the District Centers (2013)

	Total	Man	Woman
Ayvacık	7,758	3,874	3,884
Bayramiç	14,188	6,967	7,221
Çan	29,725	15,128	14,597
Edremit*	55,255	27,988	27,267
Yenice	7,423	3,582	3,841

Table 2. Population of the Towns and Villages of the Districts (2013)

	Total	Man	Woman
Ayvacık	22,977	11,443	11,534
Bayramiç	15,929	7,922	8,007
Çan	20,401	10,169	10,232
Edremit*	72,204	35,762	36,442
Yenice	27,054	13,413	13,641

Table 3. Total Population of the Districts (2013)

	Total	Man	Woman
Ayvacık	30,735	15,317	15,418
Bayramiç	30,117	14,889	15,228
Çan	50,126	25,297	24,829
Edremit*	127,459	63,750	63,709
Yenice	34,477	16,995	17,482

*Demographic indicators for Edremit are from the year 2012.

Table 4. Population of the District Centers (2007)

	Total	Man	Woman
Ayvacık	7,609	3,931	3,678
Bayramiç	13,134	6,436	6,698
Çan	29,172	14,764	14,408
Edremit	47,383	23,885	23,498
Yenice	6,917	3,460	3,457

Table 5. Population of the Towns and Villages of the Districts (2007)

	Total	Man	Woman
Ayvacık	22,178	11,357	11,421
Bayramiç	18,238	9,106	9,132
Çan	22,793	11,399	11,394
Edremit	60,237	30,488	29,749
Yenice	30,910	15,389	15,521

Table 6. Total Population of the Districts (2007)

	Total	Man	Woman
Ayvacık	30,387	15,288	15,099
Bayramiç	31,372	15,542	15,830
Çan	51,965	26,163	25,802
Edremit	107,620	54,373	53,247
Yenice	37,827	18,849	18,978

Table 7. Total Population of the Districts (2000)

	Total
Ayvacık	30,502
Bayramiç	32, 314
Çan	52,929
Edremit	93,351
Yenice	39,064

Table 8. Population of the Towns and Villages in Edremit (2012)

	Total	Man	Woman
Edremit	55, 255	27,988	27,267
(T) Akçay	10,692	5,059	5,633
Beyoba	150	80	70
Bostancı	1031	510	521
Çamcı	642	338	304
Çamlıbel	1094	541	553
Çıkrıkçı	602	303	299
Dereli	354	171	183
(T) Güre	3,765	1,881	1,884
Hacıarslanlar	377	188	189
(T) Kadıköy	6,724	3,442	3,282
Kızılkeçili	4,095	1,991	2,104
Mehmetalan	474	255	219
Ortaoba	1,599	822	777
Pınarbaşı	133	67	66
Yaşyer	469	227	242
Yaylaönü	256	127	129
Yolören	1,091	565	526
(T) Zeytinli	17,983	8,810	9,173
(T) Altınoluk	15,803	7,902	7,901
Arıtaşı	219	123	96
Avcılar	2,129	1,080	1,049
Doyran	348	175	173
Kavlaklar	218	116	102
Narlı	1,145	575	570
Tahtakuşlar	811	414	397
TOTAL	127,459	63,750	63,709

***T:** Town

Table 9. Population of the Towns and Villages in Edremit (2007)

	Total	Man	Woman
Edremit	47,383	23,885	23,498
(T) Akçay	9,095	4,387	4,708
Beyoba	188	90	98
Bostancı	1016	516	500
Çamcı	688	345	343
Çamlıbel	465	216	249
Çıkrıkçı	482	258	224
Dereli	406	192	214
(T) Güre	3,917	2,010	1,907
Hacıarslanlar	389	195	194
(T) Kadıköy	5700	2,977	2,723
Kızılkeçili	3270	1616	1654
Mehmetalan	502	271	231
Ortaoba	1507	786	721
Pınarbaşı	131	70	61
Yaşyer	475	226	249
Yaylaönü	282	138	144
Yolören	979	506	473
(T) Zeytinli	14,484	7,359	7,125
(T) Altınoluk	11,641	5,974	5,667
Arıtaşı	234	127	107
Avcılar	2024	1039	985
Doyuran	374	183	191
Kavlaklar	219	118	101
Narlı	1055	532	523
Tahtakuşlar	714	357	357
TOTAL	107,620	54,373	53,247

***T:** Town

Table 10. Population of the Towns and Villages in Ayvacık (2013)

	Total	Man	Woman
Ayvacık	7758	3874	3884
Ahmetçe	570	292	278
Adatepe	409	211	198
Arıklı	176	87	89
Baharlar	117	57	60
Bahçedere	207	97	110
Büyükhüsun	325	156	169
Güzelköy	232	116	116
Kayalar	181	86	95
Kırca	32	20	12
Kısacık	117	56	61
Kozlu	252	130	122
Küçükçetmi	229	116	113
(T) Küçükkuyu	8012	4015	3997
Nusratlı	160	76	84
Sazlıköy	466	225	241
Tuztaşı	58	28	30
Uzunalan	132	65	67
Yeşilyurt	154	79	75

T: Town

Table 11. Population of the Towns and Villages in Ayvacık (2007)

	Total	Man	Woman
Ayvacık	7,609	3,931	3,678
Ahmetçe	646	327	319
Adatepe	417	207	210
Arıklı	201	95	106
Baharlar	160	73	87
Bahçedere	271	133	138
Büyükhüsun	318	148	170
Güzelköy	239	119	120
Kayalar	206	102	104
Kırca	46	24	22
Kısacık	132	71	61
Kozlu	276	145	131
Küçükçetmi	285	150	135
Nusratlı	201	99	102
Sazlıköy	519	248	271
Tuztaşı	171	93	78
Uzunalan	196	96	100
Yeşilyurt	118	59	59

Table 12. Population of the Villages of Bayramiç in the Derekolu Region (2013)

	Total	Man	Woman
Bayramiç	14,188	6,967	7,221
Beşik	217	117	100
Çavuşlu	523	253	270
Çırpılar	309	152	157
Dağoba	110	56	54
Daloba	436	216	220
Evciler	1,564	797	767
Gedik	407	193	214
Güzeltepe	56	30	26
Karaköy	475	233	242
Külcüler	268	135	133
Sarıot	168	79	89
Serhat	411	199	212
Toluklar	78	39	39
Tongurlu	274	140	134
Yassıbağ	418	219	199
Yeşilköy	368	179	189

Table 13. Population of the Villages of Bayramiç in the Derekolu Region (2007)

	Total	Man	Woman
Bayramiç	13,134	6,436	6,698
Beşik	216	120	96
Çavuşlu	584	282	302
Çırpılar	383	192	191
Dağoba	145	78	67
Daloba	499	255	244
Evciler	1766	901	865
Gedik	450	222	228
Güzeltepe	65	33	32
Karaköy	543	261	282
Külcüler	294	142	152
Sarıot	197	106	91
Serhat	413	202	211
Toluklar	123	60	63
Tongurlu	325	171	154
Yassıbağ	467	246	221
Yeşilköy	455	226	229

Table 14. Population of the Villages of Çan (2013)

	Total	Man	Woman
Bardakçılar	115	65	50
Bilaller	226	114	112
Cicikler	131	66	65
Dereoba	141	70	71
Eskiyayla	187	84	103
Etili	1347	656	691
Halilağa	187	98	89
Kızılelma	277	142	135
Ozancık	101	47	54
Söğütalan	683	348	335
Uzunalan	283	135	148
Zeybekçayırı	116	60	56

Table 15. Population of the Villages of Çan (2007)

	Total	Man	Woman
Bardakçılar	92	47	45
Bilaller	241	124	117
Cicikler	148	75	73
Dereoba	128	64	64
Eskiyayla	214	112	102
Etili	1393	687	706
Halilağa	226	119	107
Kızılelma	303	154	149
Ozancık	126	56	70
Söğütalan	780	388	392
Uzunalan	300	142	158
Zeybekçayırı	139	67	72

Source: All tables except Table 7 are adapted from the statistics at the website of *TÜİK*. Table 7 is adapted from the statistics in State Planning Organization (2004), *Socio-Economic Development Ordering Research of the Districts*, Ankara, 147-155.

APPENDIX F

SOCIO-ECONOMIC INDICATORS OF THE DISTRICTS

	Edremit	**Ayvacık**
Population	*93,351 (137)*	30,502 (444)
Urbanization Rate (%)	41.99 (431)	21.23 (791)
Population Growth Rate (%)	38.63 (54)	-0.10 (513)
Population Density	128 (141)	34 (577)
Population Dependent Rate (%)	45.53 (787)	47.90 (749)
Average Household Size	3.28 (853)	3.03 (871)
Rate of Employees in the Agricultural Sector (%)	*47.62 (751)*	71.21 (516)
Rate of Employees in the Industrial Sector (%)	7.30 (240)	6.04 (291)
Rate of Employees in the Service Sector (%)	45.07 (89)	22.75 (353)
Unemployment Rate (%)	6.14 (342)	2.46 (788)
Literacy Rate (%)	91.52 (95)	86.36 (379)
Infant Mortality Rate (%)	32.68 (620)	31.63 (643)
Share of Tax Revenues within the Country (%)	0.06604 (95)	0.01038 (314)
Share of Agricultural Production within the Country (%)	0.09608 (315)	0.09074 (328)

SOCIO-ECONOMIC INDICATORS OF THE DISTRICTS

	Bayramiç	**Çan**	**Yenice**
Population	32, 314 (426)	*52,929 (264)*	39,064 (364)
Urbanization Rate (%)	37.10 (520)	54.56 (237)	14,05 (856)
Population Growth Rate (%)	1.14 (489)	2.52 (456)	-9,13 (656)
Population Density	25 (695)	58 (356)	28 (655)
Population Dependent Rate (%)	47.06 (763)	45.30 (794)	48.42 (739)
Average Household Size	3.16 (865)	3.41 (834)	3.22 (861)
Rate of Employees in the Agricultural Sector (%)	77.01 (387)	*47.78 (748)*	81.37 (236)
Rate of Employees in the Industrial Sector (%)	5.25 (335)	28.26 (17)	5.65 (306)
Rate of Employees in the Service Sector (%)	17.74 (526)	23.96 (320)	12.98 (729)
Unemployment Rate (%)	2.34 (795)	3.57 (638)	1.81 (841)
Literacy Rate (%)	86.19 (390)	91.15 (113)	84.23 (495)
Infant Mortality Rate (%)	37.74 (470)	34.09 (581)	26.62 (757)
Share of Tax Revenues within the Country (%)	0.01213 (292)	0.05511 (112)	0.01125 (300)
Share of Agricultural Production within the Country (%)	0.23848 (113)	0.06702 (394)	0.15288 (206)

Source: Table adapted from State Planning Organization (2004), *Socio-Economic Development Ordering Research of the Districts*, Ankara, 147-155.

* The numbers inside the parenthesis show the rank of the district within 872 districts according to the relevant indicator.

APPENDIX G

AGRICULTURAL STATISTICS OF EDREMİT AND AYVACIK

Table 1. Statistics of Agricultural Area in Edremit

Villages	Olive Cultivated Agricultural Area (Decares)	Number of Olive Trees	Agricultural Area	Agricultural Area (Decares)
Avcılar	5,385	47,637	Olive-Fruit	6,038
Arıtaşı	1,701	22,409	Olive	1,732
Beyoba	1,330	41,254	Olive	1,330
Bostancı	389	3816	Field- Olive-Vegetable	4,519
Çamcı	3,740	61,282	Olive-Fruit	3,740
Çamlıbel	3,402	63,121	Olive-Fruit	3,450
Çıkrıkçı	950	9112	Field- Olive-Vegetable	8733
Dereli	4710	94,310	Olive-Fruit	4,732
Doyran	3,053	62,016	Olive-Fruit	4,080
Hacıarslanlar	4,216	82,900	Olive-Fruit	4,222
Kavlaklar	1,770	47,897	Olive	47,897
Kızılkeçili	5693	79,397	Olive-Fruit	5,890
Mehmetalan	1,407	39,340	Olive	1,507
Narlı	13,126	141,580	Olive-Fruit	13,426
Ortaoba	4,877	119,984	Olive-Fruit	4,877
Pınarbaşı	894	35,097	Olive	894
Tahtakuşlar	8930	71,020	Olive-Fruit	8955

Yaşyer	1,503	31,594	Olive-Fruit	1,727
Yaylaönü	4,335	61,194	Olive	4,335
Yolören	4,444	44,749	Olive-Fruit	9,169
Towns				
Altınoluk	9784	171,260	Olive-Fruit	8845
Akçay	500	2000	Olive-Fruit	2,300
Edremit	125,947	1,350,333	Field- Olive-Vegetable	121,735
Güre	4123	100,198	Olive	4123
Kadıköy	1975	55,197	Olive-Fruit	3291
TOTAL	224,258	2,948,535		239,766

Source: Statistics are taken from the Edremit District Directorate of Food Agriculture and Livestock.

Table 2. Statistics of Agricultural Producers and Tractors in Edremit

Villages and Towns	Number of Agricultural Producers	Number of Tractors
Arıtaşı	64	4
Avcılar	419	32
Beyoba	53	2
Bostancı	161	69
Çamcı	192	19
Çamlıbel	84	2
Çıkrıkçı	101	26
Dereli	181	10
Doyran	298	3
Hacıarslanlar	148	8
Kavlaklar	64	2
Kızılkeçili	201	10
Mehmetalan	114	15
Narlı	239	11
Ortaoba	482	-
Pınarbaşı	20	2
Tahtakuşlar	233	9
Yaşyer	184	1
Yaylaönü	71	12
Yolören	63	5
Altınoluk	361	10
Güre	278	5
Kadıköy	59	9
Zeytinli	452	40
TOTAL	4522	306

Source: Statistics are taken from the Edremit District Directorate of Food Agriculture and Livestock.

Table 3. Statistics of Agricultural Products in Edremit

Agricultural Product	2006		2007		2008		2009	
	Production (tones)	Area (da)	Production (tones)	Area (da)	Production (tones)	Area (da)	Production (tones)	Area (da)
Olive	50,129	199,180	59,600	199,180	89,400	199,180	89,460	199,180
Tangerine	16,350	8,950	13,100	8,650	26,200	8,650	26,560	8,650
Tomato	12,500	2,500	8,150	1,630	10,875	2,175	10,875	2,175
Fig	1,970	1,730	1,615.4	1,730	1,970	1,730	1,970	1,730
Wheat	5,770	10,500	3,150	10,500	6,330	10,550	4,747.5	10,550

Source: Statistics are taken from the Edremit District Directorate of Food Agriculture and Livestock.

Table. 4. Agricultural Statistics of Ayvacık

Towns and Villages	Number of Agricultural Enterprises	Agricultural Area (decares)	Chemical Fertilizer Area (decares)
Ayvacık	110	6,729	5,428
Ahmetçe	83	3,910	3,857
Adatepe	46	2,384	2,130
Arıklı	34	899	899
Baharlar	19	2,669	2,562
Bahçedere	63	2,146	2,146
Büyükhüsun	21	726	597
Güzelköy	24	1,192	1,192
Kayalar	38	1,525	1,507
Kırca	1	28	28
Kısacık	15	705	654
Kozlu	8	272	272
Küçükçetmi	34	1,022	1,022
Küçükkuyu	106	6,683	6,316
Nusratlı	36	1,673	1,592
Sazlıköy	30	1,066	1,006
Tuztaşı	23	759	759
Uzunalan	12	587	587
Yeşilyurt	20	1,033	908

Source: Statistics are taken from the Ayvacık District Directorate of Food Agriculture and Livestock.

APPENDIX H

STATISTICS ON OLIVE AND OLIVE OIL

IN EDREMİT AND AYVACIK

Table 1. Edremit Olive and Olive Oil Harvest Estimation

	2013/2014 Season	2012/2013 Season
Tree Number (Fruit Producing)	2,987,000	2,982,000
Tree Number (Not Fruit Producing)	25,000	30,000
Olive Kernel for Each Tree (kg)	6.5	18
Olive Yield (ton)	19,416	53,676
Olive Reserved for Table Oil (ton)	3,883	5,676
Olive Reserved for Oil (ton)	15,532	48,000
Olive Oil Yield (ton)	3,106	9,600
Olive for 1 kg Olive Oil (kg)	5.0	5.0

Source: http://uzzk.org/Belgeler/UZZK_2013_2014_REKOLTE_RAPORU.pdf, http://uzzk.org/Belgeler/TURKIYE_REKOLTEUZZK_2012_2013.pdf

Table 2. Edremit Olive and Olive Oil Harvest Estimation

	2006/2007 Season	2007/2008 Season
Tree Number (Fruit Producing)	2,980,000	2,980,000
Tree Number (Not Fruit Producing)	20,000	20,000
Olive Kernel for Each Tree (kg)	11.0	8.4
Olive Yield (ton)	32,780	25,032
Olive Reserved for Table Oil (ton)	5,780	5,006
Olive Reserved for Oil (ton)	27,000	20,026
Olive Oil Yield (ton)	5,400	3,338
Olive for 1 kg Olive Oil (kg)	5.0	6.0

Source: İzmir Commodity Stock Exchange

Table 3. Ayvacık Olive and Olive Oil Harvest Estimation

	2013/2014 Season	2012/2013 Season
Tree Number (Fruit Producing)	1,810,460	1,809,630
Tree Number (Not Fruit Producing)	4,150	4,980
Olive Kernel for Each Tree (kg)	4,5	17
Olive Yield (ton)	8,147	30,763.7
Olive Reserved for Table Oil (ton)	407	1763
Olive Reserved for Oil (ton)	7,740	29,000
Olive Oil Yield (ton)	1548	5,800.1
Olive for 1 kg Olive Oil (kg)	5.0	5.0

Source: http://uzzk.org/Belgeler/UZZK_2013_2014_REKOLTE_RAPORU.pdf, http://uzzk.org/Belgeler/TURKIYE_REKOLTEUZZK_2012_2013.pdf

Table 4. Ayvacık Olive and Olive Oil Harvest

	2006/2007 Season	2007/2008 Season
Tree Number (Fruit Producing)	1,747,500	1,773,500
Tree Number (Not Fruit Producing)	70,000	65,000
Olive for Each Tree (kg)	5.5	7.8
Olive Yield (ton)	9,611	13,833
Olive Reserved for Table Oil (ton)	2,111	2,075
Olive Reserved for Oil (ton)	7,500	11,758
Olive Oil Yield (ton)	1,500	1,960
Olive for 1 kg Olive Oil (kg)	5.0	6.0

Source: İzmir Commodity Stock Exchange

Table 5. Olive Production in Edremit

	Table Olive Production (ton)	Olive Production for Oil (ton)
2005	10,550	39,500
2006	10,783	39,436
2007	12,940	46,660
2008	19,410	69,990
2009	19,470	69,990

Source: Edremit District Directorate of Food Agriculture and Livestock

Table 6. Olive Production in Edremit in 2009/2010 seasons

General Data	
Total Area of Olive Grove	199,680 decares
Total Number of Olive Trees	2,982,000
Total Olive Production	89,460 tons
Data for Olive Production for Table Oil	
Covered Area	43,705 decares
Fruit Producing Tree Number	649,000
Average Efficiency per Tree	30 kg/tree
Production	19,470 tons
Data for Olive Production for Oil	
Covered Area	155,975 decares
Fruit Producing Tree Number	2,333,000
Average Efficiency per Tree	30 kg/tree
Production	69,990 tons
Oil Production	14,000 tons

Source: Edremit District Directorate of Food Agriculture and Livestock

APPENDIX I

STATISTICS ON TARİŞ AGRICULTURAL SALES COOPERATIVES

Table 1. Olive Oil Purchasing of TARİŞ Agricultural Sales Cooperatives

	Edremit TARİŞ	Altınoluk TARİŞ	KüçükkuyuTARİŞ
2000/2001	929,843	2,578,236	1,462,581
2001/2002	154,369	607,979	260,155
2002/2003	511,736	1,724,963	700,050
2003/2004	411,923	843,989	-
2004/2005	194,721	750,266	551,621
2005/2006	-	1,581,165	1,033,668
2006/2007	234,674	421,656	436,131
2007/2008	96,727	482,855	278,354
2008/2009	312,955	391,960	515,035
2009/2010	303,949	703,508	172, 487
2010/2011	254,388	219,655	553,051

Source: The Statistics are taken from the Edremit, Altınoluk, and Küçükkuyu Branches of TARİŞ

Table 2. Olive Oil Purchasing of TARİŞ Agricultural Sales Cooperatives in the 2012/2013 Working Year

	Olive Oil Purchasing from Associates	Olive Oil Purchasing from Non-Associates	TOTAL
Altınoluk	526,343	10,029	536,372
Edremit	811,945	-	811,945
Küçükkuyu	514,116	-	514,116

Source: 2012/2013 Working Year Common General Assembly Meeting S.S. TARİŞ The Union of Olive and Olive Oil Agricultural Sales Cooperatives

Table 3. Statistics of Associates, Harvest, and Delivering to TARİŞ Agricultural Sales Cooperatives in the 2012/2013 Working Year*

	Altınoluk	Edremit	Küçükkuyu
Registered Associates	510	995	965
Harvest Declaring Associates	319	599	496
Amount of the Harvests of the Associates (kg)	922,310	1,105,250	1,126,560
Delivered Product (kg)	526,343	811,945	514,116
Rate of Delivered Product to the Harvest (%)	57.07	73.47	45.64

Source: 2012/2013 Working Year Common General Assembly Meeting S.S. TARİŞ The Union of Olive and Olive Oil Agricultural Sales Cooperatives

Table 4. Organic Olive Oil Statistics of TARİŞ Küçükkuyu Agricultural Sales Cooperative*

Organic Certification Year	Cooperative Working Year	Number of Organic Producers	Number of Organic Producers in Waiting	Organic Olive Purchase (kg)	
2000	2000/2001	23	0	5,796	
2001	2001/2002	89	0	0	
2002	2002/2003	92	0	15,473	
2003	2003/2004	95	0	15,204	
2004	2004/2005	154	5	58,575	
2005	2005/2006	181	14	352,703	
2006	2006/2007	153	8	0	
2007	2007/2008	154	15	81,031	
2008	2008/2009	152	15	5,736	
2009	2009/2010	104	27	2,045	
2010	2010/2001	87	32	125,346	

Table 5. Organic Olive Oil Production of the Associates of Küçükkuyu TARİŞ Agricultural Sales Cooperatives*

	Organic Olive Oil Production (tonnes)
2010/2011	125
2011/2012	66
2012/2013	90

Table 6. Organic Olive Oil Producers of Küçükkuyu TARİŞ Agricultural Sales Cooperatives in 2013*

Villages	Number of Organic Producers
Adatepe	7-8
Ahmetçe	17
Arıklı	30
Bahçedere	3
Behram	2
Kayalar	1
Korubaşı	1
Koyunevi	1
Kozlu	2
Küçükçetmi	5
Nusratlı	26
Paşaköy	5
Yeşilyurt	7
TOTAL	108

Source: Statistics in Table 4, Table 5, and Table 6 are taken from the TARİŞ Küçükkuyu Agricultural Sales Cooperative

APPENDIX J

STATISTICS ON STOCKBREEDING IN EDREMİT AND AYVACIK

Table 1. Statistics of Animals in Edremit in 2013

Towns and Villages	Cattle	Sheep	Goat
Altınoluk	124	250	-
Akçay	13	50	-
Avcılar	34	650	50
Arıtaşı	-	-	30
Beyoba	-	-	25
Bostancı	533	930	40
Çamcı	29	-	15
Çamlıbel	46	50	20
Çıkrıkçı	1226	380	105
Dereli	15	250	30
Edremit	1641	2360	-
Güre	251	1100	100
Hacıarslanlar	11	80	350
Kadıköy	217	300	30
Kavlaklar	4	-	-
Kızılkeçili	45	500	40
Mehmetalan	30	40	50
Narlı	230	200	230
Ortaoba	5	50	450
Pınarbaşı	-	-	20
Tahtakuşlar	-	-	25
Yaşyer	5	100	920
Yaylaönü	129	200	60
Yolören	214	610	120
Zeytinli	725	1400	200
TOTAL	5527	9500	3000

Source: Statistics are taken from Edremit District Directorate of Food Agriculture and Livestock

Table 2. Statistics of the Stock Raisers and Animals in Ayvacık in 2013

Towns and Villages	Cattle	Stock Raisers (Sheep/Goat)	Sheep	Goat
Adatepe	8	28	450	1500
Ahmetçe	197	2	450	350
Arıklı	88	2	50	350
Ayvacık	3759	25	2000	1000
Baharlar	153	29	900	120
Bahçedere	-	1	30	-
Büyükhüsun	642	9	750	150
Güzelköy	81	3	150	150
Kayalar	45	2	250	60
Kırca	20	9	150	300
Kısacık	152	15	600	70
Küçükçetmi	9	6	17	470
Küçükkuyu	189	1	24	-
Nusratlı	61	2	100	50
Sazlıköy	61	5	150	500
Tuztaşı	139	4	50	70
Uzunalan	46	45	70	150
Yeşilyurt	-	0	0	0
Ayvacık District Total	18,422	710	26,761	10,150

Source: Statistics are taken from Ayvacık District Directorate of Food Agriculture and Livestock

APPENDIX K

STATISTICS OF KAZ DAĞI NATIONAL PARK GUIDES

Towns and Villages	Number of Guides
Altınoluk	2
Akçay	1
Avcılar	4
Burhaniye	1
Edremit	4
Kızılkeçili	1
Mehmetalan	10
Pınarbaşı	2
Tahtakuşlar	6
Zeytinli	6
TOTAL	37

Source: Statistics are taken from Kaz Dağı National Park Directorate in Güre

APPENDIX L

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Şakar, Emre

Date and Place of Birth: 05 December 1976, İzmir

EDUCATION

2004-2014	Ph.D. in Sociology Middle East Technical University, Ankara
2002-2003	International Graduate Programme Faculty of Social Sciences Stockholm University, Stockholm, Sweden
1999-2002	M.S. in Sociology Middle East Technical University, Ankara
1995-1999	B.S. in International Relations Middle East Technical University, Ankara

WORK EXPERIENCE

February 2006-August 2013	Research Assistant Department of History, Faculty of Arts and Sciences Yeditepe University, İstanbul

INTERNATIONAL CONFERENCES

"Environmental Initiatives in the Kaz Mountains Region", International Conference on Interdisciplinary Social Sciences, Universidad Abat Oliba CEU, Barcelona, Spain, 25-28 June 2012

"Rural Communities in the Kaz Mountains Region: Actors for Sustainability", 6th Annual International Conference on Sociology, Athens Institute for Education and Research, Athens, Greece, 7-10 May 2012

LANGUAGE SKILLS

Advanced English

APPENDIX M

TURKISH SUMMARY

Bu çalışmada sürdürülebilirlik ekonomik, toplumsal ve ekolojik boyutları incelenerek bütüncül bir bakış açısından ele alınmıştır. Böylelikle yerel katılım, yerel bilgi, sürdürülebilir geçim yolları, çevre dostu tarımsal pratikler, topluluk temelli çevre yönetimi ve kapsayıcı ekoturizm faaliyetlerine dayalı alternatif bir sürdürülebilirlik anlayışı ortaya konmuştur.

"Kaz Dağları bölgesinde sürdürülebilirliğin sağlanmasında yerel aktörlerin rolü nedir?" sorusu tezin araştırma sorusudur. Bu bağlamda, Kaz Dağları bölgesindeki yerel aktörler ve sürdürülebilirlik aktör-yönelimli bir yaklaşım benimsenerek incelenmiştir. Bölgedeki sürdürülebilirlik ihtimallerinin, yerel aktörlerin tarım, orman köyleri, milli park, ekoturizm ve altın madenciliği gibi çeşitli alanlardaki konumları ile bu alanlarda yerel aktörler ve çevre arasındaki etkileşimlere bağlı olduğu tartışılmıştır. Bu bağlamda, kamusal otoriteler, çevreciler, zeytinyağı üreticileri, turizm girişimcileri ve köylüler gibi yerel aktörlerin çoklu faillikleri bu alanlara bakılarak değerlendirilmiştir.

Bu bağlamda, sürdürülebilirliğin yerel, ulusal ve küresel düzeyde gerçekleşen birçok sosyo-ekonomik ve sosyo-ekolojik dinamik tarafından kurulduğu irdelenmiştir. Böylece, kalkınma politikaları, tarımsal gelişmeler, çevre yönetimi, milli park düzenlemeleri ve turizm ile madenciliğin yol açtığı dönüşümlerin sürdürülebilirliğin geleceğini belirlemede önemli bir yere sahip olduğu gösterilmiştir.

Bu tezde derinlemesine mülakat ve katılımcı gözlem gibi etnografik araştırma metotları kullanılmış ve 2010-2013 yılları arasında yerel aktörler ile 138 mülakat gerçekleştirilmiştir. Böylece, sürdürülebilirlik analizi, yerel aktörlerin pratikleri, deneyimleri ve bilgileri dile getirilerek zenginleştirilmiştir.

Bu çalışmada Becker ve diğerlerinin ortaya koyduğu aktör yönelimli bakış açısı benimsenmiştir. Buna göre, böyle bir perspektif "sürdürülemezliğin toplumsal koşullarının ve nedenlerinin analizinden başlar."[1] Bu bağlamda, tezde yapılan analiz sürdürülebilirliğe karşı olan durum ve pratikleri de göstermektedir. Ayrıca, araştırma konuları toplumsal aktörlerle etkileşim içerisinde ortaya konmuş ve onların ihtiyaçlarına göre seçilmiştir. Böylece araştırmanın çeşitli evrelerinde toplumsal aktörler araştırmaya dahil edilmiştir.[2]

Bu bağlamda aktör-yönelimli bir bakış açısı ile sürdürülebilirlik tarımsal pratikler ve politikalar, yerel toplulukların geçim yolları, çevre yönetimi, çevre koruma politikaları, turistik faaliyetler ve altın madenciliğiyle ilgili çevre ihtilafı üzerinden analiz edilmiştir. Bu konular bölgede sürdürülebilirliğin gerçekleşmesinde önemli bir yere sahip olduğundan dolayı, bunlarla ilgili olarak yerel aktörlerin pratikleri, tecrübeleri ve bilgileri ayrıntılı olarak incelenmektedir. Ayrıca, bunlar etrafında şekillenen yerel aktörler arasındaki uzlaşmalar ve çatışmalar da bu çalışmada ortaya konmaktadır.

Bu araştırmada sürdürülebilirlik kuramı, kalkınma, çevre sosyolojisi ve kırsal sosyoloji üzerine kapsamlı bir literatür araştırması yapılmıştır. Ayrıca Kaz Dağları bölgesiyle ilgili olarak da kitap, makale, ve haberler de literatür araştırmasına dahil edilmiştir. Tezin alan çalışması 2010-2013 yılları arasında yapılmıştır. Öncelikle 2010 yılı Mart ve Eylül ayları arasında bölgede altı ay kalınmış olup, bu zaman zarfında çeşitli yerel aktörlerle derinlemesine mülakatlar gerçekleştirilmiştir. Daha sonra her yıl bölgeye düzenli olarak gidilmiş ve araştırmanın geri kalanı tamamlanmıştır.

Bu kapsamda 138 kişiyle yarı yapılandırılmış ve yapılandırılmamış mülakatlar yapılmıştır. Görüşme yapılan kişiler amaçlı örneklem ve kartopu tekniği kullanılarak seçilmiştir. Bu bağlamda bölgedeki kaymakamlar ve belediye

[1] Becker, Egon, Thomas Jahn, ve Immanuel Stiess (1999), "Exploring Uncommon Ground: Sustainability and the Social Sciences," *Sustainability and the Social Sciences* içinde, Egon Becker and Thomas Jahn (der.), Londra ve New York: Zed Books, 10.

[2] a.g.e.

başkanları gibi yerel yöneticiler; ilçe orman işletme müdürlükleri ile ilçe gıda tarım ve hayvancılık müdürlüklerindeki müdür, şef, mühendisler ve teknisyenler; milli park şefleri ve mühendisi; TARİŞ şube müdürleri; ilçe ziraat odaları ve tarım satış kooperatifleri; çevre ve turizm dernekleri; alan kılavuzları, çevreciler, turizmciler, zeytin üreticileri, muhtarlar, köylüler, orman işçileri gibi pek çok farklı kesimden yerel aktörlerle mülakatlar gerçekleştirilmiştir.

Alan araştırmasında derinlemesine mülakatın yanında, etnografik araştırma metotları olan katılımcı gözlem ve sözlü tarih de kullanılmıştır. Esasen, etnografik araştırma metotlarının kullanılması aktör yönelimli araştırmaya daha uygundur. Bu bağlamda, Gardner ve Lewis'in ileri sürdüğü gibi "aktör yönelimli araştırma, kırsal alanlarda değerli bir giriş noktası ve bir görüş şekli sağlar…katılımcı gözlem yerel halkla doğrudan bağlantı kurmasıyla, anket gibi diğer araştırma metotlarına göre daha az 'yukarıdan aşağı' olarak görülebilir."[3]

Tezin ikinci bölümünün ilk kısmında sürdürülebilirlik söyleminin tarihsel bir anlatımı yapılmıştır. Öncelikle, 1950'den sonra ekonomik gelişme odaklı kalkınma anlayışının uygulanmakta olduğu ülkelerde ortaya çıkardığı çevre sorunları kısaca irdelenmiş ve uluslararası kalkınma ajanslarının ortaya koymuş olduğu yaklaşım eleştirel bir açıdan ele alınmıştır. Bu bağlamda Escobar kalkınmanın insanlar için olmasına rağmen onları dışarda bıraktığını öne sürer. Diğer bir deyişle, özellikle yerel topluluklar kalkınma politikalarını oluşturma süreçlerinden dışlanmıştır. Ona göre, "kalkınma yukardan-aşağı, etnosentrik ve teknokratik bir yaklaşımdı ve genel olarak öyle olmaya devam ediyor."[4] Buna göre, kalkınma Latin Amerika, Afrika ve Asya'daki azgelişmiş bölgelere ekonomik gelişme ve toplumsal refah götürmekten ziyade yerel halkların ve kültürlerin dışarda kalmasına yol açmıştır. Hiç şüphe yok ki böyle bir yaklaşım ne ekonomik krizlere ne de çevre sorunlarına karşı bir çare ortaya koyamamıştır.

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[3] Gardner, Katy, ve David Lewis (1996), *Anthropology, Development and the Post-modern Challenge*, Londra ve Sterling, Virginia: Pluto Press, 43.

[4] Escobar, Arturo (1995), *Encountering Development: The Making and Unmaking of The Third World*, Princeton: Princeton University Press, 44.

Özellikle 1960'lı ve 1970'li yıllardan itibaren Batılı ülkelerde kalkınma söylemi yoğun bir şekilde eleştirilmeye ve bir alternatif aranmaya başlanmıştır. Bu bağlamda, o yıllarda şekillenen "radikal çevreci politikanın temel taşı sınırlı dünyamızın endüstriyel gelişmeyi sınırlandıracağı inancı olmuştur."[5] 1970'li yıllarda sınırlı kaynaklar yüzünden ekonomik gelişmenin sınırsız olamayacağı ve bir yerde ekonomik gelişmenin limitlerine ulaşacağı çeşitli bilim adamları tarafından da savunulmuştur.[6] Ayrıca, ekosistemler üzerindeki toprak erozyonu, nitrat kirlenmesi, çölleşme ve ormansızlaşma gibi tehlikelerin de farkına varılmıştır.[7] Bu bağlamda, sürdürülebilir kalkınma söylemi ekonomik gelişme ve çevre arasındaki çelişkileri uzlaştırmak üzere, kalkınmanın ekonomik boyutu dışında çevresel ve toplumsal boyutlarının da olduğunu dile getiren bütüncül bir yaklaşım olarak 1980'li yıllarda ortaya çıkmıştır.

Sürdürülebilir kalkınma söyleminin gelişmesinde Birleşmiş Milletler'in düzenlemiş olduğu uluslararası konferanslar belirleyici olmuştur. Örneğin 1972 yılında Stockholm'de düzenlenen Birleşmiş Milletler İnsan Çevresi Konferansı'nda kalkınmanın çevre boyutu ilk defa ele alınmıştır. Bernstein'a göre korumacı önlemler alınmasını isteyen Kuzey ülkeleriyle (gelişmiş Batılı ülkeler), ekonomik gelişme ve yoksulluğun azaltılmasını isteyen Güney ülkeleri (gelişmekte olan ve az gelişmiş Asya, Afrika ve Latin Amerika ülkeleri) arasında konferansta yaşanan görüş ayrılıkları, çevre korumayla ekonomik gelişmeyi uzlaştıran sürdürülebilir kalkınmanın söyleminin ortaya çıkmasına neden olmuştur. Böylece çevre ve kalkınma, sürdürülebilir kalkınma anlayışında bir araya getirilmiştir.[8]

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[5] Dobson, Andrew (2007), *Green Political Thought*, 4. baskı, Routledge: Londra ve New York, 53.

[6] Meadows, Donella H. ve diğerleri (1972), *Limits to Growth*, New York: Universe Books.

[7] Bakınız Onuncu Bölüm, "Large-scale human impacts on ecosystems," Dickinson, Gordon and Murphy, Kevin (2007), *Ecosystems*, 2. baskı., Londra ve New York: Routledge, 153-167.

[8] Bernstein, Steve (2001), *The Compromise of Liberal Environmentalism*, New York: Columbia University Press, 29.

Daha sonra Dünya Çevre ve Kalkınma Komisyonu 1987 yılında Brundtland Raporu olarak da bilinen *Ortak Geleceğimiz* raporunu hazırlamıştır. Brundtland Raporu ekonomi, toplum ve çevre arasında doğrudan bir ilişki kurduğundan dolayı sürdürülebilir kalkınma söyleminin oluşmasında bir dönüm noktası olarak kabul edilmektedir. Bruntland Raporu sürdürülebilir kalkınmayı "bugünün ihtiyaçlarını gelecek kuşakların kendi ihtiyaçlarını karşılayabilme olanağından yoksun bırakmadan karşılamak"[9] olarak tanımlanmıştır. Buna göre, eşitlik, toplumsal adalet ve katılım gibi normatif ilkeler böyle bir söylemin yapı taşlarını oluşturmaktadır. Bu bağlamda, Brundtland raporu çevreyle ilgili karar alma süreçlerine kamusal katılımı, çevre kaynaklarının topluluk temelli yönetimini ve yerel demokrasinin güçlendirilmesini öngörmektedir.[10]

Brundtland Raporu az gelişmiş ve gelişmekte olan ülkelerde, çevre üzerinde baskı yaratan nedenlerden biri olarak görülen yoksullukla savaşmak için gelişmenin canlandırılması gerektiğini iddia eder. Ayrıca gelişmenin niteliğinin değiştirilmesi, "daha az malzeme ve enerji yoğunluklu ve etkisel olarak daha eşit hale getirilmesi"[11] gerektiğini de vurgular. Sonuç olarak, Brundtland Raporu'nun ortaya koyduğu sürdürülebilir kalkınma söylemiyle, o güne kadar çevre koruma ve kalkınmanın birbiriyle bağdaştırılamaz olduğu yolundaki çevreci anlayış yerini çevreyle uyumlu bir kalkınmanın mümkün olduğu anlayışına bırakmıştır.

1992 yılında Rio de Janerio'da yapılan geniş katılımlı Dünya Çevre ve Kalkınma Konferansı (UNCED) ile sürdürülebilir kalkınma uluslararası çevre yönetiminin ana bileşeni haline gelmiştir. Konferans sonucunda Çevre ve Kalkınma Üzerine Rio Deklarasyonu, Gündem 21 ve Ormanlar üzerine Bildiri gibi çeşitli belgeler ortaya çıkmıştır.[12] Ayrıca, konferansta yapılan görüşmeler ve tartışmalar neticesinde

[9] World Commission on Environment and Development (1987), *Our Common Future*, Oxford: Oxford University Press, 43.

[10] a.g.e., 63.

[11] a.g.e., 52.

[12] Adams, W.M. (2009), *Green Development: Environment and sustainability in a developing world*, 3. baskı, Londra ve New York: Routledge, 88.

Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesi ve Biyolojik Çeşitlilik Anlaşması konferanstan sonraki yıllarda yürürlüğe girmiştir.[13]

Sürdürülebilir kalkınmanın sağlanmasına yönelik olarak küresel çapta uygulanmak üzere *Gündem 21* adlı eylem planı hazırlanmıştır. Sitarz'a göre, *Gündem 21*, "tüm insanlar için sürdürülebilir bir yaşam standardına ulaşmak cesur yeni bir yaklaşımı, çevreye sorumlu küresel bir yaklaşımı gerektirir…Bu amaca ulaşmak için çeşitli yöntemler kullanılabilir. Dünya'nın sınırlı kaynaklarını kullanmada daha çok verimlilik, atığın minimize edilmesi ve üretim süreçlerinde yapılacak temel değişiklikler uygulanabilecek tekniklerin bazılarıdır."[14]

Bu bağlamda verimlilik Rio Zirvesi'nden sonra sürdürülebilir kalkınma söyleminin deyim yerindeyse moda terimi haline gelmiştir. Sachs'a göre Rio Zirvesi'yle ortaya çıkan çevre yönetim sistemlerinin amacı "üretim süreçlerinin, kaynakların ve atık ürünlerin ekonomik ve verimli kullanımını sağlayacak şekilde biçimlenmesini sağlamaktır."[15] Bernstein bu yönetişim tarzını liberal çevrecilik olarak adlandırır. Ona göre "1992'de çevre yönetişiminin normlarında ticaret ve finansın liberalleşmesinin uluslararası çevre korumayla uyumlu olduğu, hatta gerekli olduğu yönünde genel bir kabulle karakterize edilen bir değişme meydana gelmişti." Böylece Rio Zirvesi pazar değerlerini çevre gündemiyle bütünleştiren yeni bir çevre yönetişim tarzının ortaya çıkmasına yol açmıştır.

Daha sonra 2002 yılında Johannesburg'da düzenlenen Dünya Sürdürülebilir Kalkınma Zirvesi'nde (Rio+10) geçen on yıllık süreçte Rio Zirvesi'nde konulan hedefler ve alınan kararlar gözden geçirilmiş ve Gündem 21'de önerilen program ve faaliyetlerin uygulanıp uygulanmadığı değerlendirilmiştir.[16] Son olarak, 2012

[13] a.g.e.

[14] Sitarz, Daniel (der.) (1994), *Agenda 21: The Earth Summit Strategy To Save Our Planet*, Boulder, Colorado: EarthPress, 31-32.

[15] Sachs, Wolfgang ve Tilman Santarius (der.) (2007), *Fair Future: Resource Conflicts, Security and Global Justice*, Patrick Camiller (çev.), Londra ve New York: Zed Books, 219.

[16] Strachan, Janet R. ve diğerleri (2005), *The Plain Language Guide to the World Summit on Sustainable Development*, Londra ve Sterling, VA: Earthscan, xviii.

yılında Rio de Janeiro'da düzenlenen Birleşmiş Milletler Sürdürülebilir Kalkınma Konferansı'nda da Rio Deklarasyonu'nun prensipleri ve geçmiş eylem planları yeniden teyit edilmiştir ve yeşil ekonominin tüm dünya ülkeleri tarafından benimsenmesi ve buna uygun politikaların ve pratiklerin uygulanması gerektiği öne sürülmüştür.[17]

Tezin kuramsal bölümünün ikinci kısmında ise, aktör yönelimli bir bakış açısı Becker ve diğerlerinin ve Long'un ortaya koyduğu şekliyle tartışılmıştır. Bu bağlamda Becker ve diğerlerinin ortaya koyduğu aktör yönelimli bakış açısına göre:

> Toplumsal aktörlerin biofiziksel çevreyle farklı yerlerdeki ilişkilerine şekil veren siyasal ve kurumsal düzenlemelerin ve toplumsal-ekonomik şartların çeşitliliğini analiz ederek, [aktör yönelimli yaklaşımı benimseyen] böyle çalışmalar sürdürülebilirlikle ilgili çalışmalarda yerel bir perspektifi güçlendirebilir.[18]

Böylelikle, bu yaklaşım en önemli sonuçlarından birisi şudur:

> Çevre yönetiminin önceden tanımlanmış sorunlarına çözüm olarak aletler ve araçlar tasarlamaktan çok, böyle bir yaklaşım daha katılımcı ve süreç-yönelimli bir prosedürü tercih edecektir.[19]

Ayrıca, Long'un aktör-yönelimli yaklaşımına göre, "Bu yaklaşım aktörlerce tanımlanan konular ya da sorunsallı durumlar ile başlar; ki bunlar karar alıcılar, araştırmacılar, müdahil olan özel ya da kamusal aktörler veya yerel aktörlerce tanımlanabilir; ve bu yolla her türlü mekansal, kültürel, kurumsal ve iktidar alanları, arenaları ve sahaları dahil edilebilir."[20]

Eğer yerel katılım kalkınma uzmanları ve kamusal otoriteler tarafından dikkate alınırsa çevre girişimleri, yerel topluluklar, ve diğer sivil toplum örgütleri

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[17] Bernstein, Steven (2013), "Rio+20: Sustainable Development in a Time of Multilateral Decline," *Global Environmental Politics*, 13 (4): 13.

[18] Becker, Jahn, ve Stiess, "Exploring Uncommon Ground", 8.

[19] a.g.e., 10.

[20] Long, Norman (2001), *Development Sociology: Actor Perspectives*, Routledge: Londra ve New York, 50. Alan kavramının tanımı için bakınız, a.g.e., 57.

sürdürülebilirlikle ilgili projelere daha fazla dahil edilebilirler. Bu bağlamda katılımın tanımı Fawaz-Yissi ve diğerleri tarafından şu şekilde yapılmıştır:

> Katılım bireylerin çıkarlarını etkileyen kurumlar, programlar ve faaliyetlerdeki karar vermeye etki yapmak anlamındadır. Bu yüzden, katılım vatandaşla hem hükümet yapıları ve süreçleri, ve hem de topluluk veya özel olsun yerel çıkarlar arasında bir ilişkiyi içermek zorundadır.[21]

Geçtiğimiz yıllarda yerel toplulukların ve geçim yollarının sürdürülebilirlik için önemi birçok araştırmacı tarafından ortaya konmuştur.[22] Bu bağlamda, bu tezde Chambers ve Conways tarafından yapılan sürdürülebilir geçim yolları tanımı benimsenmiştir.[23]

Yerel bilgi geleneğe dayalı, kuşaktan kuşağa aktarılabilen, tecrübeler sonucunda oluşmuş ve gündelik pratiğe dayalı olduğu için kırsal hane halkının geçiminde önemli bir yer tutmaktadır. Aslında, teknik ve uzmanlık bilgisinin giderek her alanda etkisini daha çok hissettirdiği günümüzde birçok köylü halen yerel bilgiye başvurmaktadır. Köylüler gündelik yaşamda karşılaştıkları sorunları bu yolla çözmeye alışmışlardır. Bu yüzden, yerel bilgi hane halkının kırsal kalkınmasının en önemli öğesidir. Bu bağlamda, Berkes yerel bilginin sürdürülebilirlikle ilgili olarak ne tür girişimlerde kullanılabileceğini ayrıntılı olarak anlatmaktadır:

> Yerel ve geleneksel bilgi ekonomik kalkınmayla kısmen ilgilidir çünkü türlerin, çeşitlerin ve ekolojik süreçlerin özel bilgisini gerektiren girişimlerde yerel topluluklara bazı kısmi avantajlar sağlar. Bu girişimler koruma

[21] Fawaz-Yissi ve diğerleri (2012), "Redefining local participation in sustainable rural development in Chile: the case of small farmers in Ñuble Province," *International Development Planning Review*, 34 (13): 296.

[22] Bakınız Bebbington, Anthony (2004), "Movements and Modernizations, Markets and Municipalities: Indigenous federations in Rural Ecuador," *Liberation Ecologies: Environment, Development, Social Movements* içinde, Richard Peet ve Michael Watts (der.), 2. baskı, Londra ve New York: Routledge, 394-417. Aynı zamanda bakınız, Sachs and Santarius (der.), *Fair Future*, 130-134.

[23] Scoones, Ian (2009), "Livelihood perspectives and rural development," *The Journal of Peasant Studies*, 36 (1): 175.

> projelerini, ekolojik rehabilitasyonu, ekoturizmi ve şifalı bitkileri ve genetik olarak değerli ürün çeşitlerini içerir.[24]

Yerel bilginin önemi kalkınma uzmanlarından, bilim adamlarına ve çevrecilere kadar hemen hemen herkes tarafından kabul edilmiştir. Bu bağlamda, geçmişte kalkınmayla ilgili çoğu uluslararası kuruluş ya da sivil toplum örgütü "kendi bakış açılarını ve gündemlerini yerel topluluklara zorla kabul ettirmeyi" [25] denemelerine rağmen, son zamanlarda bunların birçoğu yerel topluluklarla ilgili olan görüşlerini büyük ölçüde değiştirmişlerdir. Özellikle Güney ülkelerinde "profesyonel tekniklerden çok, keskin gözlem ve sağduyuya dayanan 'olağan bilginin' önemine vurgu yapan"[26] bu kuruluşlar yerel bilginin öneminin farkına varmışlardır. Kısaca, böyle bir perspektif yerel pratikleri ve bilgiyi teknolojik-bilimsel bilgiye göre daha değersiz olarak görmez.[27] Tam tersine, yerel bilginin önemi farklı aktörler tarafından giderek daha fazla anlaşılmaya başlanmıştır.

Bu bağlamda, köylülerin ve yerel toplulukların gündelik yaşam tecrübeleri yerel bilginin önemli bir kısmını oluşturmaktadır. "Çevre hakkındaki pratik bilgi sıklıkla Güney toplumlarındaki köylülerin, küçük çiftçilerin ve diğerlerinin gündelik tecrübesinden ortaya çıkmaktadır."[28] Bu tartışmaların da gösterdiği gibi yerel bilgi, tecrübe ve pratikler sürdürülebilirlik projelerine geçmişte olduğundan çok daha fazla dahil edilmektedir. Buna rağmen, yerel bilginin var olan çevre yönetimi düzenlemeleriyle nasıl bütünleştirileceğine dair izlenecek tek bir yol yoktur. Bu daha çok her ülkenin ve bölgenin özgün ekonomik, toplumsal ve çevre koşullarına bağlı olarak değişmektedir.

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[24] Berkes, Fikret (2012), *Sacred Ecology*, 3. baskı, New York ve Londra: Routledge, 271.

[25] Hannigan, John (2014), *Environmental Sociology*, 3. baskı, Londra ve New York: Routledge, 95-96.

[26] a.g.e., 68.

[27] Watts and Peet, "Liberating Political Ecology," Peet ve Watts içinde, 120.

[28] Hannigan, *Environmental Sociology*, 57.

Günümüzde, en tartışmalı konulardan birisi de Üçüncü Dünya ülkelerindeki milli parkların ve koruma rezervlerinin durumudur.[29] Bilindiği üzere milli parklar kuruldukları yerde yaşayan yerel topluluklarla çoğunlukla ihtilafa sebep olmaktadır. Bu bağlamda geçimleri hayvancılık ve ormancılık gibi doğal kaynakların kullanılmasına dayanan yerel topluluklar milli parkların ve koruma rezervlerinin kurulmasından sonra tamamen korumacı bir anlayış uygulandığı için geleneksel geçim yollarından yoksun bırakılmışlardır. Buna rağmen, yerel bilginin bio-çeşitliliği sağlamada oynayabileceği role dair son zamanlarda birçok çalışma yapılmaktadır. Kapoor tarafından katılımcı çevre yönetimi olarak adlandırılan,[30] ya da O'Riordan ve Stoll-Kleemann tarafından "katılımcı bio-çeşitlilik" [31] olarak dile getirilen alternatif yollar ve biyolojik çeşitliliği korumaya ve diğer çevre problemlerini çözmeye yönelik olarak topluluk temelli çabalar çoğalmıştır.[32]

Çevre sorunlarını ve kalkınma projelerini yerel toplulukların katılımı yoluyla ele almak ve bu bağlamda yerel bilgiden faydalanmak sürdürülebilirliği sağlamanın önemli yollarından birisidir. Bu aynı zamanda "[yerel] bilgi ve pratiklerin alternatif kalkınma stratejilerinin parçası haline geldiği koşulları"[33] anlamamıza yardımcı olur. Böylece daha kapsayıcı ve katılımcı bir sürdürülebilirlik anlayışı benimsenebilir.

Üçüncü bölümde, Türkiye'deki tarım ve çevre politikaları değerlendirilmiştir. 1980'ler sonrası ithal ikameci kalkınma anlayışının yerine neo-liberal bir kalkınma

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[29] Yerel toplulukların ve Serengeti Milli Parkı'nın bir tartışması için bakınız Robbins, Paul (2004), *Political Ecology*, 3-5.

[30] Kapoor, Ilan (2001), "Towards participatory environmental management," *Journal of Environmental Management*, 63: 269.

[31] O'Riordan, Tim ve Susanne Stoll-Kleemann (2002), "Deliberative democracy and participatory biodiversity," *Biodiversity, Sustainability and Human Communities: Protecting beyond the Protected* içinde, Tim O'Riordan ve Susanne Stoll-Kleemann (der.), Cambridge: Cambridge University Press, 98.

[32] Steelman, Toddi A., "Community-based involvement in bio-diversity protection in the United States," O'Riordan ve Stoll-Kleemann içinde, 146.

[33] Watts and Peet, "Liberating Political Ecology," Peet ve Watts içinde, 15.

anlayışının geçmesi tarım politikalarında da kendini göstermiştir. Özellikle Dünya Bankası'nın hazırlamış olduğu Tarım Reform Uygulama Projesi kapsamında 2000'lerin başında köklü değişiklikler hayata geçirilmiştir.

> Önerilen reform paketinin tarım sektöründe ve genelde kırsal dünyada, radikal bir dönüşüm hedeflediğini, daha da önemlisi devletin alışılageldik yönetim araçlarını elinden aldığını söylemek yanlış olmaz. Devletin uyguladığı destek fiyatları ve girdi sübvansiyonu politikaları, bunların kurumsal desteği olarak işlev gören tarım satış kooperatifleriyle birlikte, tam donanımlı bir iktidar yapısı oluşturuyordu. ARIP'ın [Tarımsal Reform Uygulama Projesi] öngördüğü dönüşümde ise kuralları çok daha kesinleşmiş uygulamalar söz konusuydu: Fiyatlar ve ürün hacmi üzerinde sürekli pazarlık yapılmayacak, iktidarın tercihleri doğrultusunda yeni kararlar verilmeyecekti. Çiftçiler piyasa koşullarına göre üretim kararı alacak, doğrudan tüccarlara muhatap olacak, ticari bankalardan kredi bulacaktı. Tarım ekonomisinin piyasa koşulları çerçevesinde özerkleşmesi fakat köylünün doğrudan gelir desteği alabilmesi öngörülüyordu.[34]

Özet olarak, tarım politikaları küçük çiftçiden çok büyük tarımsal işletmeleri desteklemekte ve çevre dostu tarım politikaları yerine de kimyasal gübre ve tarım ilaçlarının kullanımına dayalı yoğun tarım metotlarını ön plana çıkarmaktadır. Bu bağlamda, Türkiye'deki tarım uygulamalarının sürdürülebilir tarımı desteklemekten çok tarım-sanayi (agribusiness) uygulamalarına ağırlık verdiği agroekolojik tarım ve sürdürülebilir tarım tartışmaları üzerinden ayrıntılı olarak irdelenmiştir.

1980'ler sonrası şekillenen çevre politikalarının daha çok çevre korumacı bir anlayışın ürünü olduğunu söylenebilir. Son zamanlarda ise çevre korumacı anlayışın yerini sürdürülebilirlik söyleminin aldığı görülmektedir. Ne var ki, sürdürülebilirlik söylemi kurumsal düzeyde benimsenmesine rağmen, uygulamada aslında daha çok ekonomik gelişmeye odaklı kalkınmacı anlayışın devam ettiği söylenebilir. Bu bağlamda, enerji ve maden sektörleri başta gelmek üzere birçok sektörde ekonomik gelişmeye öncelik verilirken, çevre ve toplumsal boyutların göz önüne alınmadığı açıkça görülmektedir. Karar vericiler ekonomik boyutun ön plana çıkarıldığı "kalkınmanın sürdürülmesi" anlayışını izledikleri sürece, sürdürülebilirliğin bütüncül bir yaklaşımla ele alınması oldukça zordur.

[34] Keyder, Çağlar (2014), "2000'lerde Devlet ve Tarım," *Bildiğimiz Tarımın Sonu: Küresel İktidar ve Köylülük* içinde, Çağlar Keyder ve Zafer Yenal (der.), 200-201.

Dördüncü bölümde Kaz Dağları bölgesindeki tarımsal pratikler ve tarım politikaları analiz edilmiştir. Kaz Dağları'nın güney tarafında en önemli geçim kaynağı zeytinyağı üretimidir. Edremit ilçesinde tarım arazilerinin % 84'ü zeytinliktir. Geri kalan % 16'ısında ise sebze, meyve vb. yetiştirilmektedir. Edremit'te 3.012.000, Ayvacık'ta ise 1.814.610 adet zeytin ağacı bulunmaktadır. Edremit Körfezi çevresindeki Edremit ve Ayvacık ilçelerinde Ayvalık çeşidi yetişmektedir. "Bu tür yerel olarak Edremit, Edremit Yağlık, Şakran, Midilli ve Ada Zeytini olarak da bilinir."[35] Mülakat yapılan birçok zeytinyağı üreticisi Edremit Yağlık çeşidinin kalitesini özellikle vurgulamışlardır. Bu bağlamda, Kaz Dağı'nın iklimi zeytinyağının kalitesine doğrudan etkiler. Edremit'ten bir zeytinyağı üreticisi bu konuda şunları söylemektedir:

> Ayvalık kendini iyi tanıtmış. Oysa Ayvalık'ın en büyük tedarikçisi bu bölgedir. Yani Edremit ve civarı. Bakın Kaz Dağları'nın denize bakan yüzünün Dereli Köyü'nden tutun da Narlı'ya kadar olan bölgeden çok güzel yağlar elde edilir. Tabi zeytin ağacı belirli bir rakıma kadar yaşayabilir. O rakımın altında bu dağla denizin arasına sıkışmış koridorda, banttaki çıkan yağlar eğer bir de iyi hasat edildiğinde, iyi muhafaza edildiyse eğer müthiş güzel yağlar çıkar. Oranın kendine özgü bir özelliğidir o.

Bilindiği üzere ısı, yağmur ve rüzgar zeytinyağının kalitesini belirleyen en önemli etkenlerin başında gelmektedir. Bu yüzden, iklimdeki kısmi değişimler zeytinyağının kalitesini yıldan yıla etkileyebilmektedir. İklim koşulları dışında, ekonomik politikalar da zeytinyağı üretiminde belirleyici bir yere sahiptir. Geçmişte devlet tarafından yapılan sübvansiyonlarla, ürün fiyatları pazar fiyatlarından daha yüksek düzeyde tutulmaktayken; fiyat desteklerinin 1990'lardan sonra kademeli olarak kalkmasıyla birlikte yerel üreticiler piyasa etkilerine çok daha fazla maruz kalmışlardır. Bölgedeki birçok zeytin üreticisi devlet tarafından izlenen destekleme politikalarına bu yüzden eleştirel yaklaşmaktadır. Bu bağlamda, yine yukarda alıntılanan zeytinyağı üreticisi, Türkiye'de zeytine verilen fiyat destekleriyle Akdeniz ülkeleri arasında ciddi farklar olduğunu söylemektedir:

[35] Dıraman, Harun, Hülya Saygı, Yaşar Hışıl (2011), "Geographical Classification of Turkish Virgin Olive Oils from the Aegean Region for Two Harvest Years Based on Their Fatty Acid Profiles," *J Am Oil Chem Soc*, 88: 1906.

> Sübvansiyon diye, sübvanse edilmesi diye zeytinyağının bir konu var. Zeytinyağını en çok işte Akdeniz havzası ülkelerinden olan AB ülkeleri tüketirler. İtalya, İspanya, Yunanistan, Portekiz filan. Onlardaki destekleme, ordaki üreticiye verilen destekleme kilo başına 1,5 Euro'lara kadar çıkar. Bizdeki destekleme de Euro bazında söylersen 0,20 sent civarında.

Bunun yanı sıra, bölgedeki zeytin üreticilerinin üretim maliyetleri oldukça fazladır. Geçtiğimiz yıllarda, üretim maliyetleriyle karşılaştırıldığında zeytinyağı fiyatlarının aynı oranda artmadığı gözönünde tutulursa, zeytinyağı satışının işçi fiyatları, kimyasal girdiler ve mazot gibi artan üretim maliyetlerini ancak karşılayabildiği görülecektir. Ayrıca zeytin hasadında makineleşme olmadığından ve orman köylerinde sırıkla hasat hala oldukça yaygın olduğundan dolayı var yılı ve yok yılı arasındaki ürün farkları da Avrupa ülkelerine göre oldukça fazladır. Zeytinyağı üretimini etkileyen diğer bir faktör ise sulama olanaklarının birkaç orman köyü dışında çok fazla yaygın olmamasıdır.

Zeytinyağı üretiminde TARİŞ –İzmir Zeytinyağı Satış Kooperatifleri Birliği- bölgede zeytin ve zeytinyağı konusundaki en önemli tarım satış kooperatifidir. 2012-2013 sezonunda TARİŞ Edremit şubesinin 995 üyesinden 599'u, Altınoluk şubesinin 510 üyesinden 319'u, ve Küçükkuyu şubesinin 965 üyesinden 496'sı TARİŞ'e yağını satmıştır. Çoğunlukla küçük üretici olan üyelerinin birçoğu TARİŞ'in eski cazibesini yitirdiğini ve özellikle pazarlama konusunda daha etkin olması gerektiğini mülakatlarda dile getirmişlerdir.

Organik zeytinyağı üretimi Küçükkuyu bölgesinde TARİŞ tarafından verilen desteklerle 2000'li yılların ilk yarısından bu yana yapılmaktadır. Ne var ki fiyat desteklerinin günümüzde önemini kaybetmesi organik ürün hasadında düşük rekolte alınması küçük üreticiler arasında organik zeytinyağı üretiminin eski cazibesini yitirmesine sebep olmuştur. Bu bağlamda, organik zeytinciliğin geliştirilmesi ancak organik tarımın desteklerle bölgesel çapta yaygınlaştırılmasıyla mümkündür.

Sonuç olarak, zeytinyağı üretiminde küçük üreticilerin bir araya geldiği kooperatifler yerelliği ön plana çıkararak ve Kaz Dağları'nda yetişen zeytininin kalitesine vurgu yaparak, zeytinyağı sektöründe küçük üreticilerin karşılaştığı

pazarlama sorunlarının üstesinden gelebilirler.[36] Ne var ki, Kaz Dağları'nın güneyindeki orman köylerinde çoğunlukla 1970'li yıllarda kurulan tarımsal kalkınma kooperatiflerinin birçoğu bugün ya atıl durumdadır ya da kapanmışlardır. Avcılar, Mehmetalan, Narlı, Adatepebaşı gibi birkaç yerde faal olanlar ise -Avcılar dışında- çoğunlukla ormancılık işleriyle ilgilenmektedirler.

Öte yandan, Kaz Dağları bölgesinin kuzey kısmında Bayramiç'in Derekolu havzasındaki köylerde elma, nektarin, kiraz gibi meyvelerin üretiminin yapıldığı bilinmektedir. Derekolu havzasındaki bu köylerde organik tarım yapılmamakla birlikte Bayramiç İlçe Gıda Tarım ve Hayvancılık Müdürlüğü tarafından da desteklenen iyi tarım uygulamalarının bazı üreticiler tarafından yapıldığı görülmektedir. Evciler, Çırpılar, Yeşilköy ve Karaköy diğer köylere nazaran elma üretiminde önemli bir yere sahiptirler. Daha çok geleneksel çeşit elmalar üretilmekle birlikte, son yıllarda yeni türler de üretilmeye başlanmıştır. Özellikle Evciler ve Çırpılar gibi köylerdeki tarımsal kalkınma kooperatiflerinin güneydeki kooperatiflere nazaran daha faal olduğu söylenebilir. Buralarda kooperatifler soğuk hava depolarına sahiptirler ve üyelerine ürünlerini piyasaya göre daha avantajlı depolama olanakları sunarlar. Yine de bu kooperatifler de ürün pazarlama konusunda herhangi bir faaliyette bulunmamaktadırlar.

Kaz Dağları bölgesinin güneyinde son yıllarda tarımsal çeşitliliğin de giderek azaldığı görülmektedir. Bu bağlamda 1960'lı ve 1970'li yıllarda dışarıya satışı yapılan Ayasu armudu denilen armut ağaçlarının birçoğu kurumuştur. Ayrıca Antep fıstığı ağaçlarının birçoğu da verim vermemektedir. İncir ağaçlarında da kurumalar başlamıştır. Bunun yanı sıra 1960'lı ve 1970'li yıllarda Akçay'ın ve Edremit'in verimli ovalarında yoğun miktarda pamuk, şeker pancarı, bakla üretimi yapılmaktayken bugün bu ürünlerin de üretilmediği görülmektedir. En önemlisi turizmle birlikte hız kazanan yapılaşma faaliyetleriyle birlikte zeytinlikler dahil

[36] İspanya'da zeytinyağı tarımıyla uğraşan küçük üreticilerin kooperatiflerinin "mekana dayalı stratejiler" geliştirmesiyle ilgili olarak bakınız, Moragues-Faus, Ana M. and Roberta Sonnino (2012), "Embedding Quality in the Agro-Food System: The Dynamics and Implications of Place-Making Strategies in the Olive Oil Sector of Alto Palancia, Spain," *Sociologia Ruralis*, 52 (2): 215-234.

olmak üzere birçok verimli tarım arazisi yok olmuştur. Kısaca, bölgedeki tarımsal çeşitliliğin geçmişe kıyasla oldukça azaldığı bir gerçektir.

Ekonomik gelişmeye öncelik veren kalkınma politikaları on yıllarca yaygın tarım yerine yoğun tarıma dayanmıştır. Açıkça, üretkenliği artırmak için gübre, böcek ilacı, herbisit kullanımı büyük ölçüde kamusal kurumlar tarafından teşvik edilmiştir. Sonuç olarak, hem zararlılar ve bitki hastalıklarıyla mücadelede geleneksel organik metodlar hem de organik gübre kullanımı çiftçiler tarafından -kimyasal girdileri kullanmaya alıştıklarından dolayı- büyük oranda ihmal edilmiştir. Fakat açıkça, ilaç ve gübre kullanımı sürdürülebilir tarımla uyuşmamaktadır. Aşırı gübre ve ilaç kullanımı uzun dönemde toprağın ve suların kirlenmesine yol açmaktadır.[37] Bu bağlamda, Edremit Ziraat Odası'ndan bir yetkili şunları söylemektedir:

> Şimdi zeytinde de mesela kullanılmış işte. Bizim gibi geri kalmış ülkelerde 3-15 gübre, 20-20 gübre gibi kompoze gübreler. İşte "Bunu at" deniliyor. Halbuki belki toprak tahlilleri yapılsaydı çok daha farklı olurdu. Bilinçsizce, çok aşırı miktarda kullandığımız kimyasal gübreler de hem toprağımızın yapısını bozmuş, hem de toprakta kirlilikler yaratmış. Yani bu kirliliklerden dolayı da işte biraz önce bahsettik sadece zirai ilaç değil, bu kimyasal kullanılan gübreler de yağmurlarla dereleri bulmuş, çayları bulmuş, yani denizleri bulmuş, gölleri bulmuş. Bunlar da çevreyi kirletmişler.

Açıkça, izlenen tarım politikaları küçük üreticinin durumunu iyileştirmekten çok, büyük çiftçiler ve tarım işletmelerinin etkinliklerini artırmaya yöneliktir. Küçük üreticiler çeşitli stratejiler uygulayarak ekonomik sorunların üstesinden gelmek konusunda yetenekli oldukları halde, pazarın getirdiği belirsizliklere karşısında eskine nazaran daha kırılgan oldukları da açıktır. Sürdürülebilirlik perspektifinden, bu gelişmeler küçük üreticilerin çiftliklerini gelecek kuşaklara bırakmalarını daha zor hale getirmektedir.

Beşinci bölümde yerel topluluklar ve ekolojik girişimler tartışılmıştır. Kaz Dağları bölgesinde yaşayan yerel topluluklar geleneksel olarak meracılık ve orman işiyle uğraşmışlardır. Yerleşik hayata geçtikten sonra da geçimlik ekonomiye sahip topluluklar olarak yarı-göçebe olarak yaşamaya uzunca bir süre devam etmişlerdir.

[37] Hossay, Patrick (2006), *Unsustainable: A Primer for Global Environmental and Social Justice*, Londra ve New York: Zed Books, 147.

Takas bu toplulukların geçimlik ekonomilerinde uzunca bir süre önemli bir yer tutmuş ve yerel toplulukların sürdürülebilir kendine yeter şekilde yaşamalarında uzunca bir süre başat bir rol oynamıştır. Bunun yanı sıra, yerel pazarlar benzer şekilde, Kaz Dağları'nın güneyi ve kuzeyinde yaşayan toplulukları birbirine bağlayan önemli bir kurum olagelmiştir. Bugün hala bu takas ekonomisinin kalıntıları bölgede görülmektedir.

Köylülerin birçoğu 1960'ların sonlarına kadar orman arazisini açarak zeytin ağacı dikmiştir. Bu diktikleri zeytinlerin meyve vermeye başlamasıyla birlikte zeytin üretimi ancak 1970'li yıllarda yerel topluluklar için önem kazanmaya başlamıştır. 1960'larda ve 1970'lerde TARİŞ'in de alım yapmaya başlamasıyla birlikte köylüler zeytinlerini daha rahat pazarlama olanağı bulmuşlardır. Bu bağlamda, hayvancılık ve ormancılığın yerini zaman içersinde zeytinyağı üretimi almaya başlamıştır.

1980'li yıllara kadar kadınlar ve çocuklar da dahil olmak üzere orman köylüleri sezonluk işçiler olarak Edremit'in, Akçay'ın ve Altınoluk'un ovalarında zeytin ve pamuk hasadına çalışmaya gitmişlerdir. Bugün kadınlar halen kırsal hanenin geçiminde çok önemli bir yere sahiptir. Kadınlar kışlık yiyecek hazırlamaktan ormanda kozalak, mantar ya da kestane toplamaya kadar birçok işte çalışmaktadır. Orman köylerinde yapılan zeytincilikte de kadınlar ve erkekler arasında tam bir işbölümü vardır. Örneğin erkekler zeytin ağaçlarının budamasını yaparken, kadınlar ise tarlanın temizliğini yaparlar. Yine hasat zamanı erkekler sırıkla silkeleme yaparken, kadınlar ise dibe dökülen zeytini toplarlar.

Günümüzde giderek artan iç göç ve dış göçle ve pazar ilişkilerinin orman köylerine yayılmasıyla birlikte yerel topluluklar eski kendine yeter ekonomi sahibi olmaktan çıkmışlardır. Bu bağlamda, küçük çiftçiler aile içi emeği yoğun bir biçimde kullanarak tarımsal üretime devam edebilmişlerdir. Bunun dışında, kadınlar ve çocuklar sezonluk işçi olarak çalışarak da hane bütçesine önemli katkılar sağlamışlardır. Diyebiliriz ki aile içi emek, tarım dışı istihdam, borçlanma bu tür küçük çiftliklerin devamlılığını sağlamada önemli yollar olmuştur.

Birçok orman köyünde kasaba ve şehirlere göçle birlikte, dışarda yaşayan gençlerin nüfusu hızla artmaya başlamıştır. Bu gençler çoğunlukla küçük çiftçilerin çocuklarıdır ve çeşitli sebeplerle –toprakların aşırı parçalanması, tarımsal üretimden istenen gelirin elde edilememesi, ekme biçmeyi ya da hayvancılığı bilmemek gibi- tarımdan yeterli gelir elde edemediklerinden dolayı, tarım dışı sektörlerde -özellikle güney kesimde turistik kasabalarda hizmet sektöründe- çalışan kesimlerdir. Ayrıca, gençlerin arasında kasabalarda ya da şehirlerde yaşamayı tercih edenlerin çoğunlukla evli çiftler olduğu da söylenebilir. Başka bir deyişle, köyde yaşamaktansa şehirli yaşam tarzını benimseyen bu yeni kuşak gençler için sosyo-kültürel nedenlerin de göçü artırdığı yadsınamaz. Bu yeni evli çiftler yakınlardaki kasabalarda ya da şehirlerde yaşadığı için, bazı köylüler özellikle hasat dönemi gibi zamanlarda halen ailelerinin çiftliklerinde çalışmaya devam etmektedirler.

Tarımdan elde edilen gelirlerin azalmasının yanı sıra, tarım dışı istihdam ya da eğitim benzeri imkanların da var olması, gençlerin köylerden şehir ya da kasabalara dış göçünün son zamanlarda artmasına yol açmasına rağmen, orman köyleri halen "uzun vadede ekilebilir topraklardan yeterli sürdürülebilen ekonomik kazanç sağladığından dolayı, insanlar sürekli ve kararınca bir geçinmeyi başarabilmektedirler."[38] Başka bir deyişle, yine Netting'in dile getirdiği üzere "ailenin kuşaklararası güvenliğinin çok uzun zaman ufku ve değerli miras bırakılabilen mülkiyeti, küçük üretici hanesine sürdürülebilirlikle ilgili benzersiz bir perspektif verir."[39] Bu yüzden, diğer hane halkıyla birlikte çifliklerini işleten küçük üreticilerin çıkarları "ekolojik olarak sağlam, ekonomik olarak uygulanabilir ve toplumsal olarak adaletli ve insancıl olan sürdürülebilir tarımı" [40] geliştirmekte yatar.

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[38] Netting, Robert Mc.C. (1993), *Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture*, Stanford: Standford University Press, 145.

[39] a.g.e.

[40] Terry Gips'in alıntılandığı ilk kaynak, Francis, Charles ve Garth Youngberg (1990), "Sustainable Agriculture: An Overview," *Sustainable Agriculture in Temperate Zones* içinde, Charles A. Francis, Cornelia Butler Flora, ve Larry D. King (der.), New York: Wiley, 4. Alıntılanan kaynak, Netting, *Smallholders, Householders*, 143.

Kısaca, Kaz Dağları'ndaki orman köylerinde tarımsal faaliyetler halen önemli bir yere sahiptir. Bununla birlikte geçmişle karşılaştırdığımızda bu köylerin çoğunda kendine yeter geçimlik ekonominin son kalıntılarının da ortadan kalktığı görülmektedir. Özellikle güneydeki orman köyleri iletişim ve ulaşım olanaklarının artmasıyla birlikte çevrelerindeki kasabalarla gitgide daha fazla bütünleşmeye başlamışlardır. Sonuç olarak, orman köylerinde yaşanan bu sosyo-ekonomik ve sosyo-kültürel dönüşümlerin uzun vadede yerel toplulukların sürdürülebilir bir yaşam sürmelerine nasıl bir katkı sağlayacağı henüz yeterince belli değildir.

Rusten ve Skerratt'ın tartıştığı üzere "kırsal alanlar günümüzde yalıtılmış bir şekilde değil, fakat bir şekilde şehirlerin ekonomik ya da toplumsal faaliyetleriyle ilişkili olarak (ve belki birbirlerine bağlı olarak) var olurlar.[41] Bu bağlamda, Kaz Dağları'ndaki orman köyleri geçmişten bu yana çevrelerindeki kasabalarla çeşitli ekonomik ve toplumsal ilişkiler içerisinde olmuşlardır. Günümüzde bu durum giderek artarak devam etmekte olup, kırsal alanlar ve kasabalar arasındaki farklılıklar ciddi anlamda azalmıştır. Bunun en iyi göstergesini köylülerin üretim ve tüketim alışkanlıklarında yaşanan değişimlerde görebiliriz.

Şüphesiz, orman köyleri son zamanlarda ciddi ekonomik ve toplumsal değişimler geçirmişlerdir. 1950'lerden bu yana dönüşmekte olan bu toplulukların geçimlik ekonomileri ve geleneksel topluluk yapıları artık büyük oranda kaybolmaya yüz tutmuştur. Bu bağlamda bilgi ve iletişim teknolojileri kırsal alanları karakterize eden birbirine akrabalık bağlarıyla ya da gündelik ilişkilerle ya da aynı küçük topluluğa ait olmanın getirdiği ilişkilerle sıkı sıkıya bağlı dayanışmacı topluluk yapısına sahip yerel topluluklarda ciddi değişimlere yol açmaktadır.[42]

Yerel toplulukların uğradığı dönüşümler kırsal geçimlerini ve sosyokültürel yapılarını sürdürmelerine yönelik önemli güçlükler teşkil etmektedir. Sonuç olarak, Kaz Dağları'ndaki orman köyleri yerel, ulusal ve küresel düzeylerde ortaya çıkan ve

[41] Rusten, Grete ve Sarah Skerratt (2008), "Being rural in a digital age," *Information and Communication Technologies in Rural Society: Being rural in a digital age* içinde, Grete Rusten ve Sarah Skerratt (der.), Londra and New York: Routledge, 6.

[42] Bilgi ve iletişim teknolojilerinin kırsal topluluklara etkisine yönelik olarak bakınız, a.g.e.

sürdürülebilirliğin gelecekte izleyeceği yolu belirleyen ekonomik, toplumsal ve ekolojik gelişmelerden yalıtılmış bir şekilde düşünülemez.

Kaz Dağları bölgesinde birçok ekolojik girişim bulunmaktadır. Bu girişimler büyük şehirlerden gelip bölgeye yerleşen kentli üst orta sınıf insanlar tarafından kurulmuştur. Bu girişimlerin ana özelliği ekolojik bir yaşam kurma uğraşı içersinde olan topluluklar olmalarıdır. Bu bağlamda, bu topluluklardaki çevrecilerin en dikkat çekici özellikleri ise yaşama bütüncül bir bakış açısından bakmalarıdır. Bu ekolojik girişimlerin permakültür, organik tarım, geleneksel tohumları koruma ve gıda güvenliği konusundaki faaliyetleri ancak böyle bir perspektiften anlaşılabilir.

Ekolojik girişimler ve yerel topluluklar arasında doğrudan bir etkileşim vardır. Bu bağlamda, ekolojik girişimlerdeki çevreciler yaşadıkları yerdeki köylülerle gündelik hayatta, yüz yüze bir ilişki içerisindedirler. Çevrecilerin birçoğu orman köylülerinin geleneksel tarım yapma pratiklerinin öneminin farkındadırlar. Bu konuda Buğday Derneği'nin üyelerinden birisi aşağıdakini dile getirmektedir:

> Bu bölgede zaten hani bir anlamda hala daha köy yaşamı devam ediyor. Yani tamamen bitmiş değil. Hani insanlar ekmeye biçmeye devam ediyorlar. En önemli şey bu şu anda, yani dünyada yok olan şey. Toprakla yaşamayı bilen insan kalmayacak…Yani en büyük tehlikemiz, tehditimiz de bu. …Dolayısıyla o insanların yaşadığı bölgeleri bizim korumamız, onların yaşamlarına devam edebilmeleri için gerekli imkanlar varsa onları harekete geçirmemiz, o güçleri birleştirmemiz lazım yani ve dağlık bölgeler, ki burası da öyle bir bölge, bunun için son kalan sığınaklar diyorum ben.

Yerel bilgiye dayanan geleneksel tarımsal faaliyetler, "çiftçi tarafından üretilen teknolojileri ve çiftçiden çiftçiye bilgi aktarımını"[43] teşvik eden sürdürülebilir tarımda önemli bir yere sahiptir. Aslında küçük çiftçilerin bilgi, deneyim ve teknolojilerini tarımsal pratiklerle bütünleştirmek agroekolojik anlayışın en önemli bileşenlerinden birisidir. Ancak, bölgedeki ekolojik girişimlerin çoğu agroekolojik tarım yaptıkları halde, bütünleşmiş agroekolojik yöntemler uygulamamaktadırlar.[44]

[43] Holt-Gimenez, Eric (2010), "From Food Crisis to Food Sovereignty: The Challenge of Social Movements," *Agriculture and Food in Crisis: Conflict, Resistance, and Renewal* içinde, Fred Magdoff and Brian Tokar (der.), New York: Monthly Review Press, 216.

[44] Bütünleşmiş agroekolojik yöntemler için bakınız, a.g.e., 207-223.

Bununla birlikte geleneksel bilginin eskiden zeytincilikte birçok şekilde kullanıldığı biliniyor. Kızılkeçili'nden bir köylü bu konuda aşağıdakileri söylemektedir:

> Ya eski insanlar ayın halinin, ayın durumunu bile doğru kullanıyormuş. Ayın durumuna göre hareket ediyormuş. Bir zeytin ağacının budancağı, ilaçlanacağı zamanı hep geleneksel yöntemlerle tayin etmişler. Eh geleneksel yöntemler de ekolojiyi anlamada doğru yöntemler yani.

Ayrıca, Tahtakuşlar muhtarı da zeytin ağacını serinletmek için kullandıkları geleneksel metodu şöyle anlatıyor:

> Ne bileyim biz eskiden bu zeytin ağaçlarına yalak açıp deniz eleştisi dediğimiz, deniz yosunu dediğimiz şeyleri sokup, ağacın serin durmasını kapılırdık; zeytin tanesinin iri olması için, onları kabul etmiyorlar yani.

Hiç şüphesiz geleneksel bilginin yaşatılmasında bu girişimler önemli bir rol oynayabilir. Bu konuda İmece Evi'den bir çevreci aşağıdakini söylemektedir:

> Yani biz burdaki köylüye, komşumuza, bizim yaklaşımımız bir bilgeye yaklaşım gibi. Çünkü burayı en iyi onlar biliyor. Yani buranın iklimini, koşullarını, ne yetişiyor ne yetişmiyor, insanı nasıl, ne yapmak lazım, kültürü nasıl; bunları en iyi bu insanlar biliyor.

Özet olarak, bölgedeki ekolojik girişimler sürdürülebilirliğin hayata geçirilmesinde önemli aktörler olarak görülebilir. Öncelikle gıda egemenliği için oldukça önemli olan tarım-gıda (agro-food) ağlarını kurarlar. Ayrıca, tarımsal üretimleri sürdürülebilir tarım prensipleri gözeterek yaparlar.[45] Tarımla ilgili olan uygulamalarında geleneksel yerel bilgiden faydalanırlar. Ancak agroekolojik yöntemlerin köylüler arasında yaygınlaştırılmayla ilgili herhangi bir faaliyetleri bulunmamaktadır. Bununla birlikte, ekolojik girişimlerin uygulamaları sınırlı kaldığından dolayı tarım-sanayi üretiminin ortaya çıkardığı ekolojik ve sosyo-ekonomik sorunlar karşısında kapsayıcı bir çözüm getirmekten uzaktır. Bu yüzden, ekolojik girişimler ancak, sürdürülebilirlik modellerini daha geniş bir spektruma yayarak ve yerel topluluklarla dayanışmaya dayalı bir işbirliği geliştirerek var olan üretim ve tüketim pratiklerine bir alternatif oluşturabilirler.

[45] Gordon K. Douglass, (1985), "Sustainability of What? For Whom?" *Sustainability of California Agriculture: A Symposium* içinde, Davis: U.C. Sustainability of California Agriculture Research and Education Program, alıntı yapılan kaynak Merchant, Carolyn (1992), *Radical Ecology: The Search for a Livable World*, New York ve Londra: Routledge, 213-214.

Altıncı bölümde, milli park, çevre koruma politikaları ve ekoturizm analiz edilmiştir. Son zamanlarda devletler çevre yönetiminin önemli aktörleri haline gelmişlerdir. Luke'a göre, devletler "küresel politik ekonominin genel çerçevesi içinde nüfuslarının verimliliğini ve üretkenliğini garanti altına almak için 'çevre koruma ajansları' haline gelmiştir."[46] Bu bağlamda, milli parklar ve doğa rezervleri oluşturmak çevre yönetimini kurumsallaştırmanın olağan yollarından birisi haline gelmiştir.

Kaz Dağları ekolojik olarak "Önemli Bitki Alanı" olarak tescil edilmiştir. Kaz Dağı flora ve fauna olarak oldukça zengindir. Ekim'e göre "yeni eklenen türlerle yöredeki endemik tür adedinin 80 civarında olduğu anlaşılmaktadır. Bunlardan 35 kadarı yalnız Kaz Dağları, onların da 30 kadarı yalnız Milli Park sahasına özgü (endemik) bitkilerdir."[47] Bu bağlamda Kaz Dağı Göknarı (*Abies nordmanniana subsp. Equitrojani*) önemli endemik türlerden birisidir. Ayrıca, Kaz Dağları'nda boz ayı başta gelmek üzere birçok vahşi hayvan ve kuş türünün yaşadığı da bilinmektedir.[48]

Kaz Dağı'nda 1993 yılında Dünya Bankası Küresel Çevre Fonu tarafından finanse edilen "Bitki Genetik Çeşitliliğinin Yerinde Korunması Projesi" İzmir Ege Ormancılık Araştırma Enstitüsü Müdürlüğü ile ortak olarak hayata geçirilmiştir. Ayrıca 1993 yılında Bakanlar Kurulu'nun 93/4243 sayılı kararıyla 21,452 hektar alanda Kaz Dağı Milli Parkı ilan edilmiştir.

Kaz Dağı Milli Parkı'nın açılmasının yerel topluluklar açısından en önemli sonucu ormancılık ve hayvancılık faaliyetlerinin güneydeki orman köylüleri için önemli geçim kaynakları olmaktan çıkmasıdır. Bu bağlamda, Avcılar muhtarı milli park

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[46] Luke, Timothy W. (1999), "Environmentality as Green Governmentality," Eric Darier (der.), *Discourses of the Environment* içinde, Oxford: Blackwell, 145.

[47] Ekim, Tuna (2012), "Kazdağları'nın Fitocoğrafyası," *Kazdağları Ulusal Çalıştayı* içinde, Akçay: Kaz Dağı ve Madra Dağı Belediyeler Birliği Yayını, 73.

[48] Bakınız Cürebal, İsa ve diğerleri (2012), "Kazdağları Ekosistemi ve Ekolojisi" *Kazdağları Ulusal Çalıştayı* içinde, 108.

açılana kadar yapılan orman işleriyle ilgili olarak aynı hane halkının değişik üyelerinin birbirinden farklı işler yaptığı bir işbölümünden bahsetmektedir:

> Eskiden bak kesimciler ayrıydı. Sürümcüler ayrıydı, mesela tomruk sürüklemeleri. Artı oduncular ayrıydı aynı aileden. Odun sarımcıları ayrıydı, tomruk sarımcıları ayrıydı. Nakliyeciler, kamyoncular ayrıydı. Kaç tür insan ekmek yiyiyordu. En azından o zaman 150 hane ekmek yiyiyordu çok rahat.

Buna ek olarak hayvancılıkla ilgili olarak ise Tahtakuşlar'dan bir köylü aşağıdakini dile getirmektedir:

> Şu 1993 yılına kadar Kaz Dağı çoban yaylasıydı. Altınoluk'tan Akçay'a kadar hep buraya…Milli park yaptılar dağda ne kadar çoban varsa çıkardılar. Dağı koruyamıyoz falan, laf onlar. Çıkarınca ne oldu? Halkın burdan sanatı öldü. Halkın hayvan sanatı, geçim kaynakları. Ne oldu? Ayvacık, Ezine, Bayramiç, Çan çobanları bu dağdan çıkarıldı. O zaman bu dağın etrafında hayvancılık öldü. Ne oldu? Dışa bağımlı oldu. En ekstrem hayvancılık bu dağdaydı.

Bugün, Kaz Dağı Milli Parkı'nda tamamen korumacı bir anlayış uygulanmaktadır. Koruma-kullanma dengesinin kurulması gerektiği ve Kaz Dağı Milli Parkı'nın sınırlarının değiştirilmesi gerekliliği Edremit Orman İşletme Müdürlüğü'ndeki orman mühendisleri ile Kaz Dağı Milli Parkı şefi tarafından da dile getirilmiştir. Bu bağlamda Edremit Orman İşletme Müdürlüğü'nden bir orman mühendisi şunları söylemektedir:

> Ancak sınırlarında bazı değişiklikler yapmak gerekir…yani güneyden daraltıp kuzeyden biraz genişletmek gerekir. Neden? Ora mesela Kaz Dağı göknarının, endemik tür olan Kaz Dağı göknarının Kalkım, Bayramiç işletmelerine doğru uzantıları var. Onlar hala milli park alanı dışı…Köylü şimdi giremiyor. Peki hayvanını otlatacak, otlatamıyor. Çadır alacak, alamıyor. Yani istihsal artığı deriz biz, kuru dal alacak fırını için alamıyor. Üretim yapıp para kazanamıyor…Çiçeğini toplayamıyor, kekiğini toplayamıyor, nanesini toplayamıyor. Bunlar hep ormandalar. Dolayısıyla şikayetçiler…Kazdağları'nın zirvesinden Kalkım, Çan, Bayramiç, Ayvacık'a doğru milli park ilan edilebilecek köysüz alanlar var. Oralara biraz kaydırıp, aşağıda köye yakın kısımları daraltmakta fayda var milli park için. Kaz Dağı Milli Parkı için bence yapılması gereken bir husus.

Bu bağlamda, güneydeki orman köylerinin muhtarları 2013 yılında Çanakkale'deki Milli Parklar 3. Bölge Şefliği'ne köye yakın arazilerde hayvancılık yapılabilmesi için bazı alanların milli park statüsünden çıkarılması için talepte bulunmuşlardır. Naughton-Treves ve diğerlerinin tartıştığı üzere, dünyadaki milli parklarda bu tür

toprak-kullanımına dair bölgelere ayırma (zoning) faaliyetleri doğa korumayı desteklerken yerel halkın yaşamlarını ve geçim yollarını da geliştirmeyi sağlayan bir önlem olarak uygulanmaktadır. Bu tür projeler koruma hedeflerini ekonomik kalkınma amaçlarıyla uyumlu hale getirmek için bir çözüm sağlamaktadırlar.[49] Sonuçta, günümüzde dünyada kale-koruma modeli (*fortress-conservation model*) olarak da adlandırılan milli park anlayışı yerini gitgide topluluk temelli çevre yönetimi anlayışına bırakmaktadır. Bu ikinci anlayışa göre yerel toplulukların geçim kaynakları çevre korumayla uyumlu bir hale getirilebilir.

Ekoturizm çevreyle uyumlu alternatif bir turizm anlayışı olarak ön plana çıksa ve bölgedeki belediyeler, turizmciler, çevreciler, köylüler başta olmak üzere, hemen hemen her kesim tarafından dile getirilse de, Kaz Dağı Milli Parkı'yla tam anlamıyla bütünleşmiş ekoturizm faaliyetleri bölgede henüz görülmemektedir.

Daha ziyade, Yeşilyurt ve Adatepe gibi belli başlı köylerde butik otel ağırlıklı ekoturizm faaliyetleri yapılmaktadır. Esasen, bu köylerdeki ekoturizmi dışarıdan gelip o köylere yerleşen şehir kökenlilerin öncülüğünde yapılan bir faaliyet olarak görebiliriz. Başka bir deyişle, orman köylülerinin çok azı ekoturizm faaliyetleriyle meşgul olmaktadır. Yine de bazı orman köylerinde butik otel, kamp yeri ve restoran tarzı küçük işletmeler de bulunmaktadır. Avcılar ve Mehmetalan milli parkın güney tarafında yer alan girişlerine yakın oldukları için bir dereceye kadar ekotuizm faaliyetlerinden yararlanmaktadırlar. Bu ve diğer orman köylerinde milli parkta alan kılavuzluğu yapan toplam 37 kişiden 23'ü orman köylüsüdür. Ayrıca Avcılar'da Kaz Dağı Milli Parkı'na jeep safari turları düzenlenmektedir. Bu bağlamda, Çamlıbel'e dışarıdan gelip yerleşen bir turizmci Kaz Dağı'ndaki ekoturizm faaliyetleriyle ilgili olarak oldukça eleştireldir:

> Biz özgün bir turizmden bahsediyorduk, hem derneğimiz olarak, Kaz Dağı Otelcileri Derneği olarak. Böyle sırt çantalı, yürüşçü grupları ağırlamayı, onları Kaz Dağı'nda gezdirmeyi hedeflemiştik. Fakat görünen o ki, aşırı baskı yüzünden yine Kaz Dağı'nı kitle turizmine açmış bulunuyoruz. Yani şu anda

[49] Naughton-Treves, Lisa, Margaret Buck Holland, Katrina Brandon (2005), "The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods," *Annual Review of Environment and Resources*, 30: 245.

> Kaz Dağı geziliyor ama bizim o istemediğimiz anlamda geziliyor. Aşağıda bir sürü firma gelişti, hepsi cipleri var, safari yapıyorlar. Dağla hiç ilgisi olmayan ama "Ben Kaz Dağı'na bir kere gitmeliyim" diyen insanları, şimdi kitleler halinde dağa sokuyorlar. Onları araçla gezdirip, aşağıya indiriyorlar. Bu hale dönüyor iş. Bu bizim istemediğimiz bir durum, hem dağı çok rahatsız ediyor.

Gerçekten de bazı araştırmacılar "eko" etiketinin turizm deneyiminin çevreye duyarlı, eğitici ve yerelliğe odaklı olduğunu göstermekten çok, daha çok satmaya yaradığını dile getirmektedirler.[50] Aslında, Kaz Dağı Alan Kılavuzları Derneği Başkanı'na göre, ekoturizm faaliyetlerinin orman köyleriyle bütünlük içersinde yapılması gerekir:

> Turlarında katkı sağlaması lazım. Direkt parka değil de, işte ilk önce bir işte köydeki pazara veya işte köyde kurulan bir çarşıya uğrayıp Forda işte ürünlerin tanıtılması, alınması, alışveriş yapılması veya ordaki köylünün, köyün tanıtılması. Yani bu da aslında ekoturizmin içinde olan bir şey.

Bu bağlamda, yerel halkın ekoturizm faaliyetleriyle bütünleştirilmesi hem köylülere geçim kaynağı sağlayabilir hem de biyolojik çeşitliliği korumaya da yarayabilir. Zaten, "topluluk temelli ekoturizm projeleri yerel halka turizmin yararlarını getirmek, böylece onları sahip oldukları biyolojik çeşitliliği korumaya teşvik etmek için"[51] bütün dünyada hali hazırda desteklenmektedir. Sonuç olarak, bugün için bölgedeki ekoturizm faaliyetleri yerel topluluklarla bütünleşmekten çok uzaktır. Ekoturizm faaliyetleri önümüzdeki yıllarda bölgede daha da önem kazanacağından dolayı, Kaz Dağı Milli Parkı Şefliği veya diğer kamu ya da özel kurumların bu tarz kapsayıcı ekoturizm projeleri geliştirmesi orman köyleri için ekoturizmi daha geçerli bir alternatif haline getirebilir.

Yedinci bölümde Kaz Dağları bölgesindeki altın madenciliği bir çevre ihtilafı olarak analiz edilmiştir. Çokuluslu altın madeni şirketleri Latin Amerika, Asya ve Afrika'nın çeşitli ülkelerindeki yatırımlarını son zamanlarda artırmışlardır. Özellikle 1980'lerden sonra, ulusal maden endüstrileri birçok ülkede özelleştirilmiş

[50] Simpson, Ken (2009), "Exploding the Myth of Ecotourism," *Ecotourism and Environmental Sustainability* içinde, Jennifer Hill ve Tim Gale (der.), Farnham and Burlington: Ashgate, 235.

[51] Nicholls, Henry (2012), "The Conservation Business," Jaime A. Seba (der.), *Ecotourism and Sustainable Tourism: New Perspectives and Studies* içinde, Toronto ve New York: Apple Academic Press, 107.

ve çokuluslu şirketlere birçok ülkede neo-liberal yeniden-yapılandırma politikaları kapsamında haklar ve ayrıcalıklar verilmiştir.[52]

Bu bağlamda, Martinez-Alier dünyada fakir insanlara yönelik çevresel tehditlere karşı hareketlerin ortaya çıktığını söylemektedir. O bu hareketleri "popüler çevrecilik ya da geçim ekolojisi ya da yoksulluğun çevreciliği"[53] şeklinde adlandırır. Diğerlerinin yanı sıra, ürünleri ya da meraları madenler tarafından yok edilen köylülerin hareketleri de buna dahildir."[54] Dünyadaki altın madenciliğine karşı olan yerel çevre hareketlerinin ortak motivasyonu geçim yollarını ve su kaynaklarını korumak olmuştur. Papua Yeni Gine'de, Peru'da, Şili'de ve daha birçok yerde yerel topluluklar altın madenciliğine karşı mücadele etmişlerdir.[55]

Kaz Dağları'nda da 1990'lardan itibaren yapılan altın arama çalışmalarına karşı çeşitli yerel aktörlerin katılımıyla bir mücadele verilmektedir. Özellikle 2007 yılında Bahçedere'de yapılan altın madeni arama çalışmalarından sonra çevre aktivizmi kitlesel bir boyuta ulaşmış ve yerel halkın katılımıyla büyük çapta protesto gösterileri düzenlenmiştir.

Kaz Dağları Koruma Girişimi ve Güney Marmara Çevre Koruma Derneği (GÜMÇED) gibi çevre örgütleri ya da girişimlerinden çevreciler ve aktivistler kampanyanın örgütlenmesinde önemli bir rol oynamışlardır. Ayrıca Kaz Dağı ve Madra Dağı Belediyeler Birliği, turizmciler ve zeytin üreticileri de kampanyanın yürütülmesinde önemli rol üstlenmişlerdir. Bunun yanı sıra siyasi partiler, meslek

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[52] Peru madencilik sektörünün böyle bir dönüşümü için bakınız, Bury, Jeffrey (2005), "Mining Mountains: neoliberalism, land tenure, livelihoods, and the new Peruvian mining industry in Cajamarca," *Environment and Planning A*, 37: 221-239.

[53] Martinez-Alier, Joan (2002), *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*, Cheltenham, UK ve Northampton, MA: Edward Elgar, 12.

[54] a.g.e.

[55] Papua-Yeni Gine için bakınız, Kirsch, Stuart (2007), "Indigenous movements and the risks of counterglobalization," *American Ethnologist*, 34 (2): 303-321. Peru için bakınız, Muradian, Roldan, Joan Martinez-Alier, and Humberto Correo (2003), "International Capital Versus Local Population: The Environmental Conflict of the Tamborande Mining Project, Peru," *Society and Natural Resources*, 16: 775-792. Şili için bakınız, Urkidi, Leire and Mariana Walter (2011), "Dimensions of environmental justice in anti-gold mining movements in Latin America," *Geoforum*, 42: 688.

odaları ve diğer sivil toplum örgütleri, esnaflar, profesyonel meslek sahipleri, köylüler ve yerel halktan birçok farklı kesim de altın madenciliğine karşı yürütülen bu kampanyaya destek vermişlerdir. Çevre aktivizminin en yoğun yaşandığı günlerde kitlesel gösteriler, basın açıklamaları, imza kampanyalarıyla birlikte sayısız seminer, konferans ve atölyeler düzenlenmiştir. Bu bağlamda toplanan imza kampanyalarının birincisi 2008 yılında 5177 sayılı Maden Yasası'nın iptal ettirmek için, diğeri ise 2009 yılında 4086 sayılı "Zeytinciliğin Islahı ve Yabanilerinin Aşılattırılması Hakkında Kanun"da yapılacak değişikliği engellemek için düzenlenmiştir. Her iki imza kampanyası da GÜMÇED tarafından yürütülmüş ve her ikisinde de 100.000 imza toplanmıştır. Özellikle 2007-2008 yıllarında ulusal medya konuyu yoğun olarak ele almış ve böylece ulusal düzeyde de Kaz Dağları'nda altın aranmasına karşı bir duyarlık oluşmuştur.

Ne var ki, son yıllarda Kaz Dağları'nın kuzey tarafında Çanakkale ili sınırları içersinde altın arama faaliyetleri birçok farklı yerde devam etmiştir.[56] Özellikle Kaz Dağları'nın kuzey kesiminde Bayramiç ve Çan ilçelerinin sınırları arasında yer alan Ağı Dağı'nın[57] birçok noktasında altın arama faaliyetleri yürütülmüştür. Bununla birlikte, Çanakkale Çevre Platformu'nun altın madenciliğine karşı yürüttüğü kampanyanın geniş katılımlı olmadığı görülmektedir.

Açıkça, altın madencilerinin Bahçedere'den çekilmesinden sonra ilerleyen yıllarda, Kaz Dağları bölgesindeki çevre hareketi dinamiğini yitirmiştir. Bunun belli başlı birkaç sebebi bulunmaktadır. Öncelikle, altın madenciliğine karşı yürütülen kampanya coğrafi olarak ikiye bölünmüş durumdadır. Güneydeki ve kuzeydeki çevre örgütleri kampanyalarını ayrı ayrı yürütmektedirler. Bunun yanı sıra kuzeyde, hem orman köylerine ve kasabalara yerleşen şehir kökenli çevrecilerin fazla olmaması hem de turizmci ve zeytincilerin de bulunmaması, bu kesimlerin ağırlıklı bir rol oynamalarına engel olmuştur. İkinci olarak, yerel aktörlerin birlikteliği

[56] Ilgar, Rustu (2008), "Kaz Dağı'nın üstü "Altın"dan kıymetli mi?" *Uluslararası Sosyal Araştırmalar Dergisi*, 1 (2): 175.

[57] Ağı Dağı Kaz Dağları silsilesinin bir uzantısı olarak görülmektedir. Kuzey kesiminin jeomorfolojisi için bakınız, Koç, Telat (2007), "Kaz Dağı Kuzey Kesiminin (Bayramiç-Çanakkale) Jeomorfolojisi," *Coğrafi Bilimler Dergisi*, 5 (2): 27-53.

zaman içersinde kaybolmuştur. Örneğin Kaz Dağları Koruma Girişimi altın madencilerinin güneyden çekilmesi üzerine dağılmıştır. Ayrıca, turizmciler de kuzeydeki kampanyaya ilgi göstermemişler ve güneydeki kazanımlar onlar için yeterli olmuştur. Buna ek olarak, Çanakkale ve Bayramiç belediyeleri gibi birkaç belediye dışında kalan kuzeydeki diğer belediyeler kampanyaya yeterli destek vermemişlerdir. Üçüncü olarak, çevre hareketi son zamanlarda yürütülen kampanyayı ulusal düzeyde duyuramamıştır. Son olaraksa, kuzeyde yerel halkın katılımı yeterince sağlanamamıştır.

Köylüler güneydekiler gibi yekpare bir duruş geliştirememişler, aksine altın madeni konusunda kendi aralarında anlaşmazlığa düşmüşlerdir. Altın madeni işletilmesi planlanan Ağı Dağı çevresindeki Karaköy ve Kızılelma gibi köylerde, çoğunluk altın madenine karşı olmasına rağmen altın madencileri tarafından iş olanakları sunulan bir kısım köylü maddi çıkar nedeniyle altın madenini desteklemektedirler. Buna ek olarak, bu köylerden altın arama çalışmalarında istihdam edilen birçok genç de bulunmaktadır. Açıkça, köylüler kendi aralarında bölündükleri için çevre hareketine yerel katılım oldukça düşük olmuş ve kuzeydeki çevre hareketinin yerelden beslenmesi de sınırlı düzeyde kalmıştır. Sonuç olarak, Kaz Dağları'ndaki çevreciler bütün bölgeyi kapsayan bir strateji geliştirmekte başarılı olamamışlardır.

Altın madenciliğinin sürdürülebilirliğe bir engel teşkil edip etmediği ihtilaflı bir konudur. Martinez-Alier'e göre, ekolojik ihtilafların farklı değerlendirmeleri vardır: "Ne zaman çözülmemiş ekolojik ihtilaflar varsa, olasıdır ki değerlendirmede sadece bir çelişme değil fakat nispetsizlik de vardır."[58] Bu bağlamda altın madencilerine ve destekleyenlere göre altın madenciliğinin çevreye ve doğal kaynaklara olan etkisi kısıtlı ve dönemseldir. Öte yandan, çevreciler ve diğer karşı çıkanlar ise siyanürle altın çıkarılacağı için bu etkinin hem ekosisteminin bütünlüğü hem de insan sağlığı için yıkıcı ve kalıcı olduğunu dile getirmektedirler. Küçük bir kesim –daha çok orman mühendisleri ve bazı kamu görevlileri- ise altın madeninin Kaz Dağları

[58] Martinez-Alier, *The Environmentalism of the Poor*, 98.

bölgesi gibi zengin ekosisteme ve yeraltı ve yerüstü su kaynaklarına sahip olmayan daha başka bir yerde çıkarılmasının daha yerinde olacağı görüşüne sahiptir.

Özetleyecek olursak, Kaz Dağları bölgesindeki altın madeni üzerine olan ihtilaf sadece kaynak dağılımıyla ilgili bir sorun değildir. Öncelikle, Kaz Dağları yerel halkın yaşam alanıdır. Devall'in de tartıştığı gibi bölgedeki çevrecilik bir yere bağlılık ve aidiyetle güçlü bir şekilde bağlantılıdır.[59] İkinci olarak, birçok köylü için su kaynaklarının yitirilmesi başlı başına bir karşı çıkış nedeni olarak görünmektedir. Bunun yanı sıra ormanların ve meraların tahrip olması da yine köylülerin altın madenciliğine karşı çıkışlarında önemli bir yere sahiptir. Bu bağlamda, köylülerin önemli bir kesimi su kaynakları başta gelmek üzere, doğal kaynakların kirlenmesi, tahrip edilmesi ve daha kötüsü yitirilmesiyle birlikte hem çevreye dayalı geçim kaynaklarının sonlanacağını hem de köyde yaşam olanaklarının ortadan kalkacağını düşünmektedir.

Sonuç olarak, maden projelerine karşı çok çeşitli tepkiler ve birbiriyle ihtilaflı konumlanışlar olmasına rağmen Kaz Dağları'ndaki yerel halkın çoğunluğu maden projelerini onaylamamaktadır. Böyle bir ihtilafın teknik çözümler ya da maddi tazminat yoluyla çözülemeyeceği de açıktır. Teknik çözümler önerilmesine rağmen, yerel toplulukların ve geçim kaynaklarının sürdürülebilirliği göz önüne alındığında sosyo-kültürel ve sosyo-ekolojik boyutları göz önüne almanın çok daha önemli olduğu görülmektedir.

Bu tezde, Kaz Dağları bölgesinde sürdürülebilirliği sağlamak için yerel aktörlerin rolü eleştirel bir yaklaşımla analiz edilmiştir. Bu bağlamda, yerel aktörlerin ancak farklı düzeylerde bütüncül, katılımcı ve aşağıdan yukarı bir perspektif benimsendiği takdirde sürdürülebilirliği sağlayabileceği gösterilmiştir. Bu çalışma boyunca, yerel aktörlerin çeşitli alanlardaki konumları ve bu alanlarda çevreyle olan etkileşimleri aktör-yönelimli bir sürdürülebilirlik anlayışı çerçevesinde ele alınmıştır. Bu yolla, Kaz Dağları'nın kendine özgü bölgesel özellikleri de sürdürülebilirlik açısından

[59] Devall, B. (1990), *Simple in Means, Rich in Ends: Practising Deep Ecology*, Londra: Green Print, 52, alıntı yapılan kaynak, Sutton, Philip W. (2004), *Nature, Environment, and Society*, New York: Palgrave Macmillan, 101.

irdelenmiştir. Böylece, yerel aktörleri sürdürülebilirlik tartışmasına dahil ederek Kaz Dağları bölgesinde sürdürülebilirliği sağlamak için nasıl bir yol izleneceği ortaya çıkarılmaya çalışılmıştır.

Bu tez çevre sosyolojisi alanındaki çalışmalara, sürdürülebilirlik analizini toplumsal açıdan ele alarak bir katkı sağlamaktadır. Aynı zamanda aktör-yönelimli bir çalışma ortaya koyarak yerel aktörlerin sürdürülebilirlik için taşıdıkları önemi gösterir. Ayrıca, bu tez yerel toplulukların geçirdiği sosyo-ekonomik ve sosyo-ekolojik dönüşümleri incelemek yoluyla yerel topluluklarla ilgili alternatif bir sürdürülebilirlik yaklaşımı ortaya koyar ve böylece kırsal sosyoloji ve kalkınma sosyolojisi çalışmalarına da katkı yapar.

Bu bağlamda bu tez, yerel düzeyde ancak sürdürülebilir geçim yollarının, çevreyle uyumlu tarımsal pratiklerin, topluluğa dayalı çevre yönetimi anlayışının, kapsayıcı ekoturizm girişimlerinin izlenmesiyle sürdürülebilirliğin sağlanabileceğini tartışmıştır. Ayrıca, kalkınma projeleri yerel halkın ve ekosistemlerin gelecekteki durumunu büyük oranda şekillendirdiğinden dolayı, bu projelerin karar verme süreçlerine yerel katılımın sağlanması da sürdürülebilirlik için hayati öneme sahiptir. Bu şekilde, yerel aktörler sürdürülebilirliğin sağlanmasında etkin bir rol oynayabilirler. Sonuç olarak, Kaz Dağları bölgesinde sürdürülebilirlik insanlar çevreleri üzerinde daha fazla söz sahibi olurlarsa gerçekleştirilebilir. Hiç şüphe yok ki bölgede sürdürülebilirliği sağlamak gelecek kuşakların Kaz Dağları'nda iyi bir yaşam sürmeleri için kritik bir öneme sahiptir.

APPENDIX N

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı : Şakar

Adı : Emre

Bölümü : Sosyoloji

TEZİN ADI: (İngilizce) : Local Actors and Sustainability in the Kaz Mountains Region

TEZİN TÜRÜ: Yüksek Lisans ☐ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: