SPATIO-TEMPORAL TRANSFORMATION OF 'BAĞ' SETTLEMENTS AND THEIR CHANGING UNIQUE CHARACTER IN THE CASE OF MUĞLA, KARABAĞLAR

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ABSTRACT

SPATIO-TEMPORAL TRANSFORMATION OF 'BAĞ' SETTLEMENTS AND THEIR CHANGING UNIQUE CHARACTER IN THE CASE OF MUĞLA, KARABAĞLAR

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'Bağ' settlements have been a part of dynamic spatial systems, which seasonally depend on and reciprocally interact with Anatolian towns throughout centuries. This thesis presents the transforming setting of 'bağ' settlements related to changing values and meanings through an ontological assessment. Therefore, the thesis assumes that the main values of spatial organization, farmland pattern, ecological formation, settlement character, socio-cultural structure and lifestyle of the inhabitants constitute the unique entity of 'bağ' settlements.

In time, the pressures of changing socio-economic conditions have destroyed the interaction between Anatolian towns and 'bağ' settlements. The thesis explains the changing role of 'bağ' settlements, changing and conflicting land uses and the loss of unique 'bağ' character in the case of Muğla-Karabağlar.

Karabağlar is a 'bağ' settlement in the southwestern Turkey, where Muğla town residents live seasonally. It is a third grade natural site, the unique character, the natural and cultural assets and the lifestyle of which must be preserved. However, with transformation of the main values, meanings and practices, Karabağlar could no longer perpetuated its initial existence of being. Karabağlar is significant for two reasons: it has natural and cultural beings that need to be conserved, and as it still goes through a transformation process.

The master's thesis of the author evaluated conservation plan of Karabağlar. Differently, this doctoral thesis evaluates the dynamics of the spatio-temporal transformation process in Karabağlar. It presents the changing role and significance of Karabağlar within the town-country continuum. This situation brings forward the conservation problematic of the character, landscape and uniqueness of Karabağlar. Within this respect, the thesis contributes to the literature of 'bağ' settlements in terms of defining their being and changing role throughout the history.

Keywords: 'bağ' settlements, Anatolian town, spatial organization, farmland pattern, unique character, transformation

ÖZ

MUĞLA, KARABAĞLAR ÖRNEĞİNDE
'BAĞ' YERLEŞMELERİNİN ZAMAN- UZAMSAL DÖNÜŞÜMÜ
VE DEĞİŞEN ÖZGÜN KARAKTERİ

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Yüzyıllar boyunca Anadolu kentlerine mevsimsel olarak bağımlı olan ve karşılıklı etkileşim içinde olan 'bağ' yerleşmeleri, dinamik mekansal sistemin bir parçası olmuşlardır. Bu tez ontolojik bir değerlendirmeyle değişen değer ve anlamlara bağlı olarak bağ yerleşmelerinin dönüşen ortamını ortaya koyar. Bu nedenle, tez, mekan organizayonu, tarımsal arazi dokusu, ekolojik oluşum, yerleşim karakteri, sosyo-kültürel yapı ve oturanların yaşam tarzı gibi temel değerlerin bağ yerleşiminin özgün varlığını oluşturduğunu kabul eder.

Zamanla, değişen sosyo-ekonomik koşulların baskıları Anadolu kentleri ve bağ yerleşmeleri arasındaki etkileşime zarar vermiştir. Bu tez Muğla-Karabağlar örneğinde bağ yerleşmelerinin değişen rolü ve önemini, değişen ve çelişen alan kullanımlarını ve özgün bağ karakterinin yok olmasını açıklar.

Karabağlar, Muğla kenti halkının mevsimsel olarak yaşadığı Turkiye'nin güneybatısında bir bağ yerleşmesidir. Özgün karakterinin, doğal ve kültürel değerlerinin ve yaşam tarzının korunması gereken üçüncü derece doğal sit alanıdır. Ne var ki, temel değerlerin, anlamların ve uygulamaların dönüşümüyle, Karabağlar başlangıçtaki varlığını devam ettirememiştir. Karabağlar iki nedenden dolayı önemlidir: korunması gereken doğal ve kültürel varlıklara sahiptir ve hala bir dönüşüm süreci yaşamaktadır.

Yazarın master tezi Karabağlar koruma planını değerlendirmiştir. Farklı olarak, bu doktora tezi, Karabağlar'ın zaman-uzamsal dönüşüm sürecinin dinamiklerini değerlendirir. Bu tez kent-kır sürekliliğinde Karabağlar'ın değişen rolünü sunar. Bu durum Karabağlar'ın karakterini, peyzajını ve özgünlüğünü koruma problematiğini ortaya koyar. Bu çerçevede, tez tarih boyunca bağ yerleşmelerinin varlığını ve değişen rolünü tanımlama açısından bağ yerleşmeleri literatürüne katkıda bulunur.

Anahtar kelimeler: 'bağ' yerleşmeleri, Anadolu kenti, mekan organizasyonu, tarımsal arazi dokusu, özgün karakter, dönüşüm

To My Parents

ACKNOWLEDGMENTS

The case area chosen in this thesis, Karabağlar is in my hometown Muğla; therefore, I know the region very well. I lived in the case area in my childhood, I have visited the case area many times and contacted with many people. Memories of my childhood, conversations with my parents and other acquaintances guided me to investigate the area in detail and present via this thesis. While completing this study, many people contributed and supported this study.

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INTRODUCTION

1.1 Aim of the Study

'Bağ' settlements[1] located on the peripheries of Anatolian towns have been social entities that have seasonally depended on and reciprocally interacted with cities for centuries. This dependency and interaction is twofold: economic and recreational. In terms of economy, 'bağ' settlements were the means of livelihood for the urban dwellers. In terms of recreation, 'bağ' settlements have been the offsetting for summer life, which is also revealed by the distinction between the terms 'yaylak' and 'kışlak'[2]. Indeed, these were the two major components that constitute the physical space of 'bağ' settlements. In brief, the existence of 'bağlar'[3] depends on both economic dependency and recreational needs, which have been kept in an environmental coherence for centuries.

However, both 'bağ' settlements' dependence on and interaction with cities necessitate a redefinition according to changing conditions of time. 'Bağ' settlements have natural, cultural and architectural assets as well as social and cultural values. For this reason, the existence of these 'bağ' settlements deserves to be studied. Nevertheless, traditional forms of and the structures in these 'bağ' settlements which are deemed to be issues of conservation have gone through a series of transformations. Therefore, to construct a conceptual framework for such settlements therefore rests in the understanding of the very assets of such a settlement and their uniqueness and their affection process by the social and economic changes. The main tenet of such an approach is that each settlement is unique by its values

[1] In terms of spatial meaning, the word 'bağ' has two meanings according to Turkish dictionary: 1- Lands where vine-stocks are planted. 2- Orchard

[2] These two terms were part of a nomadic lifestyle and in folk speech, describes a seasonal migration between two locations under different climatic effects. They are going to be explained in detail in the next chapters.

[3] 'ler' and 'lar' are suffixes that change a noun into its plural form in Turkish.

and it is these values that need to be conserved. The values depicting the uniqueness of 'bağ' settlements have been the main theme of this thesis:

- Spatial organization (Ownership structure and settlement pattern)
- Farmland pattern (Production)
- Ecological formation and landscape components (the coherence between nature and human)
- Settlement character
- Social and cultural structure and lifestyle of the inhabitants

The *spatial organization* of 'bağ' settlements was matured and shaped by property relations that define the rules of land use, agricultural production and the hierarchy of the settlements. In spatial organization, natural and man-made components were arranged. However, some land utilizations, which are not characteristic of settlement pattern, evolved with changing conditions. Parallel to this evolvement, the domination of urban development over 'bağ' settlements and thus, the changing role of the 'bağ' settlements over time have resulted in functional changes of settlement pattern. Non-original structures such as recreational sites, hobby gardens and second houses have become widespread on 'bağ' pattern. The hierarchy of the settlements has eroded away with new lot arrangements and functional changes. Encroachment of urban characteristics into the 'bağ' context brought forth the conservation problematic of the spatial organization, one of the unique qualities of the peripheral 'bağ' settlements.

The farmland *pattern* is a result of the long-term integration of society with land. One significant role of 'bağ' settlements is that they engage people in agriculture, providing a livelihood in the region. Therefore, every 'bağ' settlement with farmlands has a socio-economic value for the society. Farming has been a dominant function that sustains the existence of 'bağ' settlements and their landscape. The very name of 'bağ' settlements conjures up images of richness as they have offered a variety of agricultural products and provided the local food to Anatolian towns throughout the history. Producing and stocking food in summer and consuming it in winter has been a ritual practice in Anatolian 'bağ' settlements for centuries, this economic need and survival have set up dependence between 'bağ' settlements and the Anatolian towns.

With the modernization period in Turkey, with technological improvements and changing economic conditions and demands, farming has become a choice rather than an economic necessity. Today, the social pattern, which has been generated with the socio-economic dependency of the town on 'bağ' settlements owing to agricultural contribution to livelihood, began losing its significance. Additionally, with changing external factors parallel to urban encroachment, the farmlands of 'bağ' settlements started transforming and the landscape of farmland disappearing in an unprecedented scale. As long as the effects of urban development and transformations on landscapes of 'bağlar' persist, such problems as fragmentation of farmlands, misuse of arable lands and conflicting land uses are bound to destroy the landscape pattern of farmlands in the course of time. What is more, the unique existence of 'bağ' settlements, which have provided socio-economic contribution to the livelihoods in the town with farming throughout centuries, will be lost. Thus, the sustenance of farming and the consistency between farming and recreational activities are the underlying issues of the farmland pattern in 'bağ' settlements.

The natural and agricultural landscapes of the settlements generate ecological structure and determine the environmental quality. Every 'bağ' settlement with its farmlands, geomorphological formation, biodiversity and landscape components, presents an *ecological value.* The built environment of 'bağ' settlements displays harmony and adaptation with the natural environment and distinctive landscape components that sets an ecological balance on the pattern. In this ecological system, the compatibility and integration of human activities with the natural environment constitutes environmental coherence. Any kind of incompatible land use or intervention irreversibly destroys the ecological balance and the environmental coherence, which leads to loss of arable lands. The Anatolian 'bağ' settlements demonstrate such perfect environmental coherence with nature that any larger scale of settlement pattern or small natural or cultural component is the outcome of this coherent structure. Thus, the destruction of this coherence may threaten the physical and social pattern of 'bağ' settlements.

As a physical and social entity, every 'bağ' settlement represents a *character* with abundant specific natural, historical and cultural values that are whether unique or familiar and offer urbanites a healthier lifestyle with its landscape quality. Furthermore, certain functions justify the longstanding existence of 'bağ' settlements. The changing of these functions causes diminishment of the landscape quality and ecological diversity and loss of the

uniqueness of settlement character. Indeed, in the last century, the traditional seasonal dependency rather has turned into short-term recreational activities. Put differently, with the changing socio-economic conditions and trends, the 'attractiveness' attribute of 'bağ' settlements have offered urban functions beyond farming activities. The existing landscape pattern of 'bağlar' and their local characteristics have been exposed to new kinds of structural and functional changes that impair peculiar character and their originality. This is such a drastic process that the settlement's initial respectful attribute of environmental coherence can no longer save its existence with qualities.

Every 'bağ' settlement represents a *social and cultural structure*, which is the product of a local common cultural process practiced by the local community. In 'bağ' settlements, local inhabitants conform with the natural conditions such as topography, geomorphology, climate, soil quality to sustain environmental coherence. Furthermore, people ascribe to these settlements some cultural local values related to the natural landscape, which ultimately constitutes a special character. All these values which represent past events, customs and identities, and which are transmitted from one generation to another, are considered to be a part of natural, historical and cultural heritage. Nevertheless, with the change of lifestyles of the inhabitants and the dissolution of common cultural processes, the unique social and cultural structure is transforming today. That is why, unfortunately, the natural, historical and cultural heritage and the original character have a risk of depletion.

In brief, the historical and cultural existence of 'bağ' settlements constitutes the basis of this thesis. The thesis points out changes in the main values and meanings that are mentioned above from varying socio-spatial dimensions. Moreover, throughout centuries, socio-economic developments and practices have shaped the settlement pattern, specific geographic features as well as the unique values of the settlement. The thesis reveals that landscape values and meanings are interrelated with each other and have a close relationship with landscape practices determining the transformations on 'bağ' settlements.

'Bağ' settlements have been part of a dynamic spatial system in time and space in Anatolia. Historical and socio-cultural beings in these 'bağ' settlements are the products of both urban and rural practices. They take place in a spatio-temporal continuous process, thus a part of the town-'bağ' continuum. Therefore, this thesis intends to consider the significance of the relation between town and 'bağ' settlement within the context of spatial system from a

historical perspective. It investigates the mutual interaction between socio-spatial and economic changes. Within this respect, it focuses on the morphological transformation of the town-'bağ' continuum as an outcome of the urbanization process.

Moreover, the thesis intends to contribute to the literature of 'bağ' settlements and define their role in and significance for the Anatolian towns by an ontological assessment.

1.1.1 The Case Study

'Bağ' settlements have been a character of the Anatolian civilizations for 7500 years. It was not just a physical pattern but also the defining factor of the seasonal dependency on town. 'Bağ' settlement was more than a vineyard; it was a socio-cultural formation, which is a combination of different farming practices such as vineyard, orchard and even pasture.

In many cases, the viticulture practice that gave its name to the 'bağ' settlement is no more a dominant agricultural product today. Likewise, some unique values, which were once dominant, are now scarce. The pressures of changing conditions have taken away the serenity offered by the 'bağ' settlements, and caused local, historical and cultural assets and landmarks to disappear.

Karabağlar/ Muğla case, the focus of this thesis, is a 'bağ' settlement that is historical in perspective. It is located in the Aegean Region in the southwestern Turkey. Muğla residents live here in summer. There is a cyclical movement aforementioned as seasonal dependency between Muğla and Karabağlar. In 1977, it was registered as third grade natural site, the landscape character, natural and cultural assets and lifestyle of which must be preserved. Karabağlar is situated on a plain having water basement, which contributes a special geomorphologic structure to the environment. Due to this natural geomorphological formation, a set of historical and cultural assets of Karabağlar have survived intact, preserving the uniqueness of this place. However, throughout history, changing socio-economic conditions and needs have resulted in some transformations on spatial formation of the settlement, farmland pattern, property relations, social and cultural structure, landscape amenities, landscape character and ecological formation in Karabağlar. As a result, Karabağlar started to lose its very essence of being an inseparable component of

Muğla town. This situation has brought about the conservation problematic of the main assets and unique settlement character of Karabağlar and its essence.

The case area this thesis focuses on, cannot be considered just urban or just rural. With its peri-urban development structure, its scattered traditional houses on farmlands, seasonal migration and recreational capacity, Karabağlar differs from Turkish villages[4]. Seasonal migration makes the residents of Muğla town multi-spatial.

Functional dependence and reciprocal interaction between Muğla and Karabağlar have been the basis of a certain social life and structure in the town. The cyclic movement that establishes the dependency and interaction between Muğla town and Karabağlar is a typical example of temporal continuum. With rapidly changing conditions in the last century, Karabağlar is not functionally dependent on and does not reciprocally interact with Muğla anymore, which broke the continuum relations. This functional shift in dependency has transformed the socio-spatial pattern and the hierarchy between these two settlements.

The aim of this thesis is to lay down ***the physical, social, and cultural changes*** *and* ***the broken town-'bağ' continuum*** *arising from* ***the changing conditions of time*** *prevalent in the transforming settings of 'bağ' settlements through the case of Karabağlar, Muğla and search the reasons behind these changes in order to present the* ***conservation problematic****.* This thesis searches the changing role of *'bağ' settlements in relation to the changing conditions and requirements and put forth the* ***transformation of settlement pattern, settlement character, land use and social structure.*** In detail, this thesis searches how the practices, the landscape values and meanings have changed in 'bağ' settlements over time, while the landscape pattern and character are changing. It further evaluates the present and the future of 'bağ' settlements and their conservation problematic with reference to their historical formation.

Karabağlar is a typical 'bağ' settlement, which is still subject to change and has all the problems we mentioned above. The space organization of Karabağlar, its settlement plan and the developmental sequence of its settlement pattern over time is evidence of this change.

[4] Turkish villages are known as the nucleated type of settlements and has no seasonal dependence with the towns. A detailed comparison of village and bağ settlement is done in Chapter 2 and 3.

This region is chosen for the study as it is a concrete example of the degradation of farming practices and landscape, loss of unique local character as a result of deteriorated environmental coherence.

First, this study assumes that *the significance and the role of 'bağ' settlements in Anatolia have been eroded with changing social and economic conditions throughout centuries. The seasonal movement that constitutes the base of economic viability ended. With changing needs, farming, once regarded as the major function of 'bağlar' has been largely relinquished to recreational functions.* The farmland pattern has substantially transformed with changes in land use and changing factors. Today, arable and qualified farmlands of 'bağlar' in Anatolia suffer from the penetration of urban life style into the landscape pattern of 'bağlar'. Especially the rearrangement of lot sizes and the density of pattern with second houses preclude the continuity of original landscape pattern of farmland. This thesis examines how the changing factors in the past and present have transformed and influenced the spatial pattern of 'bağ' settlements in the case of Karabağlar/Muğla.

Another consequence of these transformations is *the new ways of utilizing land* on 'bağ' settlements. Being *non-compatible with the local existing land uses*, they create a patchwork structure on the settlement pattern. Increasing land rents and changing ownership status also accelerate the conversion of lands from farms to recreational and residential areas. In this respect, the thesis evaluates conflicting land uses arising from land speculations and changing property relations thereof in the case of Karabağlar/Muğla.

Third, some *unique natural and cultural components, which constitute the 'bağ' settlements' character, the settlement pattern and ecological diversity, are in danger of depletion*. The thesis researches into this depletion process and its effects on the outstanding natural and cultural features and on the morphology of 'bağ' settlements with a particular focus on socio-spatial and economic changes in the case of Karabağlar/Muğla.

If summarized the issues, the study concentrates on the transforming farmland pattern, transforming spatial form, changing ownership structure and relations, therewith changing socio-cultural structure, lifestyle, changing land use and unique settlement character. In this perspective, it aims at defining the 'bağ' settlement pattern and its specific landscape components and revealing the structure of 'bağ' landscape in terms of their contribution to

the characteristic of the area. It discusses how the indigenous 'bağ' pattern and socio-spatial structure have formed and transformed in a historical process, how the original pattern has been structured related to land use and morphological formation and how this formation and its character can be preserved. In this scope, the housing and particular settlement character, its harmony with its environment and respectful and responsive consideration shown by the first inhabitants that clarify the lifestyle and cultural formation of the settlement are discussed.

The main research questions are as follows:

- What is the settlement quality of Karabağlar?
- What is 'bağ' as a social entity? What is its difference from vineyard and orchard?
- What constitutes the settlement character of Karabağlar?
- What changes have the natural, historical and cultural assets of Karabağlar, its character and the Muğla-Karabağlar continuum gone through in different periods?
- What will be the conservation approach to perpetuate the unique *reason d'etré* of Karabağlar?

1.2 The Method of the Study

'Bağ' settlements represent a socio-cultural setting for town residents along the urban-rural continuum. The mutual dependence of 'bağ' settlements and towns, as well as their spatio-temporal formation put forth their significance; therefore, this thesis explains 'bağ' settlements, their existence of being and overall character by means of ontological assumptions of Heidegger and Norberg-Schulz.

'Bağ' settlements in Anatolia have a historical background and differ greatly from the concept of viticulture in the world. In terms of seasonal dependency and social interaction with the city, 'bağ' settlements do not correspond to any type of settlement in the literature; therefore, the original word 'bağ' is used in the thesis. Nevertheless, settlement concepts from among the world that have the closest resemblance to the 'bağ' concept have been scanned and used for comparison purposes to learn from the conservation practices of Europe and America.

This research displays that the main factors behind the changing of the landscapes in the world differ from those in Anatolia; however, more or the less, the outcomes of the transformations seem similar. In terms of their closeness to city center, recreational opportunity they offer and the scattered structure they have on the peripheries of cities, 'bağ' settlements correspond to the concept of Roman villa and European countryside to some extent. In ancient times, Roman villa was self-sufficient country farmstead, mostly seasonally used by city residents. British countryside was first an adopted version of Roman villa. The countryside, the product of British landscape, is associated with escape from big city life, return to the land.

The fate of the transforming countryside has been in the agenda of Western European countries since the end of 19th century. The main reason for this early awareness of this problem was the devastating results of suburbanization on the surrounding landscapes of the cities after the Industrial and Transportation Revolution. In United Kingdom, the prime farmlands of the countryside were under the threat of high-density urban functions. However, they took immediate actions and developed strategies against this threat to conserve the natural and cultural heritage of these settlements. Many urban planners, urban sociologists and ecologists contributed to the literature of changing landscapes. While Mumford (1961), Ingersoll (2006), Couch et al. (2007) were dealing with the urbanization process on landscapes and land-use changes in their books, Cloke and Goodwin (1992), Cloke (1997), Marsden (1999), Furuseth and Lapping (1999), Heimlich and Anderson (2001), Antrop (2000, 2004) wrote on the transformation process of countryside in Western Europe and United States. The assessments of these writers about the changing of landscape in countryside contribute to this thesis, increasing the understanding of the global factors behind and the negative consequences of the transformation process in countryside. Their approaches to the conservation of the particular character of countryside settlements are guides to the evaluation of conservation practices in different countries.

By means of investigating the transformative influences over the farmlands, distinctive settlement character, land use and ownership pattern of landscape and 'bağ' settlements in the case of Karabağlar, the thesis intends to extend the theory of changing landscapes to Anatolian peninsula, a different geography beyond Western Europe and United States. In this respect, the method of this study is to analyze *the transformation of Karabağlar/Muğla and the loss of its character and uniqueness in a historical context.*

The thesis intends to make a qualitative evaluation of the problematic consequences. In Table 1.1, the main data sources, data collection and analysis methods, findings and the objectives of analysis are listed with its dynamics towards a conservation planning in the Karabağlar case area. The main sources used in this thesis are the literature review, land records, questionnaire results, aerial photography and visual and written documents.

The main data collection methods in this study are inquiry into the subjects of ownership pattern, land allocations, land use, heritage and a field analysis. This kind of inquiry will help to analyze how different socio-economic factors and political decisions have affected the land allocation and property relations of Karabağlar. The original pattern in Karabağlar, its socio-spatial transformation and change in land use over years are identified with an inventory research of land allocation utilizing data obtained from the Register of Deeds Office of Muğla.

In addition, today's land use and landscapes are compared with the past based aerial photos from 1972 with the flight scale of 1/15 000, 1992 with the flight scale of 1/35 000, which are received from General Command of Mapping and Google Earth (2010). Numerical and graphical analysis of land is carried out and maps of land-use are prepared; then, the main changes the property pattern has gone through are presented. The number and location of farmlands and their spatial formation and distribution in different time horizons, land use character, all morphological and structural transformations, and the traces of indigenous pattern are detected from this numerical and graphical analysis. The analysis of the aerial photographs is expected to reveal changes in land use over the years of, the type of the transformation and the characteristics of the change in the land-use. The analysis of data is also expected to help discover the potential threats on Karabağlar. Field surveys and landscape photography are used to verify of the results derived from the aerial photographs and parcel data. Memories and Personal experience of the residents is another data source, which helps to fill the gaps in some historical stories related to the area.

Table 1.1 The method of the dissertation

MAIN SOURCES	DATA PROCESS	FINDINGS	OBJECTIVES
LITERATURE REVIEW	• Comparison of the property relations in different periods • Historical evolution of 'bağ' settlements in Turkey • Countryside settlements in the world similar to 'bağ' settlements	• Historical formation of 'bağ' settlements • Property relations since 12th century • Ownership pattern • Similar problematic 'bağ' settlements and related planning policies	TO DETERMINE **THE SIGNIFICANCE AND UNIQUENESS** OF 'BAĞ' SETTLEMENTS
LAND RECORDS	• Chi-Square tests for non-parametric and categorical analysis • Overlapping with the map and creating thematic maps	• Parcel details • Land allocation (land division and unification) • Land allocation year • Parcel sizes • Location of parcels	TO REVEAL **THE CHARACTER OF THE SETTLEMENT** AND TO DETERMINE **CHANGING LAND USE**
QUESTIONNAIRE	• Means of some continuous data in order to find their distribution in the categorical data • Frequency analysis of all the questions in order to find the central tendency • Chi-Square tests for non-parametric and categorical analysis	• Historical formation • Characteristics of the buildings • Demographic information • Identity of inhabitants • Recreational choice of the residents • Awareness of residents about conservation site	TO INTRODUCE **CHANGING LAND USE AND CHARACTER**
AERIAL PHOTOGRAPHY	Comparison of the aerial photographs •1/15 000 (1972) •1/35 000 (1992) •Google Earth (2010)	• Land use changes • Formation of new neighborhoods • Increasing housing stock (second housing)	TO DETERMINE **PHYSICAL TRANSFORMATION OF SETTLEMENT PATTERN**
VISUAL AND WRITTEN DOCUMENTS	• Field survey • Memories • Photographs • Mapping • Copies of title deeds	• Experiences of the residents • Landscape qualities and richness • Qualitative and quantitative land use changes	TO DETERMINE THE **UNIQUENESS** OF KARABAĞLAR

In the thesis, 200 landowners who live in Karabağlar completed the questionnaire. They were chosen randomly. The questionnaire provides clues about the origins of the settlement, the identity of the landowners, their livelihood, agricultural production, the type of architectural buildings, cultural habits of the residents, their lifestyle, and their sensitivity to the values and identity of the setting. The outcomes shed light upon the residents' perceptions about land-use changes. In addition, informal interviews, observation and photography are applied to obtain qualitative data. Visual materials such as copies of the title deeds, landscape photography help to support the questionnaire. Finally, quantitative and the qualitative data is analyzed in order to contribute to conservation planning and management strategies.

1.3 The Scope and the Structure of the Study

The scope of the study is to provide a framework including the original natural and cultural assets under threat through an analysis of transformation on spatial structure, land use and ownership pattern. Therefore, it studies the setting of Karabağlar in terms of its historical formation, analyzes the dynamics of land-use practices that have created the essence of Karabağlar, its unique character, as well as evaluating the existing conservation practices.

A previous research on Karabağlar was the master's thesis of the author written in 2004, 'Urban Growth and Conservation Problematic in Muğla, Karabağlar'. The thesis laid down the main assets and threats in general and evaluated the conservation plan of Karabağlar, which had been prepared and ratified by the municipality in 2003. However, the master theses had its limitations, so a research conducted on the significance and role of Karabağlar for Muğla town and the transformation process of this unique 'bağ' settlement was lacking. Therefore, this doctoral thesis goes one-step further and focuses on the dynamics of changes in the physical structure and the values and meanings related to changing structure by making ontological assessments. The thesis then describes the essence of Karabağlar and ascertains how the original natural and cultural assets have contributed to the formation and character of 'bağ' settlement. It researches into how the 'bağ' pattern has been intentionally or unintentionally transformed with changing conditions of time. Last but not least, it evaluates different approaches to the conservation of the settlement character.

Chapter 2 evaluates the theoretical background of 'bağ' settlements and explains the differences between 'bağ' settlements and vineyard and orchard through ontological assessments. It examines various settlement types throughout the world that have distinct features and bear resemblance to 'bağ' settlements, focusing on the trends in landscape transformation. The concepts of countryside, settlement character and conservation planning of unique countryside settlements are introduced, and the conflicts arising with the loss of settlement character, transforming farmland pattern and land use changes are discussed in terms of socio-spatial transformations. The consequences experienced due to the transforming landscapes in countryside of Western Europe and United States and specific conservation practices are examined.

Chapter 3 introduces firstly the natural and socio-spatial structure of the province of Muğla in order to describe the geographical location of Karabağlar in the region and the hierarchy between the settlements. In this context, the morphologic structure, historical development, demographic composition, geologic and geomorphologic structure, climate, land assets of Muğla and Karabağlar are explained. What follows is the description of the original 'bağ' pattern in Karabağlar. With its settlement pattern and seasonal dependency (traditional seasonal migration) on the province, it appears to be a typical formation of socio-spatial organization. This chapter depicts the changing spatial layout of Muğla and Karabağlar in a historical process. Property relations being the indicator of the transformation of the land-society and the historical formation of the settlements, this chapter explains how the ownership pattern has formed and changed over time in different locations of Karabağlar (land allocations: subdivisions and land amalgamations). Land regulation and tenure system observed in Anatolia, Menteşe and Karabağlar since 12^{th} century is evaluated in order to trace transformation in the physical environment, change in land use, habits and lifestyles of the inhabitants including the values and economic dynamics.

Chapter 4 evaluates the spatial transformations on the lands of Muğla and Karabağlar as to socio-economic changes. It examines how the economic and social developments in different periods affected the land use and spatial organization in the province. Muğla, its neighborhoods and nearby villages are considered together in terms of the changes that have occurred in land use over the years. The development plans are evaluated for the purpose of observing the land use transformations and the changing social space of Karabağlar.

Chapter 5 includes a review of field studies carried out in Karabağlar/Muğla and statistical evaluation done in these studies related to land allocation. The chapter also presents the questionnaire, which probes the transformation process, obtaining numerical and visual results (thematic maps). Based on these results, the main socio-spatial transformations, the profile of the inhabitants and the land use practices are categorized and described in this chapter.

In Chapter 6, the spatio-temporal transformation process 'bağ' settlements have gone through is evaluated in a wide range of aspects. It further discusses the changing role and significance of 'bağ' settlements, land use conversions on pattern and loss of the particular 'bağ' character within a town-country continuum. The Karabağlar case is evaluated in terms of its natural and cultural existence of being. The key concept of uniqueness is highlighted. The main assets, threats and conservation objectives in Karabağlar are placed in a conceptual conservation-planning framework. This chapter also discusses the theoretical and practical significance of the dissertation. Finally, this part includes some concluding remarks concerning the conservation strategies towards the perpetuation of Karabağlar's being.

Figure 1.1 displays the content of the chapters and the development process of the study.

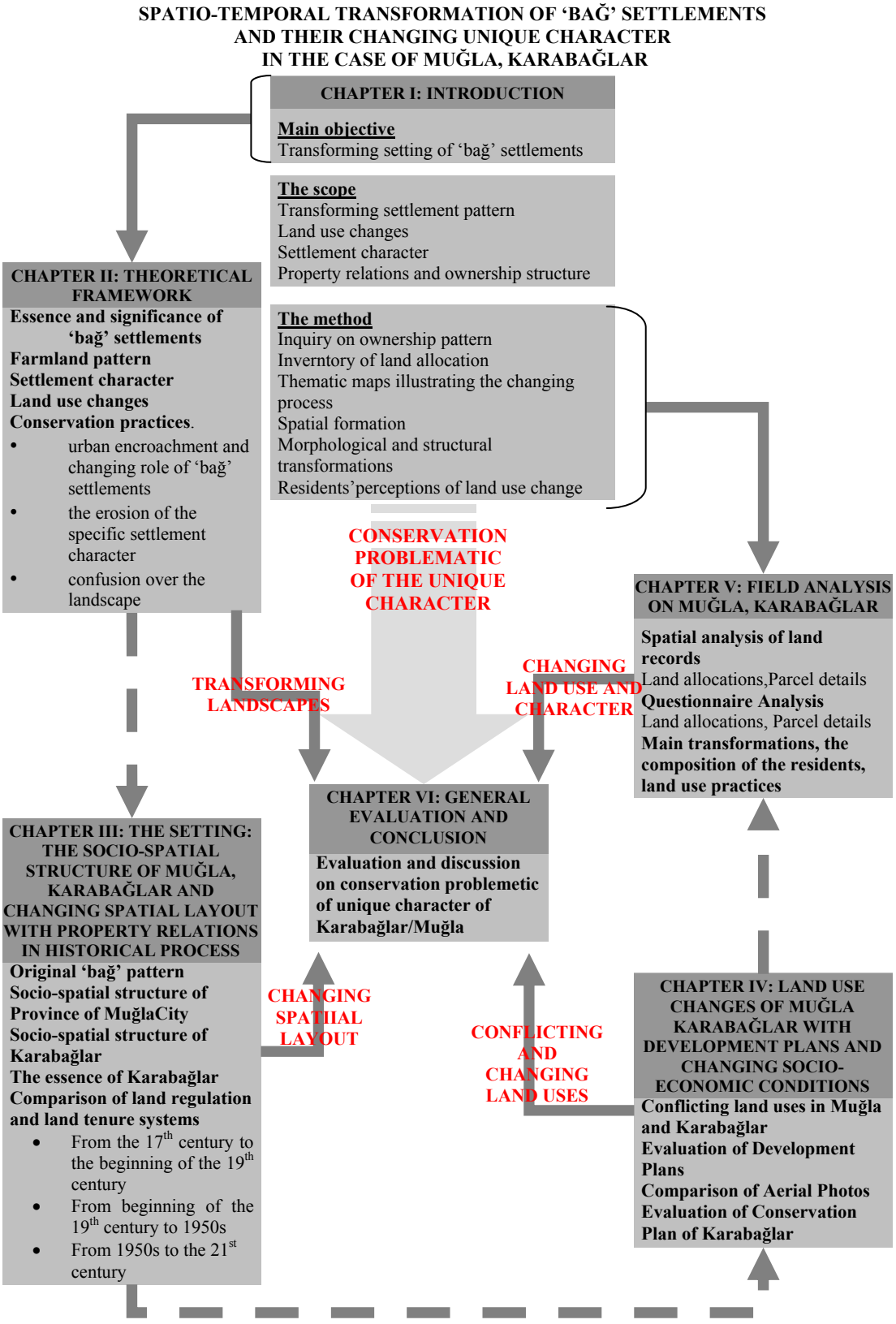


Figure 1.1 Conceptual diagram of the Chapters

CHAPTER 2

THEORETICAL BACKGROUND

2.1 Introduction

'Bağ' settlements have 7500 years of historical background in Anatolia. However, most of them have not been able to preserve their distinct original settlement pattern, which have characterized the social life throughout centuries. Therefore, the remnants of these 'bağ' settlements, which are historical in perspective, can be considered the outcome of a dynamic and transformative process occurring in regular spatial and temporal patterns.

'Bağ' settlements are the social and cultural products of interaction between the Anatolian town and Anatolian countryside. In terms of socio-cultural, historical, geographical formation, it is hard to find a type of settlement that matches 'bağ' settlements in the world literature. However, other unique country settlements exist, representing a particular character with their cultural and natural beings, and landscape pattern. Being the outcome of both urban and rural practices, the concept of countryside in the Western world may be accepted as the counterpart of 'bağ' settlements.

In the recent century, the developments in economy, technology and transportation have altered the preferences and needs of people by influencing the lifestyle and the building practices. With the impact of these advances, unique settlements (bağlar, yaylalar, countryside) located on the urban peripheries were subject to spatio-temporal transformations.

Concerns about the conservation of these unique settlements that are historical in perspective arose with the negative consequences of the transformation process in the last century. Behind this process there are many socio-economic driving forces; however, this chapter deals with the subject from the viewpoint of the impacts of transformative developments on

unique settlements and draws the negative consequences of the transforming countryside with a review of literature. As a matter of fact, the main problems on unique settlements located on the peripheries of the cities are as follows: the transforming farmland pattern, land use conversions, loss of particular settlement character and their conservation problematic by the administration and the society. Actually, the conservation plan is the cornerstone of this thesis, which investigates the changes in land use, values and meanings.

Conservation is a human action and thought. Accordingly, the natural beings and space are the objects of conservation. Humans find the essence of unique settlements worth of preservation, which leads to the different conservation approaches and practices. This thesis assumes conservation as an element of ontology and evaluates 'bağ' settlements through ontological arguments.

In this framework, socio-cultural relations are the constitutive component of Anatolian town and 'bağ' settlements. Regarding the relation between these two settlements, the thesis goes beyond their physical substances into their cultural essence. Against spatio-temporal transformation of 'bağ' settlements, conservation problem of their distinctive essence is evaluated in terms of their socio-cultural relations, formation and persistence. In order to understand the role of 'bağ' settlements, the thesis seeks answer to the following question: 'What does 'bağ' settlement mean for other beings and human beings?' Therefore, the thesis defines the essence of 'bağ' settlements and tackles with their conservation problematic as an ontological problem.

To further clarify, this chapter first explains the significance and essence of unique country settlements (countryside) in an urban-rural continuum by making ontological assessment and drawing similarities to 'bağ' settlements in Anatolia. Furthermore, it asserts the cyclical movement and mutual dependence between Anatolian town and countryside depending on the concepts of 'yaylak' and 'kışlak'. The chapter specifies the essence of 'bağ' settlements underlying the similarities and distinctions between 'bağ' settlements and orchards and vineyards. It further discusses the changing socio-economic conditions and their impacts on the transformation process of the countryside settlements and goes on to explain the negative consequences of transformative process on the uniqueness of historical settlements in the countryside. The chapter derives from practices throughout the world. It also puts forth the

significance of unique settlement character and finally evaluates the increasing awareness of the conservation planning practices of Western world in comparison to Turkey.

2.2 Ontological Conceptions

Ontology is the *'theory of being'*. It comprehends the being as it is appears. The existence of being is the way of understanding entity as entity in terms of temporal dimensions: past, present and future. Therefore, in this part, the entity and its essence is discussed through ontological assessments. Concerning the existence of being, with his philosophical assumptions about 'the question of being', Heidegger focuses on the ontology by using phenomenology in the 20th century. In architecture, Norberg-Schulz (1980) introduces the phenomenological ontology about the concept of existential space.

Heidegger refers to the human being in the world with the German word *'Dasein'* or *'being-there'* because human being is aware of other things. Access to what appears defines what those things really are. Therefore, the being of entity rests in the understanding of entities with consciousness. Dasein determines the character of the beings in an *awhileness of temporal particularity*. "…Dasein in its being there for a while at the particular time" (Heidegger, 1999, p.5). It does not mean an isolation of self from other individuals. The being of individual depends on the existence of others and the surrounding context. Dasein is the concrete expression of being in a cultural and historical context regarding to community's practices and shares. It means being with the others and sharing the same world with the others. The experiences of the people represent the entities in many different ways. The initial experiences and practices determine how people understand 'being' to this day. The entity of Dasein is the unity of involvement in the world. Entities and their being are the results of temporal and spatial events.

Time initially breeds changeable entities; therefore, change stays in time. Events take place in time. Some events that alter Dasein constitute the past. "Being futural gives time, cultivates the present and allows the past to be repeated in how it is lived" (Heidegger, 1992, p.14). Past is no longer present, and future is indeterminate present so that the sequence of time is in singular direction. Nevertheless, with technological developments, everydayness encountered in the present's particular temporality that cannot see what is past.

Günay (2009) explains the conservation problematic of natural and cultural beings with ontological argument of natural beings and space with a reference to the concept of Dasein. He defines technology as *the process of enframing* that depends on the full power of man in mastering the earth. “Consequently, instead of a world of meanings, the Da-Sein is left with a pile of functions through which nature and its own past is continuously consumed” (Günay, 2009, p. 124).

Technological developments as a product of rational and calculative thinking arise with the change and control over the nature. Heidegger defines technology as ‘a means and a human activity’ and explains the technological understanding of being as a pursuit of order for everything that causes destruction and loss of not just nature and culture but also human mind and understanding. Heidegger supports that the dominance of the technological understanding of the world reveals itself as an alienation from the environment, an *existential sense of homelessness*.

The existentialist view sees our attitude toward the natural environment as an instrumental approach in which environment is a passive object rather than an active subject. Heidegger asserts that human is separated and alienated from the natural world; however, the human essence is not an isolated being (Barry, 1999).

Ontological assumptions of Heidegger focus on a new way to care for human nature and environment because the desire for a place can be only obtained when the material problems are resolved. Place construction should be about *the recovery of roots*, *the recovery of the art of dwelling with nature* (Harvey, 1993). Dwelling is the basic character of being. Heidegger defines *'dwelling'* as "The way in which you are and I am, the manner in which we humans are on the earth, is ‘Baun', dwelling. To be a human being means to be on the earth as a mortal. It means to dwell "(Heidegger, 1971, p.147). He defines the world as the house where mortals dwell. Here, ‘dwell’ means to stay in a place. Human being is a mortal staying (dwelling) on the earth. ‘On the earth’ has a meaning that includes belongingness of all the beings to one another. To dwell also includes the meaning of protecting, preserving, caring, saving and cultivating. Heidegger (1971) suggested that the idea of saving is bringing something back into its essence more than turning back to its original form. This means that

saving does not only guard something from danger, but also sets something free into its own presence.

Norberg-Schulz (1980, p.5) uses Heidegger's term *'dwelling'* to explain the concept of *genius loci (spirit of place)*. He does not see the places independent from the lives. "A place is a space that has character". Dwelling of man in an environment and his experiences and belongingness to that environment implies *the sense of place*, which constitutes the concrete reality of man. As Heidegger's term 'Dasein' defines, *belonging to a place* necessitates approaching places as *social entities*. Place is something more than physical location; they are the product of experiences and practices.

Places are qualitative totalities in which a concrete phenomenon constitutes the whole. As these concrete phenomena are interconnected in Gestalt theory that they cannot be held isolated. "A place is therefore a qualitative, 'total' phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight" (Norberg-Schulz, 1980, p.8). He points at the place as an integral part of existence. The concrete things that have material substance, shape, texture and color determine an *environmental character* as *the essence of place*.

Acts and occurrences are the functions that take place on a locality. These functions may be similar but always take place with different properties, in different ways, in different cultural structure and environmental conditions. Therefore, according to local circumstances, every place has its particular identity that constitutes the genius loci. With their distinctive features, all the places have a *specific character*.

Norberg-Schulz (1980) states that the fundamental distinction of natural and man-made environment is described with concrete qualitative terms of 'landscape' and 'settlement' and represented by the categories of outside-inside. Different elements may convert the nature into cultural landscape. While natural places are continuous extensions, the main characteristics of man-made places are concentration and enclosure. The presence of something starts in this enclosure (Heidegger, 1971). The structure of places can be analyzed with space and character. Whereas space marks three-dimensional organization of the components, character marks the distinctive property of any place. However, similar spatial

organizations may differ in character in terms of qualitative defining components. Norberg-Schulz (1980) indicates that things become meaningful when their characters are manifested.

According to Norberg-Schulz, the socio-economic conditions are not the determinants of the existences; however, they can promote, just as they can prevent the state of being:

> …the existential dimension is not 'determined' by the socio-economical conditions, although they may facilitate or impede the (self-) realization of certain existential structures. The socio-economical conditions are like a picture-frame; they offer a certain 'space' for life to take place, but do not determine its existential meanings. The existential meanings have deeper roots. (Norberg-Schulz, 1980, p. 6)

Apart from the existential dimension, the socio-economic conditions may alter the relations of the beings in a particular time and space.

The following parts of this chapter explain the significance and essence of unique settlements on the peripheries of cities and their overall character with reference to world's literature. Then it evaluates the essence of 'bağ' settlements (Anatolian countryside) in a spatio-temporal dimension within context of changing socio-economic conditions and discusses the mutual relations of the beings with the 'bağ' context depending on the mentioned ontological assumptions.

2.2.1 The significance and essence of unique country settlements in a rural- urban continuum

The significance is the character of the world's beings. The significance of unique settlements lies in the characteristic of the 'disclosedness of Dasein' at a particular time. Therefore, the significance and the essence of unique country settlements as the product of urban and rural processes can be better understood in their own spatio-temporal formation.

In general, there is a tendency to distinguish between 'town' and 'country', 'urban' and 'rural' in terms of spatial and sectorial dimensions. As a popular sentiment, in this dichotomy, urban and rural settlements are at the two opposite ends of human settlements. Censuses and statistical researches usually assume agriculture as the principal activity of rural populations whereas industrial production and services as the primary activities of urban populations. However, in reality, there cannot be a sharp discrimination between urban and rural settlements and populations, especially if there are population movements,

temporary and seasonal migrations and socio-economic dependencies between urban and rural settlements. It is unable to isolate country settlements from cities, especially the ones that have both urban and rural activities. They may range from small traditional rural settlements to villages and hamlets and from peri-urban agricultural lands to areas of extensive arable farming. These settlements are a combination of town and country because they are socio-cultural beings produced by both urban and rural practices.

In terms of morphology of settlements, Kostof (1989) considers the classic dichotomy of the town and country, urban and rural as a visual contrast. He accepts the two distinct words as the two aspects of a single continuum. He explains the *rural-urban continuum* as a seamless physical continuity of time and place. He criticizes the view that the city is a distinctive unit on grounds that countryside also presents architecturally distinguished villa and its landscaped setting in a pattern of fields. Moreover, the city form depends on the initial systems of property pattern, farming practices and the disposition of common fields and pastures. He states that there has been a *mutual dependence of town and country* for centuries. He explains this dependency as the continuous processes of settlement: "The traditional labor of the farmer and the husbandman, set in the plains and pleats of the land and subject to seasonal rhythms, stands in millennial juxtaposition to the affairs of the city" (Kostof, 1989, p.112-113).

As can be seen here, the dependency of town and country is a spatio-temporal continuous process. When this continuum is broken with technological and rational developments, discontinuity changes the existing role and significance of settlements by alienating them from their cultural, historical, traditional, local characteristics.

Populations have had an impact on this dependency, too. In many country settlements, the population is a combination of urban and rural residences because of seasonal migration and mobility, and in these settlements households can be defined as "*multi-spatial*, combining farm and non-farm activities and rural and urban residences" (Tacoli, 1998, p.149).

Some of these country settlements present unique examples of rural and urban features and processes, which are historical in perspective. They usually have the characteristic of being the socio-cultural product of urban and rural processes because the historical formation of

these settlements depends on economic, social and environmental interdependency between urban and rural structures.

The components of traditional country settlements are the products of present and past human transformations of the natural environment; therefore, they have a historical significance. It has been widely observed that they have particular attributes, which give them a distinctive character. These definitions suggest that unique country settlements on the peripheries of cities are a combination of natural and cultural values. In this respect, the essence of unique country settlements depends on the diversity of natural and cultural values (beings) characterized with spatial organization (ownership structure and settlement pattern), farmland pattern (production), ecological formation and landscape components (the coherence between the nature and human), settlement character, social and cultural structure and lifestyle of the inhabitants.

Spatial organization is the result of man-environment relations, which take the form of collective land use. As an outcome of collective actions, social organization constitutes a spatial organization on natural environment. How the landscape is structured is based on people's subjective understanding of the natural environment. To this respect, spatial organization of settlements depends on the existence of a collective symbol as built environment. The ownership structure, which defines the territory, is the determinant factor of space configuration (Barlas, 2006). Therefore, the settlement pattern is the historical evidence of the spatial organization and ownership structure of the past.

Throughout centuries, property relations, farming practices and the disposition of common fields and pastures, which constitute the ***farmland pattern***, have structured the towns and the countries. It is the result of productive activities in a context of human-land relations. Apart from its visual effect, it provides a means for agricultural production, which has been the main means of subsistence for the inhabitants for centuries. In the early times, the interdependence among towns and the country settlements mostly depended on the production relations: "… people settled in the most fertile areas, since the lack of transport facilities meant they had to live where the food was being produced. Production, processing and consumption were thus located in close proximity" (Leeuwen and Nijkamp, 2005, p. 11). This proximity created a pattern of compound farming of orchards, vineyards, pastures on highlands or lowlands. With industrialization, a new kind of pattern of suburban, sprawl and

growth became widespread on the spatial pattern of farmland in country settlements. Today, the farmland pattern preserves its significance to perpetuate the social entity of settlements and their visual values.

The ***ecological formation*** of the settlements defines the natural and agricultural morphology of the settlements. The consistency of land use with natural environment means environmental coherence, which contributes significant ecological values to the settlements. Unique settlements are the products of unique geographies in an environmental coherence. The physical attractiveness of the settlements depends on the fundamental unity of ***the landscape components***.

> Elements of the landscape, forming the skeleton of scenery, are recognized as being fundamental and permanent determinants of scenic quality. Particular emphasis is laid on physical components on the assumption that 'in the appraisal of landscape, the form of the ground and the nature of geomorphological processes are normally regarded as being important ingredients. (Crofts, 1975, p.124).

Settlement character is what makes a settlement unique. It is a distinguishing feature that makes a landscape different from others. To determine the character of a settlement, one needs to identify the natural and man-made features, which bears the *'sense of place'*. Hence, the natural and man-made features are the natural and cultural components that make a locality distinctive. Therefore, character is the basic determinant of *how* the settlement is formed and differentiated from other settlements.

Every place has a particular character that is the product of collective experiences. "Character is denoted by adjectives. A character is a complex totality, and a single adjective evidently cannot cover more than one aspect of this totality. Often, however, a character is so distinct that one word seems sufficient to grasp its essence" (Norberg-Schulz, 1980, p. 16)

The first impression you get when you see a landscape may draw a mental picture, which lends itself to rich physical description. Descriptive language such as large farmlands and orchards surrounded with hedgerows, high mountain rows, deep forests, small village houses scattered on the agricultural lands, water streams flowing through a plain, clean and fresh air, serenity, etc. may be associated with the settlement character; however, it is more than a picture in a postcard. It is hard to define a settlement character precisely; it changes according to the perceptions of different groups of people from country to country (Tilt et al.,

2007; Merrill, 2000). The character of a settlement is the sense of landscape that one perceives there as a result of its uniqueness, cultural and natural heritage or natural or cultural landscape elements dominating the general scenic view.

With a traditional approach, Buttel et al. (1987) assumes that the overall character of a place defines the values and the behaviors of the residents. It signifies the intimate social interaction, the traditional values and homogeneity of the residents in the settlements.

Another factor distinguishing a particular landscape from the others, thus rendering a settlement its character, is landform (geology, topography, and morphology), land cover (vegetation, soil structure) and land use (cultural, social and economic activities) qualities. Settlement character is particularly structured by productive activities such as farming, horticulture, viticulture and human-land relations (Goodwin et al., 2000).

In general, settlement character includes values regarding to traditional lifestyle, landscape, cultural activities, historic and aesthetic attributes that are defined by the local inhabitants and accepted by the generations. The land use pattern and the relationship between the pattern and the community enhance the characteristics of the settlements. Each user of a settlement may have a different image of the settlement character. While a farmer sees it as the farmstead, an urbanite may see it as a recreational open space. Therefore, it is controversial to make a common definition of the settlement character. However, every settlement must define its overall character as precisely as possible in order to foster its sustainability and preserve it against urban encroachment. This may be done by highlighting the unique elements, which characterize the settlement such as attractive visual landscape, predominant land use pattern, collective lifestyle and cultural and historic attributes.

Settlements are the geographical territories of societies sharing a ***common culture and social structure***. Culture is transmitted in space and time. Values, knowledge, customs and traditions are the components of a cultural heritage and transmitted from one generation to the next in a society (Oliver, 1989). In addition to cultural formation, social patterns depend on the collective identity and traditions of the local residents. Lifestyles, status, social organizations are the components of social structure, which help the members of the

community, socialize. The permanence of settlements depends on the preservation of cultural and social structure and essence of the settlements.

Nevertheless, these values defining the uniqueness of country settlements display diversity across different localities in the world. In the Western world, the widespread concept used for the country settlements on the peripheries of cities is countryside. The city and the countryside also depend on each other, which is evident in the mobility of the people, goods, social and economic transactions. However, owing to this dependency, countryside differs and presents varying characters in different geographies, countries and periods.

2.2.2 Countryside

Countryside implies a country-oriented lifestyle conjuring up images of agricultural production, where landscape pattern is man-made and human activities are dominant. It is commonly used with reference to the amenity value of the landscape (Bunce, 1994). Countryside is characterized with a land use devoted to farming, low population density, scattered small to medium sized settlements, less developed means of transportation and infrastructure and limited access to services and amenities compared with larger urban centers (A Review of Urban and Rural Area Definitions Project Report , 2002).

Countryside has existed in the world since the 4th century. It is very much an English term. However, the first examples of countryside were seen in Rome in the form of villas in a landscape setting. The Roman villa was the common form of farming residence in the countryside. It was not merely the locations of farmers. Rich and powerful merchants and elites, as well, were using villas for recreation. Cengizkan (2002) indicates that villa that arose in countryside has been an extension of city since the 15th century. Since then, there has been a dependency between city and villa because villa does not have production that is efficient enough. They present opposite values and life styles. Thus, he describes villa as the satellite of city in the countryside.

The British countryside has a long history of several hundred years, dating back to the Middle Age. Roman culture is adopted in Britain with Celtic chiefs; therefore, the British countryside is an adopted version of Roman villa and countryside. In the Medieval time, the

British countryside generally took two forms: nucleated type and scattered type. The nucleated type appeared around the beginning of the eleventh century and dominated about a half of the countryside. The development of the common-field system of arable farming was effective in the formation of this kind of countryside. However, since the Anglo-Saxon times, scattered farms have been the common elements of very old dispersed pattern of settlement. In the middle ages, with the increasing population, new types of settlements that were further dispersed emerged (Mingay, 1990).

The medieval countryside formed as a result of a communal agreement of common-field farming system. The farmers would expand their fields as needed depending on the organization. Surplus lands were kept as common lands. Farmers had the right to cultivate the common lands in the middle ages. There was a measure of seasonal migration of farm workers round the countryside in the busy seasons. In the late middle ages, as a result of Feudal system, manors came up as the unit of estate administration. The landlords who possessed rights on the manors were controlling the lands and the inhabitants (Mingay, 1990).

In the 18th century, there were great landowners (bourgeoisie) of landed property in the countryside, who used to live in the city in winters. They constructed their weekend houses in their private gardens, which they were visiting in summer for their aesthetic and recreational pleasure. In the middle of 19th century, common lands and fields were alienated to private property and were transformed into belt of urban extension (Kostof, 1989). At the end of the 19th century, technological development of railway made it possible to expand into the surrounding countryside in England. Until the 20th century, the countryside had preserved its existence and its function of being the cities' backyards.

In the world of 20th century, countryside started to lose its essence and significance. The interdependence of town and countryside has changed in a way that these two concepts have become intertwined with each other because of mass production. The extensive road system, complex transportation network promoted the suburbanization (new neighborhoods) and attracted the urbanites to the countryside. The new suburban development areas became the extension of urban functions into the countryside (Mumford, 1961). Having experienced rapid transformation due to modernization, the former state of the countryside, which was

associated with escape from city life, returned to the land, became a periodic feature of Western social theory, being an alternative to the modern life of industrialized, urban society.

Today, people tend to flock to the countryside to live in many different kinds of settlements such as farms, villages, towns, and cities. The changing socio-economic conditions of the world are transforming the distinct patterns of country settlements and their character. The identity, hierarchy, syntax and unity that determine the character of these settlements are disappearing with the transformation of unique patterns into homogenous patterns (Ingersoll, 2006).

2.2.3 Anatolian countryside

Most of the precious unique historical settlements in the countryside of Anatolia have been unfortunately subject to a transformation process for centuries and lost their functional viability.

The Anatolian countryside ranges from nucleated settlements such as Anatolian village (*köy*), farmstead (*çiftlik*), ranch to dispersed settlements such as seasonal plateaus and plains (*yayla*), 'bağ' settlements, orchards and pastures. The Anatolian countryside is full of historical and cultural architectural structures originating in the Roman, Byzantine, Seljuk and Ottoman eras.

The earliest knowledge about the Anatolian countryside is credited to the middle ages. Just after the 7th century AD, the Anatolian countryside was utilized and operated. Noticeable changes took place after the 9th century AD, especially in the12th and the 13th century AD. In the Medieval age, the Anatolian countryside was characterized with small unobtrusive and often temporarily occupied sites (Vanhaverbeke et al., 2009).

The Medieval Anatolian settlements in the countryside were temporary in nature, which were part of a transhumance system with pendulous movement between summer pastures (yaylak) and winter sites (kışlak). This transhumance system continued between short and long distances until the 12th century AD, and just after the increasing domination of Ottoman

state, it was dissolved. Ottoman administration forced the nomadic or semi-nomadic communities to settle on the pastures and plains located at the borderlands of Christian communities (Özcan, 2006). In the Republican period, the social structure of the population changed and technical innovations were introduced, as a result of which a great amount of temporary settlements, which had convenient natural and environmental conditions, transformed into permanent settlements (Vanhaverbeke et al., 2009).

Today, many of the settlements in the Anatolian countryside, especially the ones surrounding the Anatolian towns have the functions of both producing food with farming and livestock farming and providing recreational opportunities for the town residents. These settlements are the product of nomadic and seminomadic communities[5]. The dependency between countryside and the town hinges on property relations, seasonal migration and livelihood opportunities. This dependency structures the physical setting of Anatolian countryside settlements.

Tuan (1977) explains nomadic cyclic movement with a connected path between places (Figure 2.1). This mobility has a strong relation with the sense of place.

> Nomads move, but they move within a circumscribed area, and the distance between the two extreme points of their peregrination seldom exceeds 200 miles. Nomads pause and establish camp at roughly the same places (pastures and water holes) year after year; the paths they follow also show little change. For Nomads the cyclical exigencies of life yield a sense of place at two scales: the camps and the far larger territory within which they move. It may be that the camps are their primary places, known through intimate experience, whereas the territory traversed by nomads seems more shadowy to them because it lacks a tangible structure. (Tuan, 1977, p. 182).

He states that the mobility of modern man is so much that he has no time to establish roots. Developing a feeling of a place takes long time; therefore, for modern man, experience and appreciation of place is superficial. “Sense of time affects sense of place” (Tuan, 1977, p. 186). In the modern world, being conscious of time and being there has lost its determining effect on the development of sense of belongingness to a place. Therefore, modern human beings lack a sense of place and pursue it in the past.

[5] Although they were migrating between two determined locations (yaylak-kışlak), these communities were called as ‘nomadic’.

In the last century, with modernization, the Anatolian countryside has started to lose its significance and role of being the main summer location of towns' people. Together with improvement in transportation and changing socio-economic conditions, the cyclical movement ritual that had structured the interdependence between Anatolian town and its countryside started to vanish. Hence, the sense of place is losing its effect on the formation of countryside settlements, so historical settlements are losing their natural and cultural beings and their unique character.

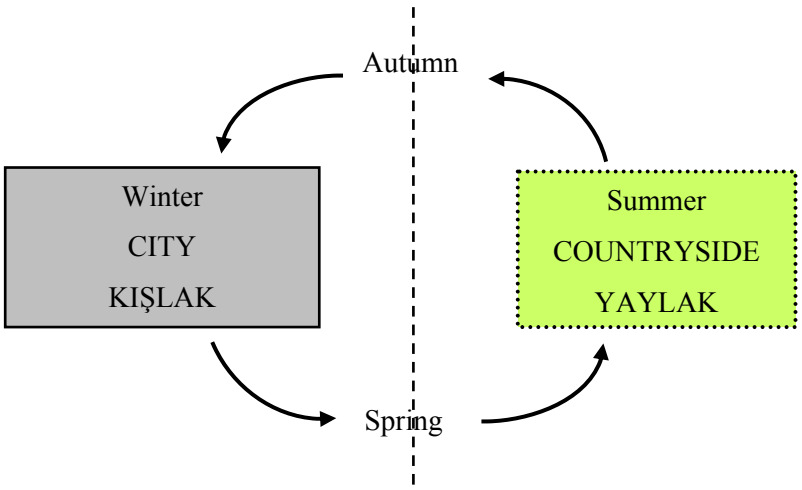


Figure 2.1 Cyclical (Seasonal) path of 'bağ' settlements
(Source: Redrawn by using cyclical model of Tuan, Y. (1977) p. 181)

2.2.3.1 The essence of 'Yaylak' and 'Kışlak'

Hayır and Tonguç (2007) explain the word '*yaylak*' as the summer camping ground. In ancient Orhun inscriptions, 'yaylağ', 'yayladım', 'yaylayan' were used as synonyms to this seasonal movement. Alagöz (1993) defines '*kışlak*' as the permanent locale where the winter is spent. 'Kışlak' may be a town, a village or a sheltered place on lowland.

Tunçdilek (1969) defines ‘yaylak’, ‘yazlak’ as a place where urban inhabitants spend the hottest time of the summer. He states that ‘yaylak’ having socio-economic functions is more than just a location of residence. It has social and economic connections with the towns and is the shared possession of the town’s people.

Alagöz (1993) defines ‘yaylak’ as the common property of the villages or towns, which are sometimes the second part of villages or towns connected to cultivated areas of the town or sometimes ‘bağ’ connected to town with its socio-economic contribution. They are generally on highlands where village or town residents move to in certain times of the year for farming, breeding cattle, resting and preparing food for winter.

Alagöz (1993) categorizes ‘yaylak’ in five main groups according to qualities of displacements and the roles of people, herd, pastures and towns:

1. Country house, countryside, ‘bağ’ settlements: In summers, residents of the Anatolian towns migrate to their houses in the countryside. This type of ‘yaylak’ is the residence of town inhabitants where they have their home orchard or vineyard, and on which they rest. The best example of this type of ‘yaylak’ is in Konya-Meram- Sille, Niğde-Karaarki-Sarıköprü-Kayaardı, Karaman-Kırbağı, Kırşehir-Osmancık, Samsun-Vezirköprü, Muğla-Karabağlar, Ankara and its 35 ‘bağ’ settlements.
2. Campsites of nomadic shepherd near spring, well or stream: Nomads visit many locales on Sultan Mountain every year. They regard and use these campsites as their own possession. e.g. Taurus mountains
3. House or house group with grazing area for the herds: People stay here just in summers.
4. A farmstead or village surrounded with grazing lands and fields: They are places equipped with agricultural facilities. All or some of the inhabitants of the village migrate to these spots.
5. High pasturelands: Village herdsmen migrate with their herds in the hottest months.

‘Bağ’ is a special type of ‘yaylak’ with historical significance. Just as many villages and towns have ‘yaylak’, cities and towns have ‘bağ’ settlements. Major examples to ‘bağ’

settlements are in the Central Anatolian Region. Ankara-Keçiören bağları, Dikmen bağları, Seyran bağları, Konya-Meram, Kayseri-Gesi, Kayseri-Erkilet bağları, Elazığ-Buzluk, Elazığ-Mürüdü bağları, Malatya-Aspuzi, Muğla-Karabağlar are the well-known 'bağ' settlements in the Anatolian countryside.

Today, many 'bağ' settlements are in danger of becoming the permanent settlements of the town residents. For example, before the Republican period, people were moving to any of the 35 'bağ' settlements surrounding Ankara. After Ankara became the capital city of Turkey, 'bağ' settlements in this city started to turn into permanent suburbs gradually. Şereflikoçhisar-Kozanlı Yaylası is another place, which hints at such a risk. It was once a 'yaylak'; now it is a permanent settlement. Similarly, Aspuzi 'bağ' settlement, which was once the recreational summer location of town residents, became the town center, now called 'Yeni Malatya' (San, 1955).

2.2.3.2 The essence of 'bağ' settlement

'Bağ' settlements historically constituted the typical examples of traditional settlements in Anatolia. 'Bağ' settlements in Anatolia can be considered neither urban nor rural, or they can be considered both urban and rural. However, it is crucial to differentiate 'bağ' settlements from villages because Anatolian village has never been subject to seasonal migration nor become a part of rural structure.

The origin of 'bağ' settlements in Anatolia goes back to 3500 BC. In the period of ancient Rome, Seljuk and Ottoman Empire, 'bağ' settlements had a great significance for the town economy and social life (Aktaş, 2002). According to dividend books (*temettuat defterleri*), they always took place in the agricultural structure.

'Bağ' settlements have been the summer locations of the urban dwellers because of nomadic tradition. They are the result of differentiation between summer and winter life. Cengizkan (2002) explains the differentiation of summer and winter life with circularity. The man solves the problem of adaptation to summer and winter conditions by building his summer and winter residences on different locations. However, the 'bağ' lifestyle has a greater meaning than this in terms of functionality. There is a differentiation between summer and

winter production types as well. In the ‘bağ’ settlement, the town man alienates himself from the monotone circular life order of city life and gets used to the new production type of circular life. This process provides the man breath of life to combat with the monotone city life cycle. With these characteristics, ‘bağ’ settlement is a kind of villa in the Anatolian peninsula. This does not mean that ‘bağ’ settlements are Anatolian versions of villas. On the contrary, similar lifestyles in different geographies create these counterpart residences.

In terms of physical formation, ‘bağ’ settlements in the Anatolian peninsula are generally located on hillsides or large plains with abundant ground water basement and cool climate. They are not entirely vineyards or orchards; however, ‘bağ’ settlements include vineyards, orchards and fields inside, so trees, grapevines, vegetables and flowers take place in a combination on a dispersed type of settlement. The houses are scattered on the orchards and vineyards of ‘bağ’ settlements contrary to the dense city settlement. The scattered pattern provides people with calmer and more intimate relations (İmamoğlu, 1992).

‘Bağ’ residences are temporary isolated structures, which are constructed on the most suitable location of the ‘bağ’ parcels. Migration to ‘bağ’ residences starts when the grape is mature and ends after the products of grape get dried (Kadıoğlu, 2010). Grape is the basic but not the only product defining the migration period. Vegetable and fruit production and leastwise stockbreeding are part of ‘bağ’ lifestyle.

With modernization and technological developments, the mutual relation and interdependency that constitute the essence and significance of ‘bağ’ settlements dissolved, so the inhabitants started to lose their sense of place. The rupture of dependence between the town and ‘bağ’ settlements generated the sociological debate about the essence of ‘bağ’ settlements and the consequences of the new transformative process.

In this part, the essence and the significance of one of the distinct Anatolian country settlements, ‘bağ’ settlement, is explained with a reference to ontological conceptions. Nevertheless, the debate on the transforming pattern of ‘bağ’ settlements and the alienation of man from ‘bağ’ lifestyle is not a local issue. In general, transforming country settlements is a problem in the whole world. In the next part, the negative consequences of the

transformative process on countryside settlements in the world are held to ultimately discuss the conservation practices of nations on this subject.

2.3 Negative Consequences of Transformative Process on Country Settlements

With the formation of transportation networks, improvements in automobile industry and communication after the Second World War, accessibility became a preeminent factor that triggers the mobility of people in the world. Once accessibility was achieved by transportation technology, the settlements with distinctive character began to transform, land prices went upwards and the particular settlement character started to disappear. So as to secure the continuity of the transportation, more landscapes were destroyed (Mumford, 1961; Antrop, 2000). This process led to diffusion of agglomerations and ascension of urban encroachment, which in consequence, transformed countryside into suburban developments. All these subsequently transformed settlements and landscapes, which were once historical in perspective, came about as a patchwork of different land uses. These new land uses, which were not compatible with the local original patterns, constituted fragmented and chaotic patterns. (Antrop, 2004).

Change at the social structure of population was also conducive to the transformation of country settlements on the peripheries of cities. The reallocation of the urban population and sometimes new influxes of population caused increases in the population density (Heimlich and Anderson, 2001). As a city grew in population, it spread out due to the preferences of the people who sought less dense and more livable places full of amenities. Pfeffer and Lapping (1994) indicate that since 1970s and 1980s, people have tended to prefer living in countryside settlements instead of metropolitan area or remote rural settlements. Technological improvements, the independence of employment from the city center, subsidies for home ownership, widespread of services have been influential on the preferences of people toward moving out of the cities. At the end of the 19th century, approximately ten percent of the world population was living in the cities. In 2000s, this rate rose to fifty percent and today nearly the sixty percent of the urbanites are living in suburban (once country settlements on the peripheries of the cities). These rates explain how the population is urbanized and how the farmlands in the countryside are displaced with peri-urban developments (Ingersoll, 2006).

In the rapidly changing world, socio-economic conditions are also changing simultaneously in a dynamic and unpredictable process. Sudden changes influence decisions to choose locations on the edges of the cities. Many global factors determine the sudden changes and transformation of countryside. The change of population structure and density is one of them but not the only one (Antrop, 2004).

The phenomenon of transformation, its sources and consequences are quite complex and intertwined to explain. We can assume technological improvements in transportation and communication, population density, preferences of populations and changing social and economic conditions as the major driving forces affecting the transformation of countryside.

In much of the country, the social, spatial and visual characteristics of distinct settlements are changing, and these settlements are losing their essence and significance. The outcomes arising with the subsequently transformed patterns are as follows:

- diffusion of the urban land use patterns through countryside
- increasing residential demands
- realignment of the size, form and function of the farmlands in the countryside
- arising infrastructure problems because of the new residential development
- transformation of productive lands and subdivisions of the farmlands
- emergence of conflicting land uses between new comers and the former landowners
- increasing population density of the settlement
- abandonment of farming activities and decrease in the number of farmers
- abandonment of cultural habits and values
- erosion of biodiversity and habitat fragmentation
- deterioration of physical landscape
- loss of landscape and settlement character
- increasing land prices
- change at the level of groundwater and the collecting area of the surface water
- quality of life problems

All these outcomes followed a trend of convergences that we can categorize under the title of three main negative impacts. Figure 2.2 outlines the sequential consequences in terms of planning considerations.

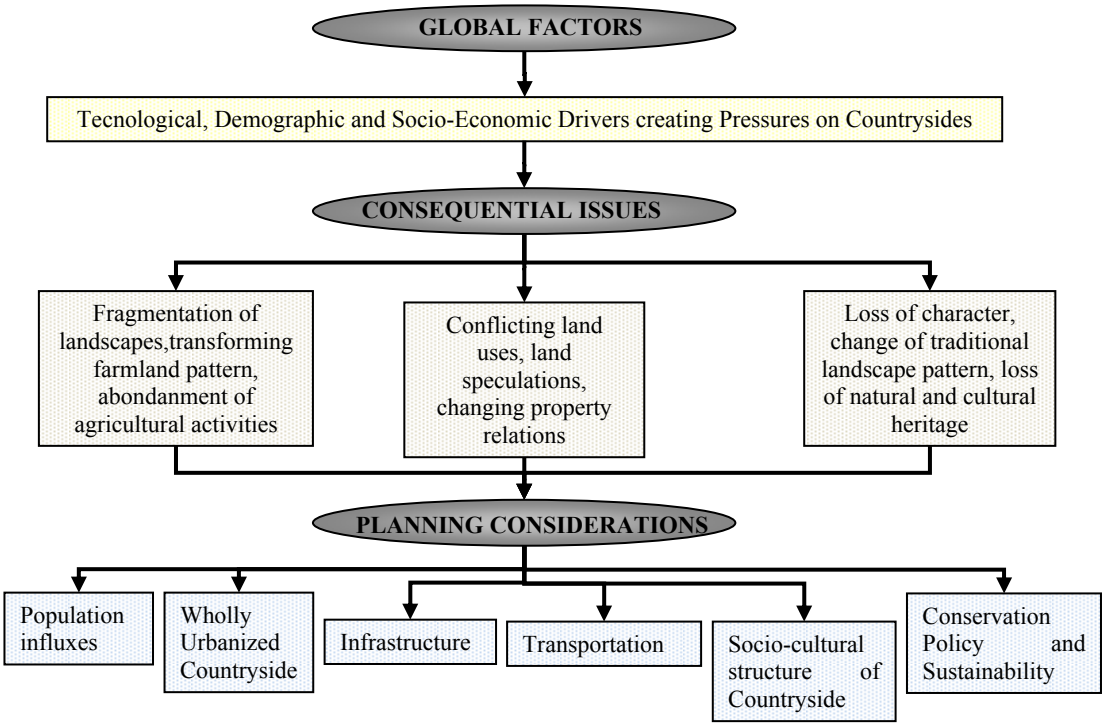


Figure 2.2 The conceptual diagram of the causes and consequences of transforming countryside

2.3.1 Transforming farmland pattern

Farming is standing as the central element that needs to be maintained by the communities to foster countryside's socio-economic structure. Landscapes functioning as farmlands, orchards, ranches or vineyards have both economic and environmental assets. The landscape character, pastoral scenery, attractive landscape pattern and landscape quality are all indebted to the farmers' efforts for operating their lands. This is such a fine balance that

when one of the farmers abandons his or her profession or sells his land to an urbanite or a developer, this action may influence the whole community and the future of the settlement (Merrill, 2000, Greenwood, 2000).

The pattern that farmlands constitute structures the countryside settlement and distinguishes it from the urban pattern. In the last century, with the changing socio-economic conditions, increasing residential, commercial or recreational leisure activities and urban agglomerations arising from innovations in transportation systems resulted in transformation of farmland pattern and natural landscapes with their amenities in the countryside. Farmland pattern is still considered as one of the most attractive values for urbanites offering them pastoral scenery and inviting them to move to peripheral country settlements. Research shows that landscape amenities and values, air and water quality, fresh food production, wildlife habitat that increase the quality of life all depend on a local farming that is up and running (Pfeffer and Lapping, 1994).

In addition, for the urbanites, countryside landscape has the potential of being an escape from congested and polluted cities, as well as presenting inexpensive lands, attractive landscape scenery and healthy environment. Nonetheless, this potential for urbanites is turning into a burden for the distinct landscapes in that the fragmentation of high-quality farmlands coming with urbanized functions has led to the loss of traditional farming activities, transformation of the land use pattern and the degradation of visual quality of the distinct landscapes in the countryside (Brabec and Smith, 2002).

In terms of economic outcomes, we cannot ignore the revenues of local farming activities for the local market economy. Local farms are the main sources of fresh food for the local markets and communities. However, urban development and urban oriented land sale is spawning degradation of high-quality farmlands, leading land allocations with subdivisions, hindering farming activities and consequently destroying the farmland pattern and economic viability of farming.

Apart from economic outcomes, conversion and loss of farmlands have devastating and irreversible environmental effects. With the haphazard conversion of farmlands into built-up areas, surface sealing problem that blocks the absorption of water of the soil arises. Water and soil are the essential elements of farming, and surface sealing is an irrevocable problem.

Additionally, the water needs of increasing numbers of populations in countryside are met from the boreholes and shallow wells, which lower the level of water table, as it becomes useless for the roots of trees. The replenishment of the water table, and in relation to remedy, sustaining the natural resources of the area can be achieved in the long term (Simon, 2008). Thus, the sustainability of distinct landscapes is being precluded with the increasing rate and scale of land conversions and resource depletion. Furthermore, by cutting off the landscapes and destroying the 'eco-corridors' of flora and fauna, highways lead to fragmentation of ecosystem (Couch et al., 2007).

Still another outcome of the changing socio-economic conditions is the increasing land prices and consequently abandonment of farming to find jobs that are more profitable. The value given to the land as residential settlement is more than that given as farmland. Therefore, farmers have a tendency to sell off their farmlands to urbanites or developers because farming as an economic activity is no longer profitable. In addition, speculations about land prices are promoting the farmlands of countryside to be a part of urban development (Ingersoll, 2006). Urban activities often compete with farming activities by increasing land prices that entail high property taxes. Many landowners cannot afford these costs to hold the farmland with the activity of agriculture (Heimlich and Barnard, 1992). They generally seek to maximize the returns of their land holdings and wait for their inevitable sale for urban development, and this situation expedites the conversion of farmlands into urban lands. Some farmlands are divided into smaller lands with subdivision plans or are converted into hobby gardens, second home developments or recreational areas to satisfy the interests of urbanites and their leisure activities (Couch et al., 2007; Heimlich and Anderson, 2001). Generally, farmlands transform into boutique farms, where non-traditional commodities are produced, to serve tourism and recreation. Moreover, urban development activities may have the outcomes of parceling operations and land fragmentation on farmlands: "Development in rural/urban fringe areas creates other farm management problems. Without strict zoning regulations farmland often becomes parcelized as entire farms or parts of farms are sold to developers" (Pfeffer and Lapping, 1995, p. 85 in Brabec and Smith, 2002, p. 256).

Furthermore, a secondary social effect of the land conversion is the change of structure of property relations. In time, with the replacement of inhabitants both in the countryside and

city, some local farmer landowners turn into non-farmers because of there being no next generation specialized in farming. “Farms are most likely to go out of business as established farmers retire without offspring willing to take over the farm operation” (Pfeffer et al., 2006, p. 107).

After the retirement or death of the farming operator, land becomes an estate for the inheritors. If there is more than one inheritor, then the land is divided into smaller inadequate units that make the functional farm unfeasible, or the land is probably sold to a new comer. In addition, because the cost of living in countryside tends to be lower in comparison to urban areas, urban populations choose to locate in the countryside.

This change in the ownership affects the functional use of the lands. Hence, farmlands start to be used as second home gardens, hobby farms, recreational parks, etc. The change of ownership and functional transformations cost a sharp rise of land prices and lead to the subdivision of parcels benefiting from speculative rent income (Cardenas, 2005). Parcel sizes continue to shrink with increasing density, so the farmland pattern disappears.

Parcel size and parcel contiguity are two significant indicators determining the land fragmentation in terms of farmland preservation. Changing parcel sizes of farmlands transforms the traditional field systems and historical pattern of distinct countryside. Spatial organization and landscape pattern are the values that contribute to the individual qualities of countryside settlements and reveal the social and economic history of them. Traditional field systems are known to be related to the economic evolution of farmland practices, local soil and topographical conditions. Social and legislative contrasts coming with urbanization movements are unfortunately altering the basic farmland pattern of traditional settlements. Furthermore, subsequently created patterns are creating contrast with the evaluated features of landscapes while directing dramatic changes (Houston, 1963).

2.3.2 Land use conversions

With the changing socio economic conditions and increasing population, expanding urban activities create a variety of land uses on the surrounding lands of cities. These land uses differ according to the demands of the populations. Nevertheless, with urbanization

pressures, competitive land use demands more intensive land use practices that trigger land use changes with controversies and conflicts. Urban oriented leisure activities on countryside in due course replace original land use. The newly created complex mosaic of land use pattern, which is incompatible with the existing pattern, generates chaos as in the example of golf courses located adjacent to the farmlands (Simon, 2008). This chaotic environment is usually spawning irreversible environmental damage and conflict among resources.

In addition, spreading non-farm housing through the countryside further diversifies the land use and fragments the farmlands. Urban developments have a tendency to locate along the main access roads. The increase of the density and congestion generates the construction of new peripheral roads and belt highways by setting up edge cities with new commercial and industrial functions. The interjacent landscapes between urban agglomerations are fragmented by the urbanized functions (Antrop, 2004). Ecologically, road networks covering the countryside are creating contradictions between natural habitat and the new residents. Road systems are standing as an obstacle on the movement paths of the species by fragmenting and isolating populations of species. This situation is reducing the reproductivity of some valuable species even to the extent that they go extinct. Moreover, the construction activities of residential areas and roads pose quality of life problems such as noise, air and water pollutions (Heimlich and Anderson, 2001, p. 34).

Improvement of public services and advances in the transportation and communication opportunities prompt alternative land uses on countryside such as recreational centers instead of farmlands (Pfeffer et al., 2006). Furthermore, Qadeer (2002) indicates that density has a transformative influence on the spatial organization of an area. In the emerging sprawl-like pattern of countryside, hamlets and homesteads is replaced with farms and open spaces. This structure is forming a landscape of diffused development. Statistical accounts indicate such expansive results that every year more than one million hectares are transformed from farmland uses to urban development (McCarthy, 2008).

In addition, urbanites' demands for and preferences toward living in a healthier and more natural environment are leading transformation of farm residences and farmlands into second homes and hobby gardens of urbanites. Hence, natural paths of farmers are becoming overcrowded with increased traffic volume. When they are in small numbers, it may seem

innocent and compatible with the existing land use pattern; nevertheless, the proliferation of these hobby gardens may be a threat to the viability of farmland operations and farmland pattern.

Increasing demands for urbanized activities may create pressures on countryside by raising land prices and speculations. The consequences of pressures may be two-sided. Most of the landowners may be satisfied with the increase of land price or speculation; however, this harmless satisfaction may cause the fragmentation of landscapes. Moreover, speculations with the increase of land value is changing the social values and creating social conflicts between new and old residents. That is, costs and benefits of decisions should be well considered (Couch et al., 2007).

Countryside surrounding cities are favorite places for urban leisure activities as they provide an escape from urban life and immerse into rural life. Nevertheless, the appreciation of country assets and lifestyle by urbanites is turning into permanent land use in the form of, for example, second homes, tourism and recreational areas that are incompatible with the established farmland pattern and character. The new situation necessitates a redefinition of landscape character. The new demands and preferences of the society require new customs, practices and consequently construction and identification of a new local identity (Bessière, 1998).

Tourism has been often considered as a valuable alternative sector to achieve socio-economic development, regeneration and source of income for local administrations although it is not the only choice. Tourism is in the age of Imperialism and many companies, agencies use local culture by capitalizing it as an image and selling its value and finally consuming all the resources and the local assets (Ingersoll, 2006). Sometimes, the newly generated sector reproduces some local cultural attributes by giving a new form to the settlement; this is the result of the consumption idea of capitalism. Antrop (2004) indicates that urbanization has the widest form after the countryside has been discovered by pervasive tourism and invaded by urbanites. Tourism as a commodification of natural resources of natural environment is not an environmentally friendly activity. Heritage components, distinct cultural, historic, ethnic and geographic characteristics of the countryside offer people the traditional and romantic idea of ‘the good old days’ by involving nostalgia, and

the rural tourism promotes a ‘natural way of life’ by selling the image of rurality (Bessière, 1998; Kastenholz et al., 1999). “Rural culture has been iconized and marketed and rural 'values' are being marketed as specific and generally problem-free commodity. Thus the rural idyll is reproduced but in a sanitized form” (Cloke and Goodwin, 1992, p. 328).

Apart from the economic inputs, the negative environmental and social reflections of rural tourism on the space are changing the appearance of landscapes and replacing traditional farming with hobby farming, leading to soil degradation and ground water depletion, changing land ownership, displacing farmer with trader and tourists. Farming culture is vanishing with its originated social and cultural structure. Residential and commercial investment is constructing second homes, holiday houses, hotels and restaurants with their associated infrastructure. Commodification of natural and cultural assets and exploitation of resources is going on while the degradation of the natural environment persists. Increasing population, changes at the scales and the structure of the land use pattern, traffic congestion, park problems, and infrastructure are all generating conflicts and fragmentation of landscape.

> More subtly, the landscape is changed by the transplantation of plant and animal species; by the introduction of more commercially attractive crop varieties and the abandonment of less-favoured traditional varieties; and by the proliferation of the symbols of global consumer culture in the built environment of small towns (Woods, 2007, p.493).

McCarthy (2008) explains the consumption of the valuable resources and assets and purchase of the residences for their aesthetic and recreational quality as amenity migration and with a well-known phrase ‘urbanization of countryside’. He continues to explain the popularity and intensification of amenity migration in the world with the increasing mobility, accessibility of places with transportation and communicational improvements, much less severe restrictions for foreign property ownership in different countries and the widespread presentation of distinct countryside in the world market. Nevertheless, the ecological impacts of this process is often ignored, while the new property owners have a tendency to change land use pattern, land cover, water ways, housing styles, local planting and sometimes landscape components intentionally or unintentionally. Once the landowners change, transformation of social relations becomes unavoidable. Increasing land prices leave no room to the existing residents who do not hold the property of the lands except for quitting.

2.3.3 Loss of particular settlement character

As noted before, transforming farmland pattern, fragmentation of landscapes and conflicting land uses arising from the transformation process of countryside end up in the loss of aesthetic landscape qualities, taking away of social and cultural values of the community, thus, in loss of particular settlement character.

Generally, the new residential settlements (suburban) have a tendency to choose from the nearest countryside and rural landscapes because of their attractive landscape amenities and healthy lifestyle opportunities. However, these suburban developments generally end with the disappearance of the initial values, which constitute countryside assets that once attracted people to settle. Many incompatible elements and structures that are applied on traditional landscapes cost loss of identity, heritage values and resources. When this process started, a limit cannot be put to the transformation of the landscapes (Antrop, 2004).

With mobility, today, the urbanites are reaching all parts of the countryside, and they are changing the traditional values and lifestyles of the existing distinct settlements. In the last century, after the car mobility became general, the movement patterns changed. The main roads, which attract many types of commercial, residential developments, became the main elements by changing the corridor that pass over. By filling the countryside with highways and modern gardens, urban residents caused the characteristic countryside idyll to disappear. Accessibility and mobility started to congest the natural paths of countryside landscapes. Generally, the areas surrounding the main roads began to lose their quality of landscape character and naturalness (Antrop, 2000).

The new settlement patterns often neglect the existing natural geomorphology of the traditional settlements, natural and cultural features of the landscape (Couch et al., 2007). Some historical landmarks that have been created throughout centuries with the common sense of the local residents and which have been admitted as community spaces are hindered from public uses and are annihilated or consumed with the pressures of development activities (Heimlich and Anderson, 2001). Traditional landscapes are losing their identity and the unique features. Especially, small traditional settlements cannot carry the burden of the

urban needs. While diversity of landscape attributes is diminishing, the diversity of urban functions on these traditional settlements is taking place of the vanished ones (Antrop, 2004).

Modernization is not just changing the physical landscape, but also changing the habits of the populations and their traditional lifestyles. The new living spaces have no character in contrast to the historical settlements. Ingersoll (2006, p.5) defines this newly created *placelessness space* as: "No-man's lands prevail as the dominant character of sprawl and a sense of belonging seems an evanescent condition". When *the sense of belongingness* is lost, nobody will pay any effort to sustain the rural way of life and the settlement character.

Today, the pace of changes makes people forget the original local identity, so they perceive these transformations as the local character of the traditional landscapes (Antrop, 2004). Moreover, Antrop (2000) declares that the natural and cultural heritage got lost in many parts of Europe, and the speed of the changes was so excessive that what was getting lost is still could not known.

Aforementioned, settlement character is the perception of different groups in a society. Human perception determines a particular identity to the landscapes. Activities of people, their daily routines, social interactions and practices designate the cooperating or conflicting land uses and their perceptions of the landscape defines the character of the settlements (Qvistrom and Saltzman**,** 2007). The concept of countryside identity has such historical, cultural, geomorphologic aspects that understanding the perceptions and acts of the initial residents on the settlement gains significance in terms of effective planning and sustainability (Vos and Meekes, 1999). Antrop (2000) criticizes the lack of knowledge of the new landowners who are not aware of how the landscape components have evolved and how the pattern of settlement character has formed. They often have very little knowledge about the original land utilization; accordingly, they act to the pattern in an uncontrolled and unplanned manner. A resident can get close to define the character of the settlement to the extent that he or she is cognizant of the settlement. Therefore, awareness of historical formation of the settlement is a prominent concern in raising the significance of the land in the public perception.

Generally, the visual quality is known as a key factor for the perceptions of local residents. They often look for whether the new urban elements fit in the natural setting or not. Ryan

(2002) inquired about the local residents' perceptions about the compatibility of new residential developments with the existing settlement character, and the results of the study proved that farming had been accepted as the most significant element of countryside character and living in and close to natural landscape as the most significant aspect of countryside lifestyle. From these considerations, we understand that some natural and cultural elements approved by the local community are the constituent of the settlement character.

Mattesan (2000) expresses that if the pattern of settlement character that is inherited from the ancestry many centuries ago is creating a value for the settlement and contributing for the quality of life, it will be a shame for the communities to let the invasion of housing and commercial activities distort the existing land use pattern.

So far, the main consequences of transforming landscape of country settlements have been explained. In terms of this thesis's framework, changing physical and social pattern (farmland pattern), land use conversions and loss of particular character of unique country settlements are the results of a dichotomy between the continuity and discontinuity of spatio-temporal processes. With modern technology, the domination of man on the nature started to consume all the resources, natural and cultural assets of the traditional country settlements. Amid this consumption, the notion of interaction between town and countryside has evolved with loss of 'sense of belongingness'; in conclusion, the town-country continuum was broken. On the one hand, consumption, negation and loss are experienced; on the other hand, human being seeks way of preserving the admired and missed past and its assets. In the next part, the conservation practices of Europe and North America on transforming countryside are evaluated with reference to Turkey.

2.4 Conservation Practices on Transforming Countryside

In the last century, the need to preserve status quo in controlling the transforming of countryside has led to the preservation of existing land use pattern and architecture, natural landscape and socio-cultural structure by highlighting the historical role of spatial patterns of distinct settlements in countryside.

After the Second World War, industrialization has been a driving force on the urbanization process. Factories; the places of industrial production, took place on the landscapes of city peripheries. The distances between home and work widened, and the new traffic system created a network on the landscape. Automobile ownership increased. Within this kind of development, people preferred to live on the non-urbanized landscapes of the cities and to go natural landscapes for their leisure activities. In much of the geography, unfortunately, the social, spatial, and visual characteristics of the distinct settlements in countryside disappeared.

> *What management and planning mechanism deal with dying and transforming countryside and its landscape?*

This question has been the main objective of conservation planning approaches. Therefore, many nations turned their attention to the transforming farmlands, changing character of countryside in terms of economic and environmental costs. Conservation practices became significant in this period in terms of preserving the original character of the cultural landscapes and unique settlements in countryside. Accordingly, the preservation studies and land-use planning of unique settlements aiming to combat with transforming process and suburban development have attracted a great deal of attention since 1940s with different planning approaches coming from different theoretical understandings.

Some research on this subject is noteworthy, and there are conservation organizations and groups that determine the planning objectives and policies in Western Europe and North America. The uncharacteristic spatial attributes contradicting with the existing traditional pattern brought the conservation problematic of landscape character to the consideration firstly in England. Because the countryside concept originated from English literature, we see a special concern on conservation of countryside in England. Preservation of countryside has caused concern as it means the *preservation of a particular way of life*, *a particular sense of collective identity* in England.

Heimlich and Anderson (2001) point out some existing differences between countryside amenity goals in Europe and the United States. The percentage rate of farmlands in Europe is much larger than in the United States. Development restrictions in Europe are generally

more severe than in the United States, and property rights prohibitions against regulation are less strict. Countryside in Europe is generally threatened more by abandonment to less intensive uses when it is compared with pressures for urbanization in the United States.

In the United States, land use planning has a special concern for the improvement of economic configuration for the preservation of agricultural lands and research into the underpinning reasons of transforming countryside with an emphasis on the sustainability of countryside amenities (Simon, 2008).

In the last fifty years, farming, which has been the main characteristic land use of the countryside, is totally shifting into multi-functionalities. The main role of farmlands in countryside is not yielding food now, but in general attracting tourists and urban residents by offering their recreational potentials, assets and natural beauty. Heimlich and Anderson (2001) inform that both the United States and Europe have been eager to keep farmland in farming. The interest in farmland preservation first emerged with the widening environmental movements of the 1970s. In 1980s, after service sector became widespread, much countryside was fragmented as they became linked with patterns of production and consumption. In addition, social and cultural changes arose with the consumption of countryside idylls and lifestyles via commodification. In 1981, The National Agricultural Land Study highlighted the loss of millions of acres of farmland in the United States by putting forth the causes and consequences of farmland conversions to non-farming uses and presenting recommendations to curb the conversion (National Agricultural Lands Study, 1981). In addition, under the title of 'Working Lands Program', the United States aimed to preserve croplands, pasturelands and rangelands and their natural heritage (Heimlich and Anderson, 2001). Later on, concerns for food production gained significance against the land use changes in transforming countryside, and initiatives for the farmland preservation were taken immediately (Pfeffer and Lapping, 1994).

According to the analysis done by Furuseth and Lapping (1999) in North America, the countryside and its farmlands have different purposes of land use such as providing agricultural production and local supply of food, providing open space and wildlife habitat, preserving landscape character and landscapes, protecting cultural and heritage values, maintaining environmental quality, preventing urban sprawl, preserving countryside

lifestyles, providing a supplementary income, sustaining economic viability role in the overall economy and presenting leisure activities. It is useful to analyze them to understand the landscape character and values of the unique settlements in countryside. Changing external factors and urbanization affect the strategies of farmland preservation and the productive viability of the countryside settlements. The sensitivity of the environment, the context of existing land-use controls and planning, local mix of agribusiness and family farming, land productivity, farmer income levels, the skill and leadership of government officials, public attitudes towards land-use control, the local importance attached to farming, the number and location of parcels and population growth are the main factors influencing the farmland preservation strategies.

With functional urbanization, recreational uses started to take place on the prime farmlands of countryside because of charm of these lands. It is explicit that the revenues of recreational activities are greater than the revenues of farming. Therefore, some authorities and residents have a tendency to perceive urban development and tourism as a progress (Hart, 1976). However, in the long run, when the recreational functions destroy the farmlands, the charm quality of the countryside will be lost. Therefore, recreational encroachment on farmlands can just be prevented with working farmlands and incentives for farming. Countryside conservation is not an isolation of the physical setting, but enhancement of visual quality of the settlements. Preserving landscape character and local distinctiveness besides require conserving the social structure of the property.

Alexander et al. (1977, p.37) criticizes the evaluation of human-farming relation on the basis of private property. “Farms, when treated as private property, rob the people of their natural biological heritage - the countryside from which they came”. People now relate to nature as a form of property. While land allocation is a social question, private property emerges as a cooperative achievement. Property relations structure accessibility, so the control of the property gains importance. Property relations affect how natural resources are transformed (Duncan et al., 2004). Berkes (2003) points out that the common property, traditional ecological knowledge; environmental ethics, political ecology, and environmental history basically trigger community-based conservation. For communities, the consistency of local common property structure with conservation objectives is the ideal position aimed to be reached.

Sometimes some preservation techniques can be misperceived or abused for the interests of user groups. According to Weller (1967), in general, the newcomers lack the sensitivity to original land uses and character of the countryside and they are open to any kind of changes considering conservation planning as controlled changes.

Developed countries proposed solutions to the problem of land use contradictions and loss of working farmlands with incentives like tax reduction/exemption and land-use controls like purchase and transfer of development rights and dishonored zoning procedure or a more enhanced method of cluster zoning. Furuseth and Lapping (1999) introduced the existing and proposed innovative farmland preservation strategies in North America in two categories: land use control and integrated programs. Land Use Controls include agricultural zoning, right to farm laws, purchase and transfer of development rights, land banking, comprehensive planning, land trusts, foreign land ownership, and purchase restrictions while Integrated Programs include comprehensive growth management strategies, integrated state/provincial programs.

Another alternative method, though outdated now, is zoning. The aim of the conventional zoning is to prevent the harm that one landowner's use of his or her land on the community and on the values of neighboring property (Lee, 1979). It is a tenure regulation system. Conventional zoning achieves this purpose by designating permissible uses for all parcels of land in terms of allowable activities, characteristics of buildings and placement of buildings on lots. This method can designate maximum densities, minimum setbacks of house lots, and can briefly make a subdivision design. However, it cannot be an effective method to protect the open spaces in countryside because of lack of concern about configuration of open spaces. It is a planned sprawl more than a preservation plan (Arendt, 1992).

A more developed type of conventional zoning is cluster development. Arendt (1992) explains cluster development as the grouping of new housing on the development area and preservation of the left over part as an open space. It encourages concentrated development and eases the conservation projects to protect open spaces. Again, zoning regulations, which allow overall density, are the common ordinances of this method. This method can only reduce infrastructure costs. He advocates cluster development against purchase development rights with its flexible structure: "It does not require large public expenditures and allows

farmers and others to extract their rightful equity without seeing their entire land holding bulldozed for complete coverage by houselots" (Arendt, 1992, p.3).

Daniels and Lapping (2005) criticize Arendt with his consideration of cluster development as a farmland preservation technique because they characterize it as a kind of suburban development that is justifying housing development while protecting open space. The only advantage of open space zoning is the adaptive role to protect the landscape character instead of the farming feature of landscape (Daniels, 1997). Therefore, they do not accept cluster zoning as a method of preservation of farmlands.

The countryside of today is different from the countryside of yesterday. They are undergoing a rapid change as they become less isolated and more accessible. Many nations are learning from historic patterns of settlements before the development and application of conservation planning and design policies related to special settlements by highlighting effective and integrative sustainable strategies to maintain settlement character and the sense of place. In his book, Woodruffe (1976, p.46) explains the aims of conservation policies in England as follows:

> (1) the safeguarding of listed buildings and other buildings contributing to the character of the area…… (2) a closer control over new development by insisting on detailed designs or sketches before any decision is given; …… (3) a more critical assessment of existing development, including advertisements and 'permitted development'; (4) a greater attention to details-street furniture, signs, poles, wires and lighting can all detract from the appearance of an area; statutory undertakers, local authorities and developers will be encouraged to give priority to minimizing clutter and unsightliness; (5) local effort and initiative from individuals or local societies must be encouraged.

In terms of planning and design objectives for conservation of settlement character, Cloke (1983) focuses on conservation of 'villages of special overall character'. He specifies the conservation and enhancement of general character and appearance as the primary planning objective. Any kind of new intervention or development should be respectful to the overall quality and existing character of the settlement. The sense of place should not be destroyed.

As aforementioned, settlement character varies from community to community and country to country. Locations, geomorphologic structure, resources of the area, traditional local economy, availability of the facilities are the key factors to determining the overall character. Transformations in the area can affect the perceptions of the residents while designating the character of the settlement. What is common among perceptions is the prompting factor for

planners and local administrations to preserve the unique and precious character of the distinct settlements in countryside (Ryan, 2002).

The variety of local characteristics that constitute the unique identity of the settlement which are historical in perspective is specific to the area and differs from region to region, country to country. Therefore, the structure of policies should be adjusted according to the changing conditions and outcomes of the countryside. Economic, social and environmental impacts on transforming historical settlements are needed to be considered in a coordinated strategic planning approach at regional or national level to preserve and represent the distinctiveness of the settlement (Marsden, 1999).

2.5 Conservation Practices of Turkey for Country Settlements

The first preservation movements in the world started in order to protect the attributes of precious and unique resources of heritage, preserve identity and achieve development in a sustainable way. New policies were developed to protect cultural sites, places and assets in the late nineteenth century. UNESCO's World Heritage List has codified the natural and cultural heritage that shows an outstanding value around the world since 1972. According to UNESCO's criteria, heritage includes ideas and oral traditions as far as the physical settings. The World Heritage Committee added to and defined the concept of cultural landscapes with their distinct geomorphologic structure as a part of natural and cultural heritage in 1992. UNESCO's list, however, includes very few landscape heritage areas and Gorp and Renes (2007) indicates that most of them are the wine producing historical settlements from Europe.

In Turkey, the conservation legislation depends on the concepts of natural and cultural beings while it depends on the concepts of heritage, historical building, monument, site, or beauty in the world. Turkey has a well-developed legislation; however, there are deficiencies in conservation practices. The society is lack of consideration of the very essence of being there (Günay, 2009).

In Turkey, in terms of conservation practices, 'bağlar', orchards, villages, plains, flatlands (*yayla*), farmlands, distinct countryside settlements are all evaluated under the same

categorical title of rural areas. The definition of 'rural areas' was first made in the General Census of 1960. In addition, Turkey has experienced industrial developments lately in comparison to Western World. Therefore, it is beside the point to talk about the post-World War urbanization in Turkey. Approaches to rural areas have generally been towards the economic aspects of agriculture; therefore, rural development has been the general aim of the government since the establishment of Republic.

Since 1970s, the majority of the population was living in the villages and the economy was based on agriculture. For national development, agriculture and rural areas gained importance. With the increase at the level of knowledge and technology in rural areas and mechanization in agriculture, a rapid migration from rural areas to cities started (Gülçubuk et al., 2009). The problems arising with urbanization were tried to be solved with 'development plans', which were accepted as the product of the new understanding of planning. However, no sooner had the necessity of plans for conservation of sites occurred than 'Conservation Plans' were prepared and ratified by the municipalities. Nevertheless, until now, development plans and conservation plans could not have been prepared in coordination, yet.

In Turkey, the first law related to preservation of architectural and historical assets was accepted in 1951. A commission (Gayrimenkul Anıtlar ve Eski Eserler Yüksek Kurulu) was established for the conservation of immovable cultural and historical assets. In 1973, the Law of Immovable Assets and Historical Art with the item 1710 were including contemporary approaches to conservation. In 1983, with enact of the Law of Conservation of the Immovable Cultural and Natural Assets with the item of 2863, the responsibilities and the duties of the administration were given to Regional Commissions. In 1987, the law with the item of 2863 was changed with the Law of 3386. UNESCO and the other international institutions were effective on the new conservation policies of Turkey. In 2004, the contents of the law were changed with the item of 5226 Law. The principles of participation, localization and transparency were added to this law. Nevertheless, the main problems arose from the inadequacy of the technical workforce and financial supports of the local governments and municipalities. There are just a few municipalities, which create their technical structure for conservation practices (Güçhan, 2002).

Ministry of Culture and Tourism is responsible for the conservation issues at the central administration. At the local level, there is a Council of Conservation of Natural and Cultural Assets, which act as Regional Commission. Each commission is responsible from their domain. These commissions have a right to registration of the historical, cultural, archeological and natural assets and classification of them. The members of the commission are specialists from different fields, and they are chosen from the universities or other conservation institutions for a period of five years. The Ministry prepares reports for registered assets. The commissions meet every week and take decisions. Local administration, citizens and non-governmental organizations can participate in these commissions.

The approach to sustainable development has been effective on the formation of national and international legal institutional organizations since 1972 in Turkey. However, some dualities of demands and constraints arising from the functional changes of historic and cultural assets led to some problems with the application process of the conservation plans. Sometimes, the quality and the character of the cultural and natural heritage disappeared (Altunbaş, 2007).

Financial problems also accompany the protection of cultural and natural assets. Joint ownership or multi-ownership is creating constraints while using the assets and getting permissions for any kind of repair. The procedures about repair of destroyed cultural assets takes time and some of the cultural assets are becoming dilapidated. Many owners cannot afford expenses for conservation and reconstruction. One of the most significant problems is the speculations about the rant on lands.

In Turkey, every group of users has different expectations from preservation programs, which are even conflicting, and having speculative results. Therefore, it is hard to make all in the society adopt the preservation practices.

In Turkey, the policies related countryside are mostly related to agricultural activities in the region. However, the unique countryside settlements should also be evaluated as a separate entity from agriculture. The possibilities of the nature except for agriculture, the experiences and lifestyles, biodiversity, and most importantly, the advantage of cultural potentials should be taken into consideration. In Turkey, the policies related to countryside were discussed in

the framework of search for solutions to the emerging problems of urbanization. However, the improvement of the structural policies as well as social and economic development for countryside is needed (Eminağaoğlu and Çevik, 2005).

There are many distinctive countryside settlements in Turkey. They should be evaluated as distinctive social formations on natural environment, which have a cultural history. Changing local circumstance may cause structural shift on these formations. Unfortunately, in the last century, due to misuse or land use changes on these settlements, deterioration became unavoidable. Therefore, no sooner it is understood that conservation programs, which will provide environmental coherence between natural environment and man-made structures, preserve farmland pattern, a pleasant scenery, and vegetation are needed for unique settlements located in countryside. In recent years, local authorities prepared conservation plans related to unique county settlements, which are historical in perspective, in order to ensure the preservation of the settlement character and their sustainability. Nevertheless, there are still some problems and inadequacies at the strategies of the conservation practices. In Turkey, the following conservation strategies are still mere considerations to be developed:

- Conservation objectives and aims differ according to the characteristics of an environment. However, the common objective in conservation initiatives should be the planning of the area to secure the overall character of the settlement.
- Conservation practices should consider the essence of being there (Dasein) of the entities to perceive the wholeness and to preserve settlement as a whole. The existence of the being is the thing that has to be cared, and this care depends on the human awareness.
- While developing conservation plans, before and during the course of the planning process, the required information, inventory related with the area should be gathered; required evaluation and synthesis should be done, and conservation decisions should be justified with great care (Gürpınar, 2000-2001).
- The way to preserve landscape character and heritage is to resist on stabilizing and fostering active, productive farmsteads. There should be conservation planning and design policies related to special settlements management. Conservation practices should consider the cultural values of original assets, high visual quality of farmlands and characteristics of the settlement.

- In conservation plans, conditions for the perpetuation of natural, cultural assets should be guaranteed.
- The differentiation of urban-rural may mislead the objectives. The dependency and relations between urban-rural, town-countryside (the spatio-temporal continuum) should be considered.
- The knowledge of the original inhabitants was depending on the practice, which adapted itself to the socio-spatial conditions and handed down through generations by cultural transmission. Therefore, the objectives of conservation planning should give attention to the traditional practice and the interaction of inhabitants with the settlement. In this respect, the sustainability of the relationship between people and space and their interaction, spatial layout and cultural heritage are gaining importance in terms of preventing the disappearance of the socio-cultural and spatial assets of the sites.

2.6 Evaluation of Unique Countryside Settlements in terms of Ontological Arguments

As asserted in the literature of conservation practices, conservation of settlement character and uniqueness of countryside settlements necessitate first the identification of the existence of being, then preservation and enhancement of general characteristic of natural, historical and cultural environment. To this respect, preserving interdependencies between the natural environment, working landscapes and the built environment, perceiving the natural and cultural beings as a whole and preserving the collective memory of society and its relation with the place are the responsibilities that local governments should take on.

In a larger context, countryside settlement is a living system composed of landscape, property relations, biodiversity, cultural practices and human being. A shift that breaks down this living system can destroy communities' overall character and can create an alienation of human beings from the environment, resulting in the loss of sense of belongingness. Therefore, this dissolution necessitates a rethinking of conservation and management of the system as a constituent of its existence.

Landscapes reveal the social and economic history of an area. Socio-economic developments are significant facts integrated with the ecosystem; therefore, every economic decision has

reflections on the physical landscape as land allocations. Property relations affect how natural resources are transformed, and they are the control mechanism of the resources and the land. In fact, the ownership pattern and land allocation include clues of every beneficial and detrimental decisions and facts of development. Therefore, the property relations are the pursuing elements of the conservation approach.

Conservation goals cannot be considered independently from the needs of the local inhabitants because the original settlement pattern was formed by the collective practices and beliefs of the former inhabitants according to changing socio-economic conditions. However, in general, conservation objectives have not served the local ownerships yet because of political decisions that do not deal with the collective practices of the communities. Therefore, the restricted scope of development plans should be overcame with the extent of sustainability, its concentration on collective practices that structures land use pattern and its consideration with the whole range of issues aiming to preserve the identity.

Conservation is not just saving from the threats but also saving its own presence. Conservation is the consideration of the values of landscape assets, ecological aspects, and visual quality of farmlands and characteristics of the unique settlements that as a whole defines the essence of settlements. Hence, conservation requires land-use policies to address economic, social, cultural and environmental issues of sustainability that aims to preserve the essence of social, natural and cultural assets via physical arrangements. Landscapes are not just the end- product of natural processes; they are created in a socio-spatial process that the human perception and consciousness determine with a particular character. An effective conservation necessitates an understanding of the evolution of the landscapes, their functioning land use pattern, and the perceptions of the community and the reciprocal interaction of the community with the environment. The needs, functions and characters of the settlements should be considered in determining both settlement policies and plans.

If a comparison of conservation practices of the world and Turkey is to be made, it will be observed that the objectives of countryside conservation seem similar; however, the problematic issues seem different because of the geomorphological and cultural differences. In Europe, while countryside conservation mostly depends on the conservation of historical and cultural heritage, in United States, it is mostly concerned with the suburbanization of

working farmlands. Turkish countryside varies from region to region, so every settlement should be evaluated with its own existence of being in a spatio-temporal dimension. 'Bağ' settlements, the subject of this thesis is just one kind of settlement in the Anatolian countryside and displays differences from other settlements with their proximity to the town, seasonal viability, self-sufficient economy, recreational opportunity and their town residences. These characteristics differentiate 'bağlar' from any kind of countryside settlement in the world. Therefore, as the settlement character changes from locality to locality, the generally accepted rules and policies of conservation could not be applied in every region. Likewise, urban conservation planning processes and methods cannot be imported into countryside conservation planning initiatives, either.

In conclusion, to reach an effective conservation planning; from now on, the questions that we ask have to be concentrated on **'what?', 'when?**' and **'how?'** as Heidegger emphasized. **What is the essence and significance of the unique settlements? When did they transform? How changing socio-economic conditions affect the countryside? What is the value of unique countryside settlements for the society? How will we provide the perpetuation of this unique value of being for the future? What will be conservation approach to perpetuate the unique existence of being? How will we plan and manage the transforming landscapes of unique countryside settlements?**

Parallel to all definitions and the considerations explained in this chapter and in the light of conservation practices of the world, the case study of the thesis is evaluated in terms of transforming landscapes of unique countryside settlements in the next chapters.

CHAPTER 3

THE SETTING: THE SOCIO-SPATIAL STRUCTURE OF MUĞLA, KARABAĞLAR AND CHANGING SPATIAL LAYOUT WITH PROPERTY RELATIONS IN HISTORICAL PROCESS

3.1 Introduction

> Karabağlar is located in Muğla Basin. Eleven thousand 'bağlar' are recorded in the registry book. For a period of eight months in summer, all residents of Muğla and Ula dwell in Karabağlar. There is a total of forty types of grapes are known. Grapevines creep to elm, plane, poplar, oak and redbud trees. Each tree yields ten or twenty load of grapes. Its grapes are very succulent and other yields depend on the grapes. Moreover, if an outlander sets foot on the roads of Karabağlar, he or she cannot find his or her way in a sea of trees. People are fascinated by this. Roads, which consist of 'irimler' (ditches) and 'kesikler' (hedgerows), are connected to each other. There is no sunlight on these 'bağ' roads because the branches of trees on 'kesikler' (hedgerows) are intertwined with each other making the sky invisible. In patches, there are tombs on meadow grass courtyards. There are paradisiacal 'bağlar' that upt to the pashas. In brief, a very image of Karabağlar in the Ottoman Empire is seen in Malatya-Aspuzi and Konya-Meram. We stayed in here ten days. Later, after farewell to everybody in the province, in two hours, we reached Ula at the south of Karabağlar by walking through the vineyards and orchards and crossing a mountain.
>
> Evliya Çelebi[6], 1670, No: 9, p.203

With his gorgeous description, Çelebi draws an image of Karabağlar and all its distinct features in 1670, which enables us to visualize the fantastic physical setting of Karabağlar in

[6] "Muğla sahrası içre malamal bu Kara Bağlardır cümle on bir bin bağdır deyu sicillatda masturdur ve yaz günleri cümle Muğla şehri ve Ula halkı bu bağlarda sekiz ay sakin olurlar ve kırkelvan engürü meşhuru afakdır. Cümle engür ağaçları karaağaç ve çınar ve kavak ve meşe ve ergavan dirahlerine sarmasub çıkmışdır. Her dirahten onar yirmişer yük üzüm hasıl olur. Gayet abdar engürü olur ve sair müsmirat dahi ana göredir. Ve bu Karabağların yollarına bir garibüddiyar adem girse bir ağaç deryası içine girüb selamete çıkamaz. Alemi hayretde kalur. Hendek behendek yollarının birbirine müşabeheti vardır. Bu bağ yollarında asla güneş yoktur. Zira evci semaya serçekmiş dirahti müntehalardır. Cabeca çemenzar sofalar üzre aramgah vardır. Ve bu bağlar içre paşalara mahsus bir bağ var kim güya iremizatülimaddır elhasıl memaliki Ali osmanda misli ya Malatyada Aspuzi yahud Konyada Meram ola Andan on gün temaşayi Cemal İdüb Cemii ahalii vilayet ile vedalaşup Kara Bağlardan kıble tarafına bağ ve bahçeler içre ubur iderek ve hali dağı aşub badehu Ula şehri bağları içinde iki saat ubur idüb." Evliya Çelebi is a famous Turkish travel writer who lived in 1611-1682. His travel book notes retrieved from Karabağları Geliştirme ve Güzelleştirme Derneği, (April 1996, p. 3) *Yayla Bülteni*.

the period of Ottoman Empire. Travel notes of Çelebi, which are the only written documents of the 17th century, have significance as the evidence that proves the existence of viticulture in Karabağlar. Viticulture and the other farming activities have been the source of living for the society of Muğla/Karabağlar, contributing to the house economy; however, the yields of farming have never provided a considerable amount of revenue to the town economy. The self-sufficient production relations in Karabağlar indicate the characteristic of this closed economic system. The necessity of meeting the economic needs brought about the seasonal migration of the society; therefore, Karabağlar has been the summer residence of Muğla residents throughout centuries. This seasonal dependency creates a distinct socio-cultural setting for Karabağlar, which is worth describing in its historical formation.

As being one of the unique 'bağ' settlements of Anatolian countryside, which are historical in perspective, this thesis holds Karabağlar as the case area and investigates the socio-spatial transformation of Karabağlar as a social entity throughout the centuries. In order to understand this transformation process, the essence and the significance of Karabağlar should be explained within its own spatio-temporal conditions.

Therefore, this chapter focuses on the socio-spatial formation of the case area Karabağlar, Muğla with respect to its geomorphological, historical, demographic structure, natural and socio-cultural with cultural and natural assets and property relations. Doing so, it highlights the land use and ownership pattern in a time scale. First, the study aims to describe the essence of Karabağlar, its settlement character and its uniqueness. Second, it determines the changing spatial layout throughout centuries to prove the transformative impacts of changing socio-economic conditions and land regulation systems related to urbanization process (transforming farmland pattern, conflicting land uses and loss of settlement character).

As defined in the passage of Çelebi, the existence of Karabağlar depends on the seasonal dependency between Muğla province and Karabağlar. Therefore, at first, the socio-spatial structure and the morphological structure of the province of Muğla is introduced in order to clarify the formation of socio-spatial organization and geographic context of Karabağlar settlement and its seasonal interdependency (traditional cyclical movement) with the province. Karabağlar has been in spatial, social and economic relation with the surrounding villages, neighborhoods of Muğla and the plains in history. Thus, in this chapter Muğla,

Karabağlar, their neighborhoods and relational villages are dealt with together in terms of land use changes, spatial transformations in centuries.

When we delve into the past, we observe that the historic pattern of landscape formed with the influences of former practices of the inhabitants and customary land uses. Every decision and practice on land organization act on the future formation of the landscape. Qviström (2010) defends that the landscape is a process more than a picturesque place; therefore, the historical formation and the origins are the major ways of understanding the future development of that landscape. Therefore, this chapter continues to explain the origins of Karabağlar, the peculiarities of its landscape, social lifestyle of the inhabitants in a wider context to put forth the particular character of the settlement.

Land tenure systems including the property relations, land regulations and current practices regarding the use of farmlands build the basis of farmland pattern. Continuous change of physical, social, economic and technological factors motivates states to modify their land tenure systems by forming the ownership pattern of lands. Landscape pattern of farmland is the outcome of labor and capital relations on the land. The soil characteristics, the size and form of farming plots, their fragmentation, remoteness to the main roads, how and by whom they are operated all affect the organization and the preservation of farmland pattern (Gün, 2003). Accordingly, land tenure system that influenced the farmland pattern of Karabağlar and the region since 12th century is examined in this chapter. Property relations and their reflections on the physical landscape are defined according to the changing conditions of the given period.

3.2 Socio-Spatial Structure of the Province of Muğla

This section explains the historical and structural formation of the province of Muğla.

3.2.1 The morphological structure of Muğla

The province of Muğla is located at the southwestern side of Turkey (Figure 3.1). The mountainous area where the city is located is called Menteşe region. In this region, where the row of mountains reaches forward to the sea, small plains and stretching valleys naturally formed between these mountain rows. The inside of the region have karstic plain basins

closed with hilly areas, three of which in sequence constitute Muğla, Düğerek and Karabağlar Plains. These plains are surrounded with Kızıldağ, Karadağ, Hisar and Yılanlı Mountains, which have been natural barriers to city expansion. Figure 3.2 shows the topographical structure of Muğla. The red line shows the combination of three large plains surrounded with mountains. Hamursuz Hill is the only obstacle separating Düğerek and Karabağlar Plains from Muğla Plain. These three plains are approximately 12 km in length and 4km in width in northwest-southeast direction and cover an area of 48 km^2 (Güner, 2001).

Figure 3.1 The location of Muğla (Source: Drawn by Feray Koca)

The province of Muğla was first established on the slopes of Hisar (Asar) Mountain. The inhabitants of Muğla were living at the foothills and carrying on their agricultural activities on the arable farmlands of Muğla, Düğerek and Karabağlar Plains. The seasonal migration between the city and the plains was a traditional activity for Muğla residents.

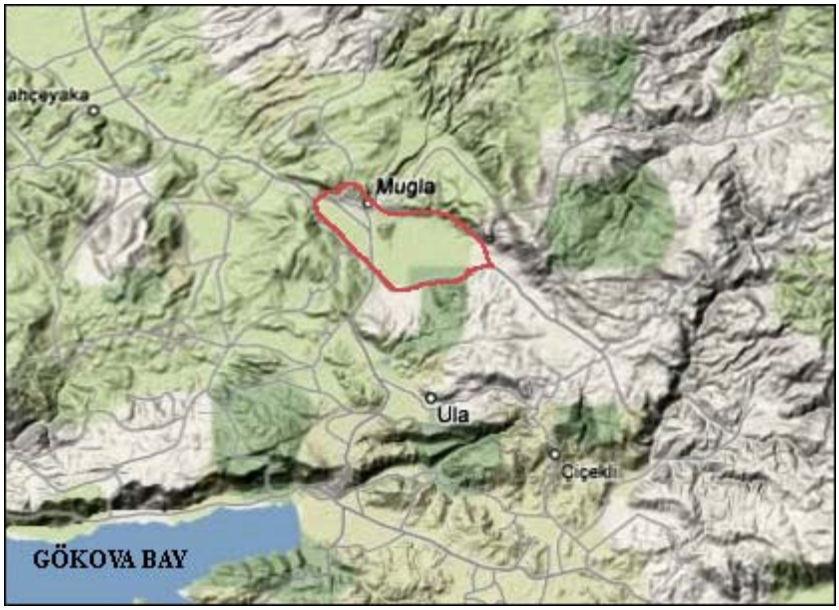


Figure 3.2 Topographical formation of Muğla (Source: Archive of Baykan Gunay)

There are three creeks flowing down to Muğla Plain: Değirmendere, Karamuğla, and Basmacı. These three creeks, which were once fulfilling the water need of the traditional Muğla settlement, separate the town into neighborhoods. Moreover, these three creeks merge with Düğerek, Deli Dere, Yeniköy and Dereköy Creeks flowing down to Karabağlar and Düğerek Plains and constitute a ponding area on meadows of Muğla and Karabağlar Plains (Koç et al., 2002). Together with Düğerek, Kötekli and Karabağlar, there are 15 neighborhoods in Muğla, in which approximately 60 000 people are living today (Türkiye İstatistik Kurumu [Turkish Statistical Institute], 2010). Figure 3.3 displays the city map and the locations of some neighborhoods and villages. The below-named locations and neighborhoods all belong to the Muğla Municipality administratively.

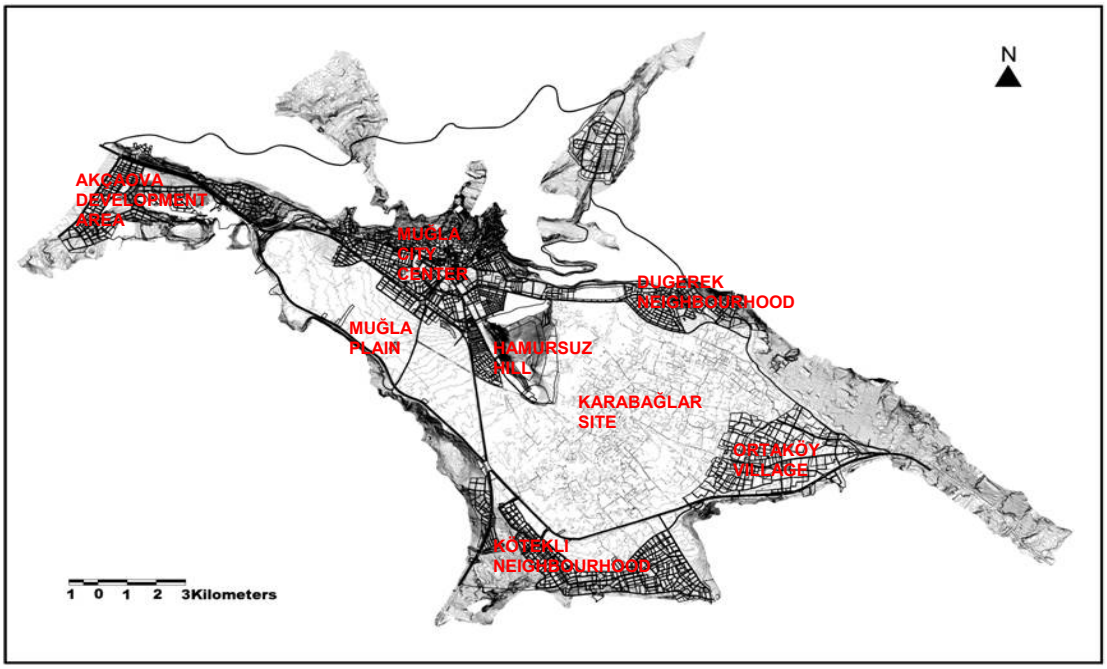


Figure 3.3 Muğla City Plan (Source: Plan is adapted and overlapped from the Development Plan of 2004 and Topographic map by the author.)

3.2.2 The foundation of Muğla in history

The foundation of Muğla city goes back to B.C. 335. In the antiquity, the name of the region was Karia. This name comes from the name of Kar, who was the son of king Foroneus coming to the region as the leader of the tribe (Tosun, 1983).

In 1284, led by 'Menteşe Principality', Karia region started to be called 'Menteşe'. In 1424, in the hands of the Ottomans, Turkish domination began in the region. It had become 'sanjak' of other Province Aydın until the foundation of Republic, and then the name of 'Menteşe' changed into 'Muğla' (Günsan, 1973).

After connecting to the Ottoman Empire, the importance of Muğla increased; urban structure developed very rapidly. The chessboard pattern of city form of the ancient times disappeared (Tosun, 1983).

3.2.3 Demographic structure of Muğla

As Table 3.1 demonstrates, the population in Muğla was stable for years. The population movements generally occur seasonally between rural and urban settlements. In every five-year period, while there was a gradual increase in population, in 1950-1955, 1970-1975, and in 2007-2009 there seems a decrease in the rural population while a rapid increase in the urban population. In 1950s, economic and political changes led to a rapid urbanization. Additionally, the popularity of sea holidays, holiday villages and coastal settlements were offering better job opportunities for the residents of the villages (Cengizkan, 2002).

Table 3.1 The population changes in the province of Muğla city center both in urban and rural areas in 20th century (Source: Created from the statistical data of TUIK (2010) and information gotten from Tekeli (1993, p. 145) and Akçura (1993, p. 208).)

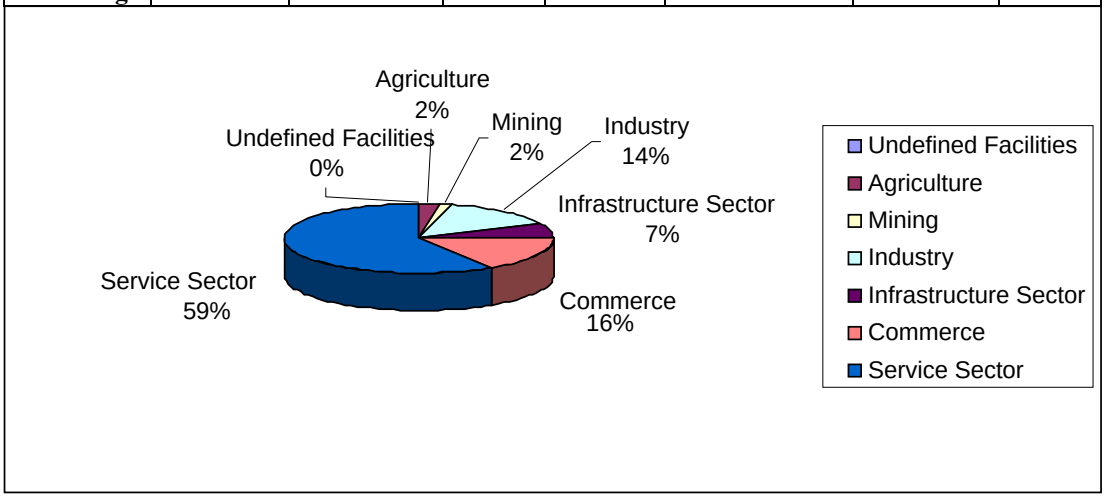
The population changes in the province of Muğla city center			
Years	**Urban**	**Rural**	**Total**
1890	15 000	-	-
1927	10 128	-	-
1935	10 983	-	-
1940	13 370	-	-
1945	12 319	-	-
1950	10 612	38 569	49 181
1955	12 052	29 305	41 357
1960	14 053	31 302	45 355
1965	16 408	34 246	50 654
1970	18 624	35 769	54 393
1975	24 178	32 520	56 698
1980	27 392	33 076	60 468
1985	31 279	34 580	65 859
1990	35 605	35 550	71 155
1997	40 586	38 918	79 504
2000	43 845	39 666	83 511
2007	52 918	41 289	94 207
2008	56 619	35 709	92 328
2009	61 550	35 270	96 820

At the end of 1960s, technological improvements and the transportation developments boosted mobility and at the end of 1970s the automobile ownership became widespread in Muğla. In 1970s, the emergence of new jobs resulted in the change of socio-economic life; therefore, migration from villages and rural settlements to city centers and to seaside towns became more common. People moved to the city center of Muğla in order to pursue new job opportunities. The last decrease of rural population in 2007-2009 may have different reasons. The address-based population registration system was first tried out in 2007, and it was not a census method; it was just a database updated every year. Therefore, unregistered population may give illusory results. Besides, in 2008, some villages of Muğla, e.g. Kötekli and Yeniköy, became the new neighborhoods of Muğla city center. This statistical decrease may be the results of this administrative shift.

According to the general population census results of 2000 (Table 3.2), 13921 people are economically active in Muğla. Fifty-nine percent of this population work for service sector, two percent of the population for agricultural sector, two percent of the population for mining, fourteen percent of the population for industry sector, seven percent of the population for infrastructure sector, sixteen percent of the population for commerce. Meanwhile, fifty-tree percent of this labor force is employed in the public service (TUIK, 2010). Besides, many people prefer to live in the area after they retired because of mild climate and closeness to popular touristy seashores. Therefore, the population is mainly composed of officers and retirees (Güner, 2001). As the statistics asserts, agricultural activity is of secondary place as a field of occupation for many urban residents. In other words, it is not the main economic activity of Muğla residents.

Table 3.2 Economic Activities and Employment Rates of 2000 in the province of Muğla city center (Source: TUIK, 2010)

Population	Undefined Facilities	Agriculture	Mining	Industry	Infrastructure Sector	Commerce	Service Sector
Total	7	324	222	1923	909	2289	8247
Percentage	0%	2%	2%	14%	7%	16%	59%



3.3 Natural and Socio-Spatial Structure of Karabağlar

This section explains the main components of Karabağlar that contribute to the natural and socio-spatial structure of Karabağlar.

3.3.1 Geologic and Geomorphological Structure

The large plain, which is composed of Muğla, Karabağlar and Düğerek Plains, is between Toros fold system and Saruhan-Menteşe metamorphic block. The large plain is surrounded with mountains. The plain stretches in the southeast direction with a slope, the lowest place of which is Karabağlar.

Muğla plain is a depression region that was formed with tectonic movements. The 'hum' (Hamursuz Hill) in the middle of the plain and the ponors at the base of the plain indicate that the plain is a result of karstic formation. In terms of rock stratum, Karabağlar plain is

placed on a flat and gently sloping area and is covered with quaternary alluvial units at the top (Figure 3.4) composed of silt, clay, mud, sand and gravel lithogies, reaching 0-70-110 m. thickness. The main material in alluvial units is usually formed with available rocks around limestone, schist, serpentine, etc., and their alteration (decomposition) with wind and river erosion (Muğla Governance, 2008). At the ground of the plain, the alluvial soils are extremely fertile and cultivable for crop production.

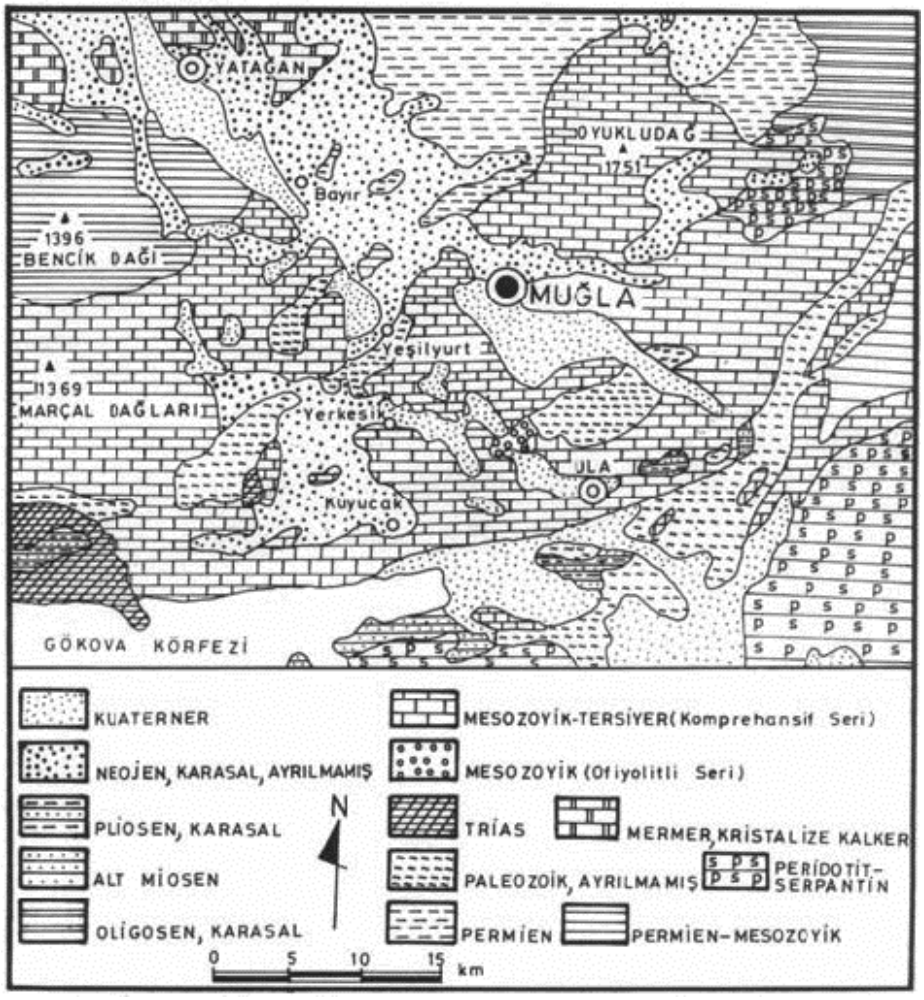


Figure 3.4 Geologic formation map of Muğla (Source: Güner, İ. (2001, p.5) Muğla ve Çevresindeki Yerleşmelerin Gelişmelerini Etkileyen Coğrafi Faktörler, Muğla Universitesi, SBE Dergisi Bahar,Sayı 4.)

Karabağlar and Muğla Plains are at the south boundary of Yılanlı and Oyuklu Mountains with a range of 620-650 meters in height, and they are separated from each other with Hamursuz Hill (Güner, 2001). At the base of the plain, limestone with multi-fractured and fragmented structure is found, the dominant geological formations of the Permo-Carboniferous age. Hence, the rainwater that reaches up through the multi-fractured cracks of the rocks drains off from Gökova Bay with underground river branches as flow rated resources. On this plain, while mainly stacked sandy gravel series constitute tight and very tight ground group, yellowish silty sandy soil series constitute tight and tight ground group in the middle. If the stacked limestone is thick, fractured and fissured; the recharge area is large, then it becomes a good reservoir for the groundwater. Existence of base levels of waterproof clay in such a limestone might constitute stable resources (Muğla Governance, 2008). The abundant water table of Karabağlar formed thanks to these geological potentials.

Hamursuz Hill, structured with limestone is located on this plain in the case of a large polje[7] formed as a karstik depression (Figure 3.5). At the eastern side of the hill, there is a mouth of a *large ponor (düden)*. *'Düdenler'* are the formations locating at the ground or at the edge of closed basins or depressions that drains water to underground.

The level of the water table in Karabağlar and Muğla poljes varies seasonally between 5 and 16 meters. According to measurements of Directorate of Rural Services, on some locations, the static and dynamic water levels of some wells may decrease to 40 meters through underground (Güner, 2001).

Muğla is the province of Turkey having the second highest annual rainfall. Because of this attribute; rainwater fills the lowest parts of the polje in winters and creates *ponding and overflowing areas*[8] (Figure 3.6). With decreasing rainfall at the end of spring, 'düdenler' drain off the water in ponding areas thanks to permeable soil and local evaporation. This natural formation leaves behind first quality agricultural lands.

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[7] Large plains which have occurred between high mountains made of carbonate rocks. The agricultural potential of polje is higher than the other areas because of water table; therefore, many settlements are established on the poljes.

[8] The ponding area occured around the Çayırucu 'düdenler' locates near Hamursuz Hill is in height of 617 m and covers an area of 3,62 km^2. The overflowing areas join in height of 618 m and covers an area of 2,35 km^2 (Koca, 2004).

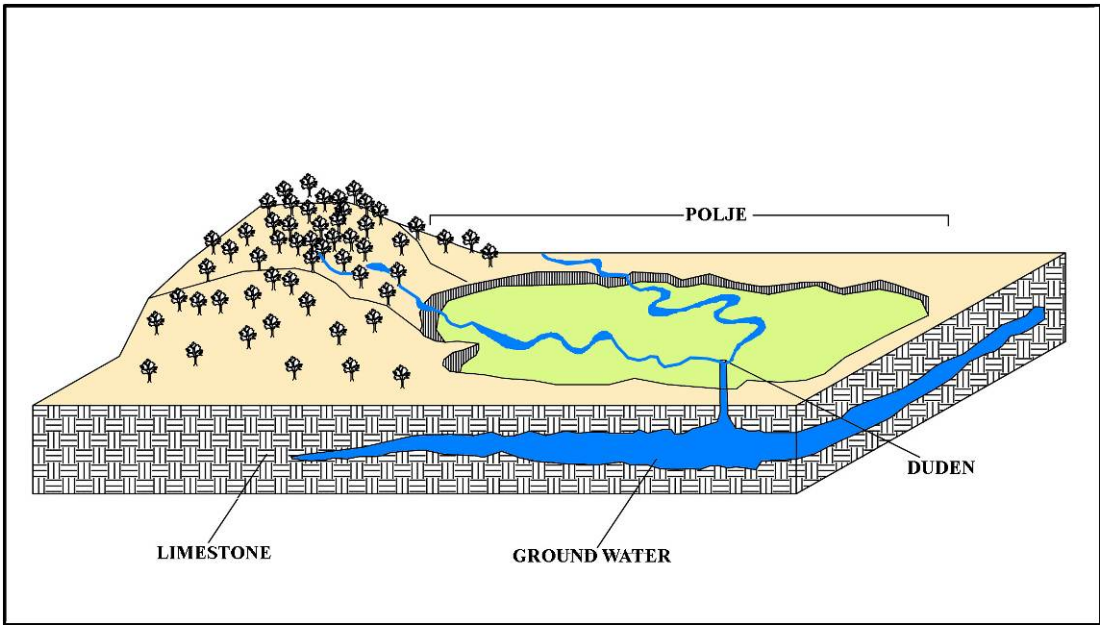

Figure 3.5 Cross section of Polje and 'Düden' (Source: Drawn by Feray Koca)

Figure 3.6 Ponding area (The photo is taken from Yılanlı Mountain)
(Source: Archive of Feray Koca)

The seasonal migration is in close relation with the drainage period of the surface water of the poljes via 'düdenler'. Hence, at the end of April when the area is drained, people move to Karabağlar and stay there during the second half of spring and the whole summer. In

autumn, with heavy rains, the ground of polje became full of water, and it is time to turn back for residents to their permanent residences in the town center of Muğla (Güner, 2001).
In terms of geologic formation and seasonal dependency, there are similar 'bağ' settlements, which are called as 'yayla' in Menteşe region. All of them are on a polje that is lower than Muğla town in height. These 'bağ' settlements are Ula, Yerkesik, Yeşilyurt and Yenice. These settlements are district and towns of Muğla province. They are not as wide as Karabağlar; however, they display similar characteristics and similar spatial organization with Karabağlar.

3.3.2 Climate

Muğla has a temperate Mediterranean climate. While the summers are arid and hot, the period between November and March is rainy. The average precipitation alters between 600-1200 mm. When it is 600mm, the season is regarded to be arid, but when it reaches 1000mm, the season brings abundance and fertility (Eroğlu, 1939).

Although there is a short distance between Muğla and Karabağlar (4 kilometers) and there is not a major difference between their altitudes from the sea level, there are distinctions between these two settlements in terms of bioclimatic comfort values. Çınar (2002) carried out a research concerning the effect of bioclimatic comfort values on landscape planning process in Karabağlar. According to his analysis, it is calculated that the temperature in Karabağlar is 4-5 ^{0}C lower than the one in Muğla town center between the hours of 15:00-16:00, when the temperature is the highest of the day. During other hours, this difference is calculated to be 2-3 ^{0}C. During the hottest period, the relative humidity value is calculated to be 10-15% higher in Karabağlar. The major reason for this rate is the evapotranspiration between soil, plants and atmosphere. In the hottest term of the year, the water table decreases to 13 meters. The water table changes according to seasons and helps the continuation of evaporation on the surface of the soil by being transferred to the plants as capillary water[9]. It is known that the underground water of Karabağlar is found under 76-meters depth of the main rock and reaches to Gökova Bay by the help of underground channels and 'düdenler'. Thus, underground water and 'düdenler' are significant elements for the humidity.

[9] Capillary water is the water molecules that are attached to clay and silt particles.

Çınar (2002) indicates that the water in the soil is very effective on the bioclimatic comfort value of Karabağlar. With evaporation of 0,5 gr water, the temperature of 1 m^3 air is decreasing to 1^0C. The amount of water in the soil is very high in ponding areas. Therefore, the major bioclimatic comfort distinction between Muğla and Karabağlar depends on the ponding areas that occur between November and April and soil humidity.

In addition, in the hottest period of the year, dominant wind direction in the polje is in the northwest and southeast direction. During the hottest hours of the day, the wind in the southeast direction intensifies and prevents a sultry weather by blocking the formation of relative humidity (Çınar, 2002).

Apart from natural formations (high water table, 'düdenler', ponding areas), man-made structures*; 'kesik'*, '*kabalık'*, '*irimler',* which are explained in the following parts of this chapter, are considered to be important factors in the process of creating bioclimatic comfort conditions and soil moisture. Therefore, both the natural and man-made formations are interconnected, which is why any kind of deterioration may change climatic conditions.

3.3.3 Land Asset

Muğla Polje including Muğla, Düğerek and Karabağlar Plains is covered with first quality agricultural land (the area enclosed with red line in Figure 3.7). This kind of land is characterized by high depth of soil with sufficient drainage. The capacity of water permeability is high, and productivity is good (Başbakanlık Köy Hizmetleri Genel Müdürlüğü [General Directorate of Rural Services], 1998).

Muğla Polje is mostly made up of colluvial soil. This is young soil formed by accumulated materials with the help of streams, land sliding, and gravity. At profile, layers in various dimensions form according to the flow of surface and slope degree. They are usually exposed to overflowing; however, their drainage is fine owing to the slope degree and structure (Başbakanlık Köy Hizmetleri Genel Müdürlüğü, 1998). In Karabaglar, overflowing and ponding areas structure the colluvial soil; however, drainage problems occur in winters because of heavy rainfalls and low slope degree.

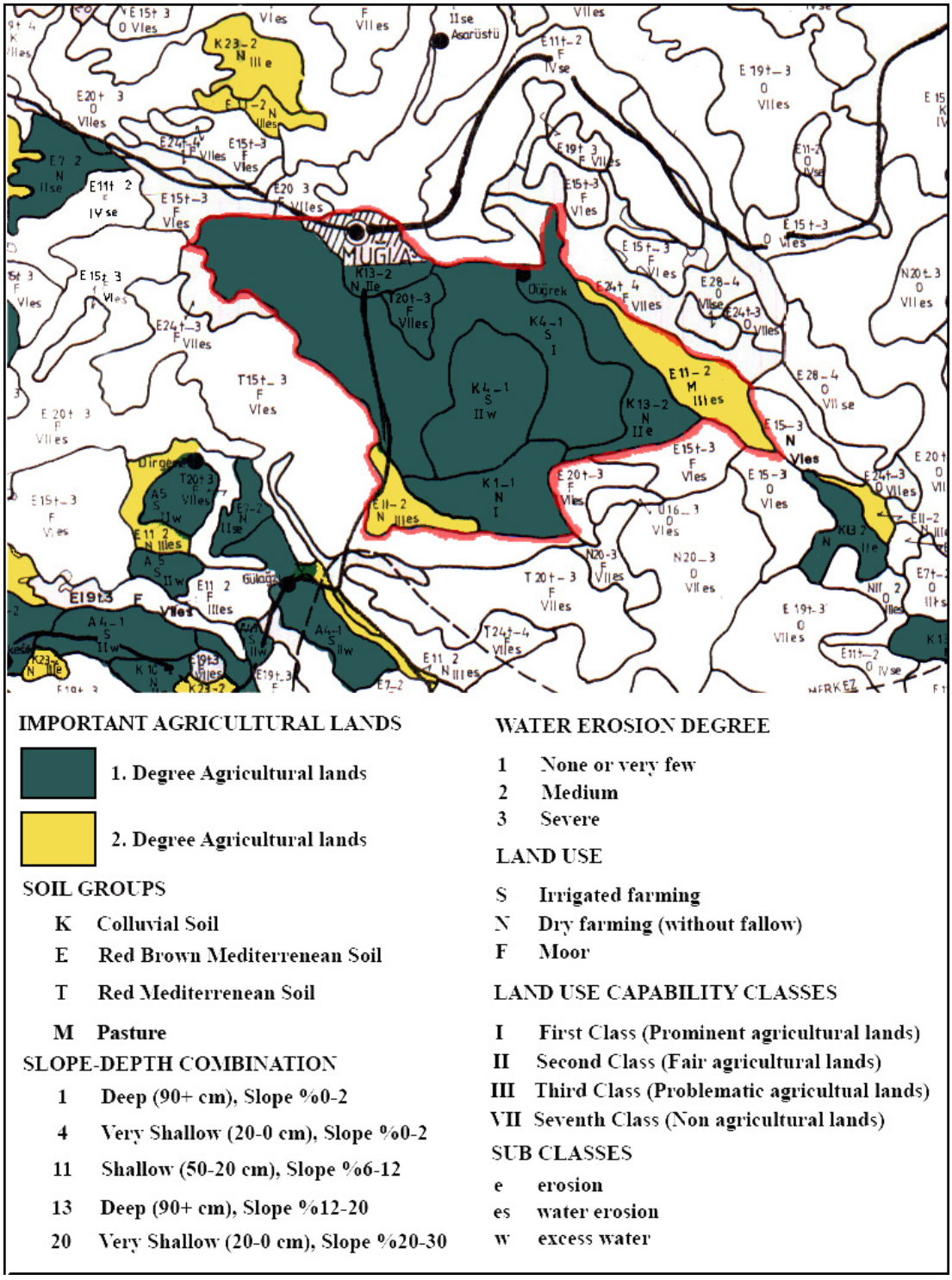

Figure 3.7 Land Asset of Muğla Polje (Source: Başbakanlık Köy Hizmetleri Genel Müdürlüğü, 1998)

Throughout Karabağlar, irrigated farming is practiced. The slope is about 0-2% and the soil consists of small and medium sand particles. The depth of organic soil for planting is high. However, in rainy seasons, while water erosion is a problem on Hamursuz Hill, excess water can be a problem on Karabağlar Plain because of insufficient soil drainage, high water table and overflowing problems.

3.3.4 Morphological Structure

Karabağlar is separated from Muğla by Hamursuz Hill. It is 4-5km far from Muğla town center. It is called 'Karabağlar Yaylası' in the literature. The literal meaning of 'yayla' is 'tableland, plateau, or summer range'. This means that 'yayla' has to be in highlands compared to town or village. However, Karabağlar Yaylası[10] is about 625 m high from sea level, which is a little bit lower in height than the town center of Muğla (650m). Tunçdilek (1964) indicates that there are parallel 'yaylalar' in Central Anatolia; however, Karabağlar is the only 'yayla' in Anatolia where town residents move down.

Karabağlar is a peri-urban 'bağ' settlement where Muğla residents live. It is located at the southeastern side of Muğla town. Farmlands, vineyards, orchards, animal husbandry, plantations, cropping, sheds, natural vegetation, 'bağ' houses, summerhouses and abundant ground water table are specific characteristics of Karabağlar. Its physical, social and cultural genesis renders its distinct settlement character. However, it is not considered a village because typical Turkish villages are generally nucleated type of settlements in which all the farmsteads are clustered in the center of the village lands, farmlands surrounding the cluster of farmsteads. However, Karabağlar is a dispersed settlement. In this kind of settlement, the isolated farmsteads are placed in the midst of their own fields; that's why, the spatial layout gives it a countryside character (Figure 3.8). It is the archetype of the Aegean Region country settlement type (especially in the West) located on a large plain with water basement.

[10] Although it is a geomorphologic plain, the local inhabitants of the settlement call it as Karabağlar Yaylası (Plateau) because of its cool climate.

Figure 3.8 A panoramic western view of Karabağlar landscape.

(Source: Archive of Feray Koca)

The means of living is linked to farming activities in Karabağlar. The economic activities are directed towards the self-sufficiency of the households. The migration between Karabağlar and Muğla town is the main ritual that occurs every season. Cribb (1991) explains this migratory cycle occurring in both winter and summer as the outcome of economic conditions requiring people to prepare food stock for winter and ensure the accumulation of livestock.

Population in Karabağlar is approximately 4000 people, and Muğla holds 60000 together with Karabağlar. Muğla State Institute of Statistics explained the population of the house stock in Karabağlar to be 1175 in 14th population census conducted in 2000. It is a large plain spreading over an area of 25 km^2 (Eroğlu, 1939). The main town (Muğla) lies to the northwest of Karabağlar. Ortaköy Village and Düğerek and Kötekli neighborhoods surround Karabağlar.

Aran (2000) indicates that Karabağlar landscape is composed of scattered miniature cubic houses and one-five-acre horticultural farmlands. While large farmlands are dispersed along the northwestern and western side of the plain, small and medium sized farmlands agglomerate in the center of the plain.

In 1977, Karabağlar was registered as a third grade natural site, the settlement character, natural and cultural assets and cultural heritage of which must be preserved. It gained acceptance as a 'yayla' settlement that is worthy of preservation. In January 2003, the Municipality of Muğla ratified a conservation plan prepared by the Department of City and Regional Planning of Dokuz Eylül University. Nevertheless, the plan focused on the parcel-sized regulation instead of perceiving its existence of being as a whole landscape. The plan used conventional conservation methods (zoning) and mainly emphasized the regulation of the density of second housing (summerhouses) per hectare.

There are 2890 parcels divided into 48 localities (Figure 3.9). Of the 48 localities, 20 are called with the name of the coffee house that they have. These localities were chosen by first inhabitants; reproduced through daily use and transmitted through time. Naming practice reflects the settlement pattern of the area, and in a sense, its historical evolution.

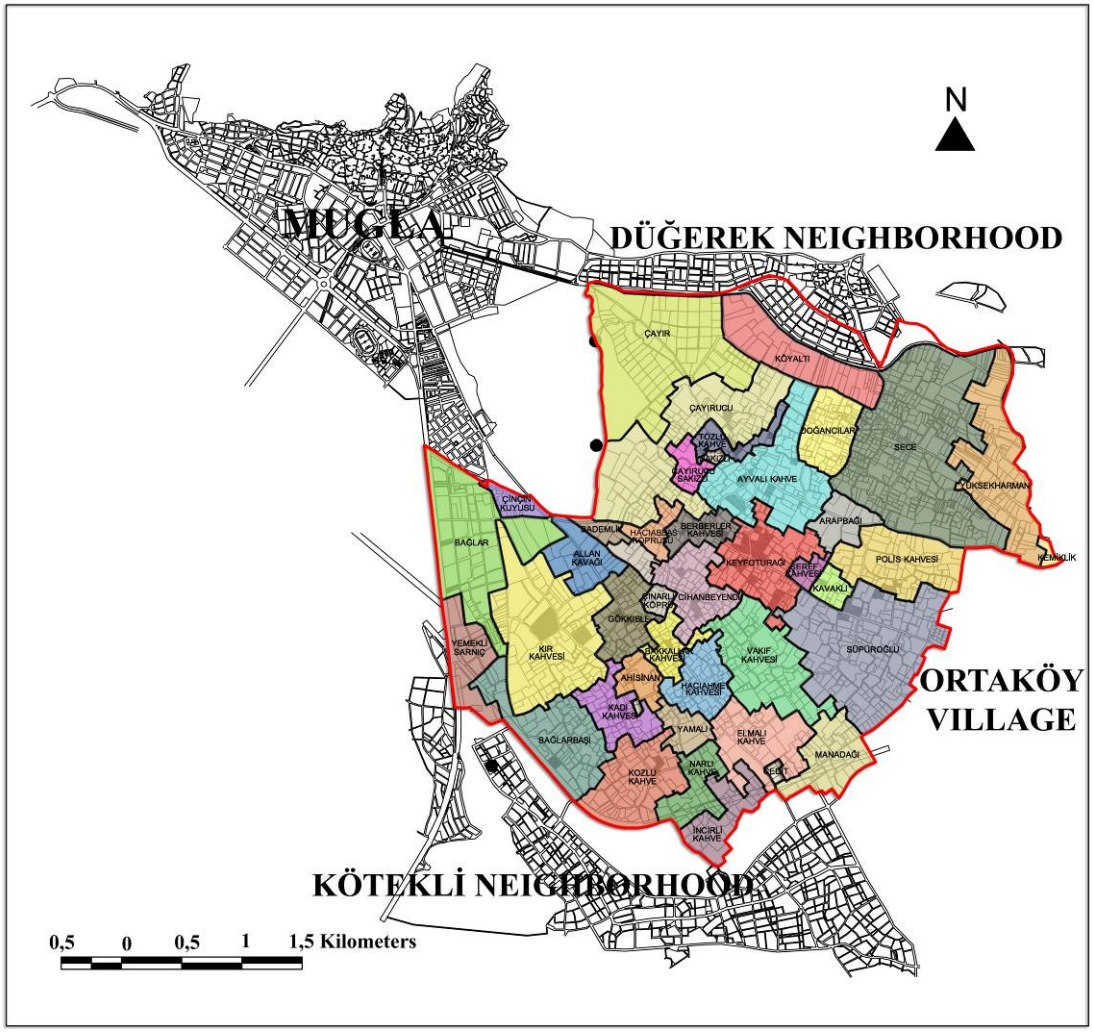

Figure 3.9 Karabağlar Natural Site and the localities with the name of coffee houses. (Source: Adapted and Redrawn from the "Conservation Plan" and according to data obtained from the Register of Deeds Office of Muğla.)

Distinct geomorphologic and hydrologic features of Karabağlar directly influence the physical/spatial characteristic of the settlement. Karabağlar settlement is composed of many small focal points (common squares composed of coffee house building, masjid, handicraftsman building, well, *biryan* pit[11] and plane trees) and displays a dispersed

[11] It is a kind of oven made in a hole in the earth

settlement type. Man-made and environmental components affect the distribution and composition of focal points. Settlement pattern of Karabağlar rests on an outstanding typical architecture: vernacular landscape consisting of small plots called as *'yurt'* surrounded with linear elements such as *'irim', 'kesik', 'kabalık*', abundant water reservoirs provided by *'düden'*[12], historical summer masjids and coffee houses as the focal points and common meeting areas. Aran (2000) suggests that in the construction of traditional country buildings in Anatolia, the inhabitants of that country settlement have considered traditional requirements, spatial and climatic factors, environmental coherence and conformity with nature. Therefore, country buildings are a kind of representation of the inhabitants' lifestyles and culture. Besides, country buildings symbolize the interaction between human beings and built and natural environment. This interaction and conformity is clearly observed in Karabağlar.

3.4 The Essence of Karabağlar

The landscape pattern of country settlements, which constitutes the natural characteristics of the land, is a remnant of many years of socio-cultural activities. The evolution of the landscape from origin to present shows its historical coherence. Therefore, the future development and change within the landscape necessitate an understanding of the essence of the area, its present character and the evolvement of the society in a historical perspective.

Karabağlar is a 'bağ' settlement in the Anatolian countryside, which has undergone a transformation in its particular character and society. Transformations in the historical perspective have created extreme contradictions between town and 'bağ' land uses. Furthermore, the spatial evolution of the settlement reflects the role of social, economic, and political factors in determining the settlement patterns. Actually, the farmland pattern of Karabağlar is predominantly shaped by farming activities. Therefore, this section takes into account the history of the settlement, the changing social structure of the settlement and the evolution of its spatial organization in terms of understanding the original structure, the amenity values of the landscape and the very essence of Karabağlar.

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[12] Each of these specific expressions identifies landscape components of Karabağlar and they are explained in the following pages.

3.4.1 Karabağlar in history

Kuban (1995) suggests that the cities in Anatolia and the Balkans have displayed all the characteristics of medieval physiognomy since 15th century. They were fortified until the Pax Ottomana[13]. Just after 15th century, cities started to grow outside the fortresses. Nomads and outlanders settled outside the fortresses, and new neighborhoods were set up on large plains (Tekeli, 1993). It also account for why Karabağlar was settled outside the fortress (*hisar*[14]) of Muğla town, which gives its name to the mountain (Hisar or Asar Mountain). There is not much written information on Karabağlar's history except for legends, travel notes of Evliya Çelebi, descriptive contribution of Zekai Eroğlu with his book, some waqf (*vakıf*) documents and inscriptions on the historical masjids. Indeed, even a simple descriptive study about the landscape, architecture and spatial organization does not exist. This part makes a descriptive explanation of the origins, spatial layout and particular landscape character of Karabağlar.

The name 'Karabağlar' comes from the dense shady vegetation, which makes up an extensive area of dark color. In addition, the word '*kara*' is considered to come from the elm trees (karaağaç) that were once the dominant tree group in the area. The word *'bağ'* comes from famous vineyards and orchards. According to Evliya Çelebi, Karabağlar consisted of vineyards and dark green elm trees. After he visited Karabağlar and its surrounding in 1670, he cited in his travel book 11 thousand vineyards and pattern of roads made up of dense and shady trees, through which sunlight could not permeate inside. Hence, this very day, though few in number, tunnel like dense and shady roads or '*irimler'* can be found in the area.

3.4.2 Spatial Organization in Karabağlar

Spatial organization in Karabağlar is an outcome of socio-cultural formation that took place many centuries. It was structured with great sensitivity to the settlement and efforts of the first inhabitants. Land uses, existing resources, social activities and their relations with the

[13] Pax ottomana is the theory of N. Malcolm who deals with Kosovo from 1450 to 1580. This theory intends to demonstrate that the Ottoman Empire, particularly in the early centuries of its rule in the Balkans, represented the ideal of state organization, in which all peoples living within its borders enjoyed full legal and religious rights. This theory supports the construction of fortresses in Anatolia and the Balkans. **Kuban**, D. (1995;35-36) *Türk Hayatlı Evi.*

[14] Today we can see the stones of the fortress that still stands on Hisar (Asar) Mountain as quadrangle plan. Inside the fortress, there is an interior fortress, rooms and tomb that are made of squinch.

environment have given form to the landscape of Karabağlar throughout centuries. Spatial organization in Karabağlar asserts the existence of an environmental and historical coherence. This coherence realizes the uniqueness of Karabağlar.

Lynch (1960) describes urban setting with five elements: paths, edges, nodes, landmarks and districts and states that the spatial organization of the settlements is determined with these five cognitive elements. Some components equivalent to Kevin Lynch's elements constitute the spatial organization of Karabağlar. Being the smallest particular unit of the settlement, '*yurt'* constitutes the districts of Karabağlar. The paths consisting of the configuration of '*irimler', 'kesikler' and 'kabalıklar'* provide with the transportation of the residents and the drainage of water. *Coffee houses and masjids* are the nodes which are located at the intersection of main roads and in which people meet and share their practices. Some *monumental plane trees, minarets* define the localities as landmarks. The districts consisting of coffee houses, masjids and monumental plane trees, which are surrounded by 'yurtlar', have distinguishing characteristics of forming and naming process. All these structures are the components of a whole, and they cannot be thought separately because their existence of being depends on each other to operate efficiently, to live and to dwell.

In this part, to present the essence of Karabağlar, every component is investigated in the context of their evolvement and dependency on each other. They are significant as to the unique representation of the harmony and coherence between man-made and natural values.

3.4.2.1 'Yurt'

In Karabağlar, houses are scattered on one-five acre horticultural flatlands. In this geography, every 1000-5000 m^2 flatland which have a field, a well and a house or a wooden hut is called *'yurt'* (Figure 3.10). 'Yurtlar' are the smallest particular units in Karabağlar. If we take Karabağlar as a living organism, 'yurt' may be the cell of the organism. Although the sizes of the 'yurtlar' change, they have more or less similar components: house, porch (*sofa*), field (orchard, vineyard), well, outbuilding or stall, pool, courtyard, fireplace on the courtyard, wooden bedstead (*kerevet*), fruit trees, and flowerbed. Figure 3.11 is a sample to spatial organization in a 'yurt'. Figure 3.12 displays axonometric view of spatial organization in the same 'yurt'.

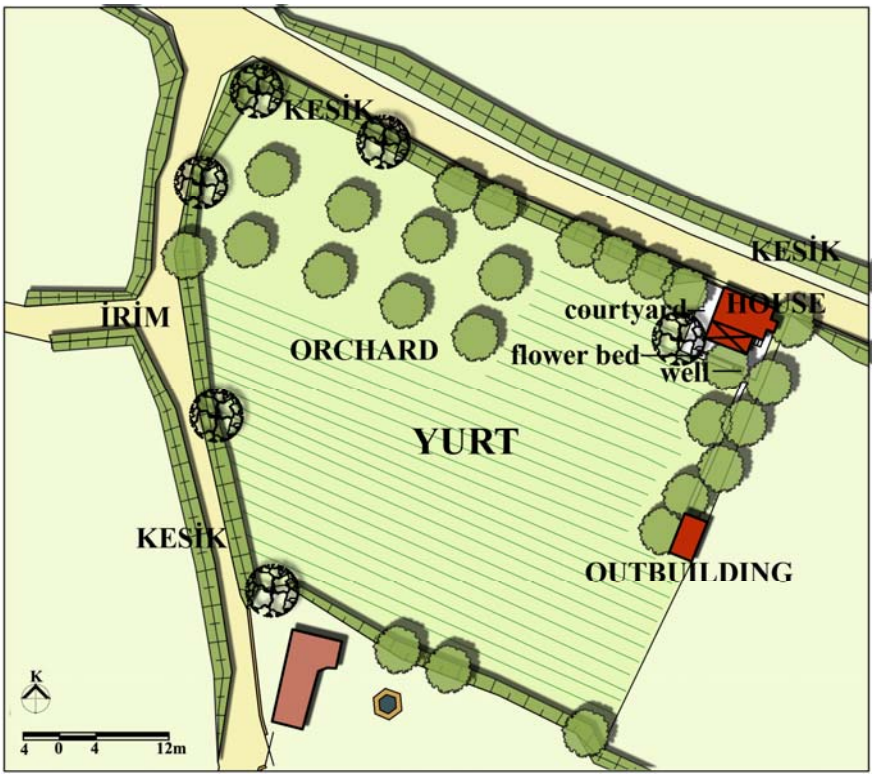
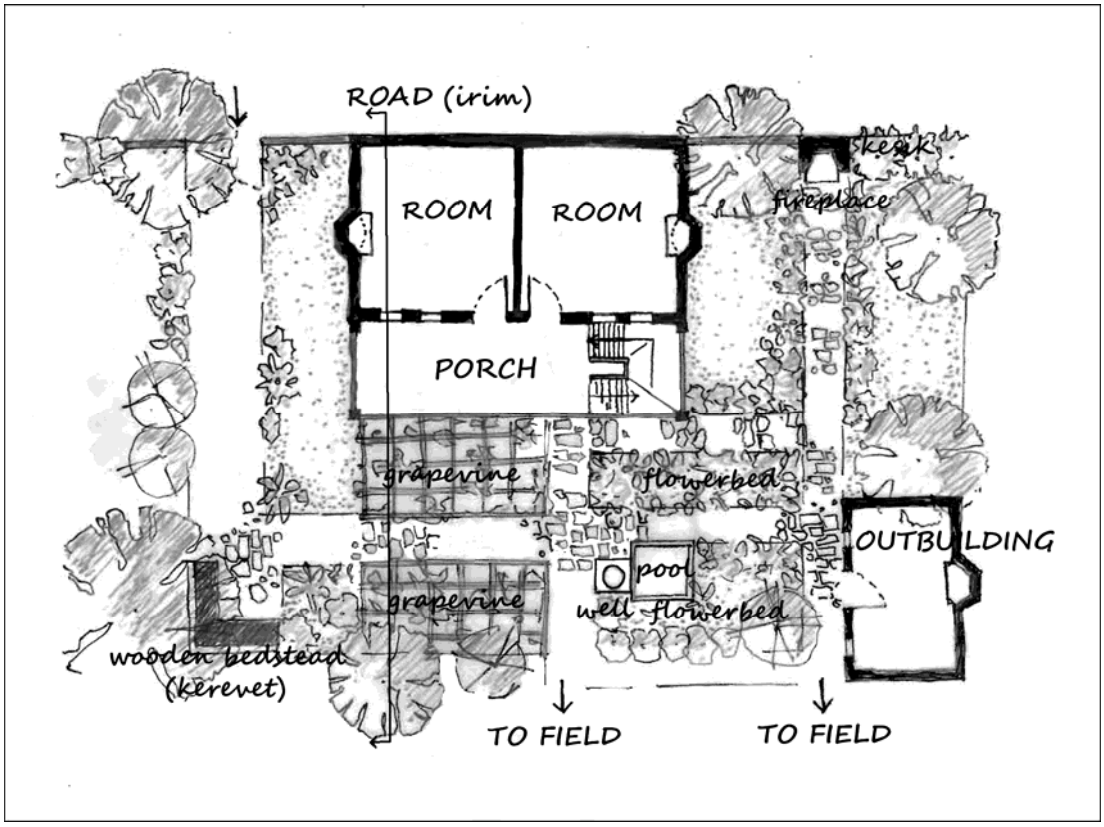
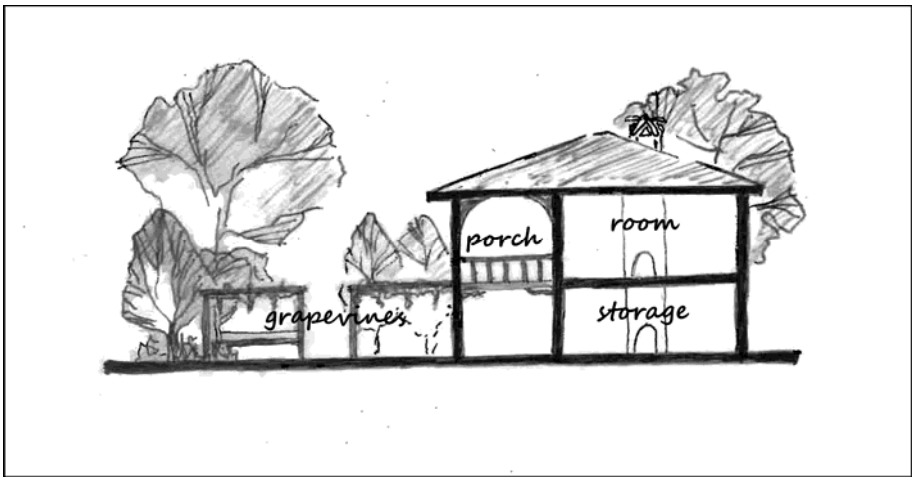


Figure 3.10 A 'yurt' plan (Source: Drawn by Feray Koca)

The origin of 'yurt' goes back to Central Asia and defines circular, domed Nomadic dwelling or tent of Turkic people. Similarly, Sözen and Eruzun (1992) explain 'yurt' as the first prototype of dwelling of Turcoman nomads. 'Yurt' was an outcome of agricultural way of life. Kuban (1995) indicates that both circular tent (yurt) and centrally planned Turkish house have the 'idea of centrality'. In Karabağlar, while this centrality is observed in the spatial organization of nodes and neighborhoods, a piece of land with a field, a house and a well is accepted identical to nomadic tent. This kind of appropriation may be the result of Nomadic tradition and acceptance of field and house as inseparable components of a particular social life and culture (Figure 3.13). Because of this public appropriation, 'yurtlar' are called with the owners' nickname.



a) Plan



b) Section

Figure 3.11 A sample spatial organization in a 'yurt' (a, b) (Source: Drawn by Feray Koca)

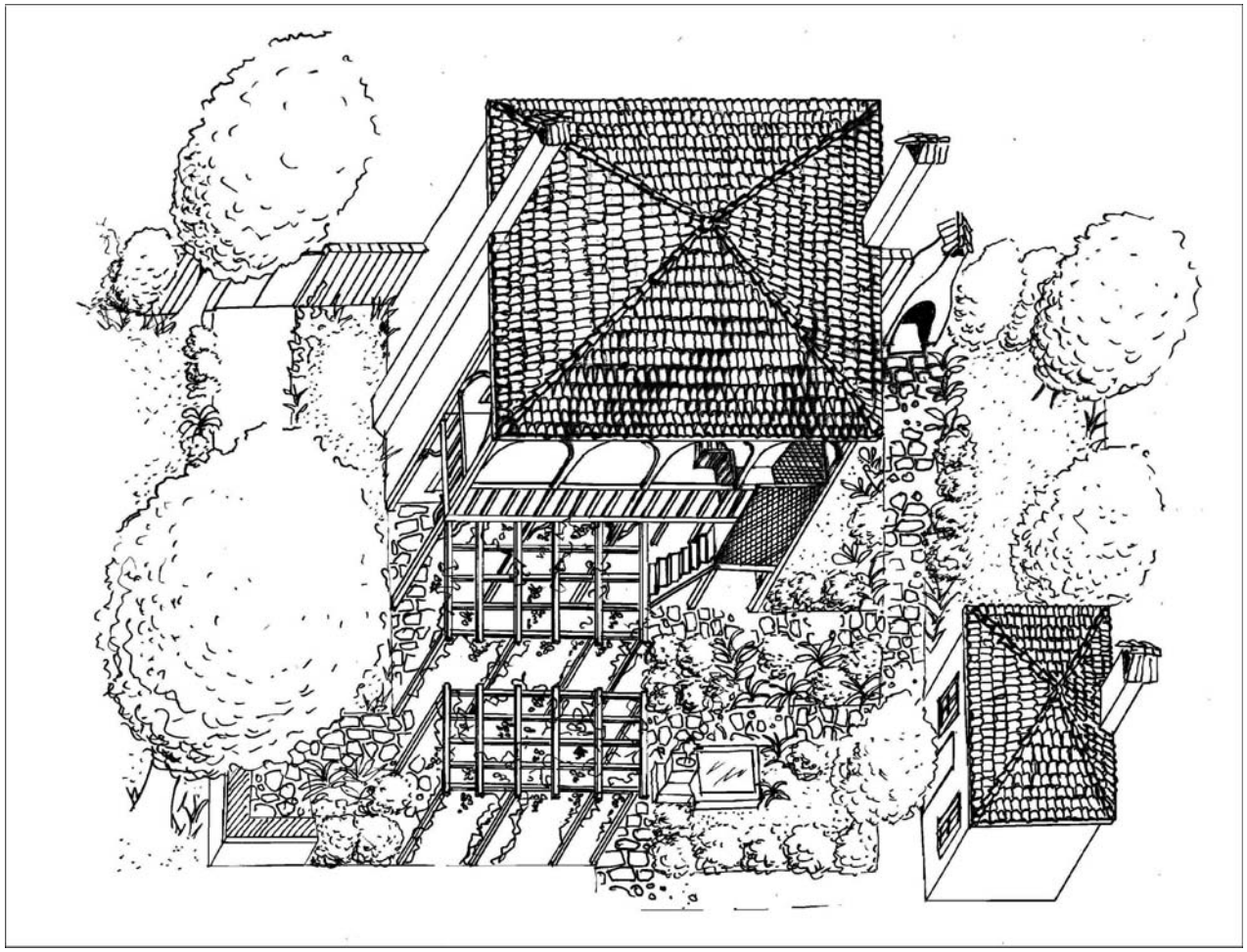


Figure 3.12 Axonometric view of spatial organization in a ‘yurt’ (Source: Drawn by Feray Koca)

a) Field

b) House

c) Well pump

Figure 3.13 'Yurt' components: Field, House and Well (a,b,c)
(Source: Archive of Feray Koca)

Eroğlu (1939) indicates that the economic conditions in 1939 allowed all the Muğla residents, except for 3 or 5 percent, to have a land and a residence in Karabağlar. He defines

each land with its residence as 'yurt'. This ownership rate has changed since 1939; however, the term 'yurt' is still the same today. These 'yurtlar' are generally 3000-5000 m^2. Nevertheless, there are also 'yurtlar' with the size of 500, 1000, 10000 and 30000 m^2. The residences of these 'yurtlar' are in general wooden houses with one or two rooms. 'Yurtlar' are surrounded with *'kesikler'*, which is a kind of dense hedgerow consisting of grapevines, elm trees and blackberries.[15] Every 'yurt' has a well from which the water is obtained with a pump. In the past, the water pumped from these wells was used for the daily needs of the houses; it was not used for irrigation. Dry farming was common in Karabağlar. Eroğlu (1939, p.144) explains these wells: "There is no running water in Karabağlar; therefore, in every 'yurt', there is a well with a depth of 3-4 meters. The water pumped from the well is cold and tasteless but peptic". [16]

In 1939, while the depth of wells were at reasonable rates, in the last decade, due to increasing housing density and occasional droughts, wells which are deeper than 20 meters dug. This process has changed the level of water table and thus, the variety of vegetation.

In every 'yurt', people cultivate their needs in order to consume in winter. The agricultural products range from grapevine to vegetables. While one part of 'yurt' is allocated to vineyard, other part is allocated to orchard or melon field. In addition, people conduct stockbreeding for its meat (Eroğlu, 1939).

3.4.2.2 'Kesik', 'İrim' and 'Kabalık'

'Kesik', *'irim'* and *'kabalık'* are other physical components that assert the unique character of Karabağlar. Barlas and Koca (2006) introduced these landscape components with a detailed comparison of British hedgerows in an early study. In Turkish literature, *'kesik'* has two meanings of *'a row of bushes or small trees and shrubs that delimit a certain piece of*

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[15] " Muğla halkının yüzde üç veya beş nisbetindeki pek cüz'i bir kısmı istisna edilirse diğerlerinin hemen hepsinin Karabağlar'da bir miktar arazisi ve vakıt ve haline uygun bir ikametgahı vardır ki bunlara Yurt denir. Yurtlar umumiyetle üç ile beş dönüm miktarındadır. Mamafih bunlar meyanında yarım, bir ve on ila otuz dönüm olanları da vardır. İçindeki ikametgahlar, tahta barakalarla tek ve çift odalı evlerden ibarettir. Dört beş odalı muntazam binalar da vardır. Yurtların etrafı, üzerleri asma, karaağaç ve böğürtlenlerle kesif bir çit halini alan kesiklerle çevrilidir." (Eroğlu, 1939, p. 144).

[16] "Karabağlar'da akar su yoktur. Su ihtiyacı yurtlariçinde mevcut üç dört metre derinlikteki kuyularla temin edilir. Kuyu suları soğuk ve yavancadır. Fakat oldukça hazımdır." (Eroğlu, 1939, p. 144).

agricultural plot' or *'ditches that are dug around the agricultural plots to drain surplus water'*. In Karabağlar, the function of 'kesik' is closer to the former meaning, and strikingly *'irim'* is standing as the term corresponding to the latter meaning.

It is should be noted that 'kesikler' and 'irimler' are the landscape components designed by the human beings. The geomorphologic and hydrologic features of the area have been influential on the spatial organization of the settlement. 'Kesikler' and 'irimler' were the responses of the first inhabitants to natural conditions of the earth. They simply had to form this structure to perpetuate their farming activities. These two components were first introduced in master's thesis of the author; however, it is necessary to redefine these components in the content of spatial organization.

'Yurtlar' are separated from one another with the soil heaped at the sides of '*irimler',* on, which a variety of bushes, shrubs and even trees are to be found. This soil heap with their vegetation is called *'kesik'*. They are usually 1-2 meters in width and 1,5 -2 meters in height. The formation of 'kesikler' depends on the 'irimler' (Figure 3.14; Figure 3.15). *'Kesikler'* were formed after '*irimler'*. '*Irimler'* act as paths to cross from one 'yurt' (agricultural plot) to another. They are at most 3 meters wide and 2 meters deep. Topography, level of surface water, wet structure of the soil and probable erosion after years of flooding are the factors determining the depth of 'irimler' because they have a function of draining surplus water after flooding. In some years, the rainfalls may be so heavy that 'irimler' cannot handle the flooding. They can even turn into creek beds, so the transportation can only be provided with rowboats. These creek beds flow through *'düdenler'*. The surplus water that sometimes causes flooding in Karabağlar is also drained by well-like geological formations called '*düdenler'* (ponors). They are then connected to long tunnels that help carry the water to the sea.

In some parts of Western Anatolia, 'irim' has the meaning of *'cul-de-sac formed streets'*[17]. It is actually a familiar situation in Karabağlar because there are quite a number of dead-end '*irimler'* that form the maze like layout of Karabağlar as Evliya Çelebi described.

[17] The term 'irim' is used with a meaning of 'Cul-de-sac' in Aydın, which is another province of Menteşe region.

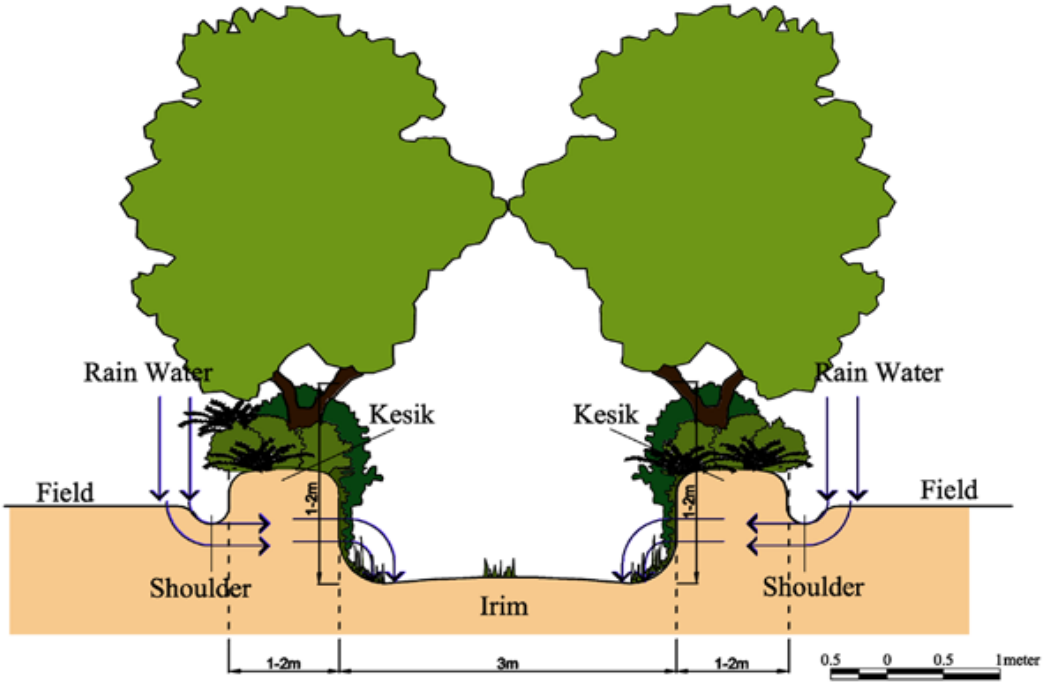

Figure 3.14 Section of 'İrim' and 'Kesik' (Source: Drawn by Feray Koca)

Figure 3.15 Photos of 'İrim' and 'Kesik' (Source: Archive of Feray Koca)

The relation between ‘irimler’ and ‘kesikler’ is essentially a compulsion. The way they formed can explain this compulsion. At first, ‘irimler’ were dug to protect the fields and houses from surplus water of rainfalls. The soil that is dug out of ‘*irimler’* is heaped on the both sides of ‘irimler’. On the soil heaps, a natural condition for vegetation occurs. Later, the inhabitants grew shrubs and trees on these soil heaps. Many of the ‘yurt’ owners prefer to mark the boundaries of their ‘yurt’ with defining natural elements. They plant tall conspicuous trees at the corners of the boundaries of their ‘yurt’. The trees and shrubs of the ‘*kesikler’* growing on the corners of ‘yurtlar’ (parcels) are called *‘kabalık’*. They usually emphasize a junction or turn of the path. These trees and shrubs especially consisted of grapevines, elms, cornel trees and blackberries. They also provide nesting area for nightingales and ouzels.

The lexical origin of the word ‘kesik’ has a meaning of ‘to cut’. Every year seasonal rains fill up ‘irimler’ with water and they are drained from ‘düdenler’. With the withdrawal of water, there occurs a suitable condition for the weeds in the bed of ‘irimler’. However, this natural formation necessitates a cleaning up process. The inhabitants weed out of them and heaps on the soil parts of ‘kesikler’. With the help of spring sun, these cut weeds decompose naturally. ‘Kesikler’ get their nutrients from these composts and water from the abundant underground water. However, ‘kesikler’ need trimming every year to perpetuate their functions.

Fields are located higher than ‘*irimler’* by 1 to 2 meters. Ditches (shoulders) are dug alongside ‘*kesikler’* on the side of the fields to canalize surplus water from the fields to the ‘*irimler’*. ‘Kesikler’ helps drainage by absorbing the surplus water that accumulates in the fields with the help of these shoulders. Aran (2000, p.52) explains how ‘irim’ and ‘kesik’ function in the plain: “…a web of man-made mounds and trenches protects Karabağlar plain from floods”.

Apart from their functional utility, ‘kesikler’ and ‘irimler’ together create spectacular scenery with a variety of vegetation they have. The main plants that constitute ‘kesikler’ are rosehips (Rosa canina), blackberries (Rubus spp.), grape vines (Vitis Vinifera), elm trees (Ulmus minor), wild pears (Pyrus elaeagrifolia), walnut trees (Juglans regia), quince trees (Cydonia vulgaris), plum trees (Prunus domestica), sloes (Prunus spinoza), fig trees (Ficus carica), Cornelian cherries (Cornus mas), hawthorns (Crataegus monogyna), oaks (Quercus ithaburensis), ivies (Hedera helix) and hackberries (Pistacia terebinthus).

‘Kesikler’ provide a bioclimatic condition for other living organisms. They create cool climate for the inhabitants. While providing privacy and security for ‘yurtlar’, they create a habitat for fauna. By surrounding agricultural plots, they structure the farmland pattern of Karabağlar. ‘Kesikler’ are estimated to cover a length of 230 kilometers in total. Unfortunately, in the last years, with new land allocations, building of stonewalls and deterioration of ‘kesikler’, this number has been decreasing rapidly.

3.4.2.3 Coffee houses and masjids

In Karabağlar, the main source of living has been farming as in the villages. However, it is not identical with the one in villages because the long distances between houses and fields, which are the characteristics of Turkish villages, are not observed in Karabağlar. Houses are scattered in the area, which are predominantly clustered around some nodes. These nodes are composed of a coffee house, a masjid, service buildings, a biryan pit, well with a pump and a pool and plane trees. These coffee houses that are means of private ownership serve as common spaces of local residents, and they function as public squares.

According to waqf documents and land records, most of the traditional buildings in Karabağlar were constructed at the beginning of 19th century, and some of them were constructed before the 19th century. *Coffee houses and masjids* display all the characteristics of civil and domestic architecture. They are the most well-known examples of the 19th century buildings in Karabağlar. They are registered as the example of civil architecture.

Twenty *coffee house and masjid* nodes (Hacıahmet, Süpüroğlu, Keyfoturağı, Narlı, Kozlu, Elmalı, Cihanbeğendi, Gökkıble, Berberler, Bakkallar, Polis, Kır, Vakıf, Tozlu, Ayvalı, Sece, Şeref, Topallar, Kadı Coffee Houses and Kavaklı Masjid) in Karabağlar originated in clustered ‘yurtlar’ around a focal point. These nodes assign the name of neighborhood-like areas and generally serve to its own neighborhood. They locate at the intersection points of main roads. Coffee house buildings serve as cafés in the daytime as well as local pubs at nights. Local people meet with each other, rest and discuss their farming practices in these coffee house buildings. Important celebrations, wrestling matches and wedding ceremonies are done on the coffee house localities.

Service buildings assemble around the coffee house building. Until 1970s, transportation could not have been provided with motorized vehicles. In those years, many artisans, tradesmen were moving to Karabağlar together with other Muğla residents, and they were running these service buildings. While they were working in the town center in winters, they were giving this service in Karabağlar in summers. These service buildings were single-storey, stone-masonry type of buildings with hipped pantile roof. The masters of crafts were bakers, tailors, shoemakers, grocers, butchers, blacksmiths, hairdressers, etc. who gave their crafts' name to the coffee houses. Today, neither the service buildings nor their operators exist, yet their names remained. Hence, some of the coffee houses are called with the name of property owners (Hacıahmet, Süpüroğlu, Keyfoturağı, Şeref); some of them are called with the names of fruit trees (Ayvalı, Narlı, Kozlu, Elmalı); some of them are called with the values that are attached to them as a result of common experience (Cihanbeyendi, Gökkıble); and some of them are called with the occupations of their owners (Berberler, Bakkallar, Kadı, Polis).

Masjids are other significant buildings in the nodes. They are usually square-planned buildings with hipped pantile roof that are built on a wooden base. They can be considered summer mosques, three facades of which are surrounded with low walls and closed with batten fences with motifs (Eroğlu, 1939). Most of them were built by waqfs in the 19th century. Summer mosques usually do not have minarets; however, after 1950s; minarets were constructed on two masjids: Gökkıble (Figure 3.16) in Karabağlar Neighborhood and Sece in Düğerek Neighborhood.

Monumental plane trees are other characteristics of the nodes. They determine the location of coffee houses. Most of them are about 500-600 years old today. They create a cool atmosphere by shading the courtyard of the coffee houses.

In every coffee house, there are brick *biryan pits* which are 1-1,5 meters in depth and have a diameter of 50-60 centimeters (Figure 3.17). Roasted lamb, which is cooked in these biryan pits by the keepers of the coffee houses, is the main meal of dinners (Eroğlu, 1939).

Well with pumps that provides water need of the coffee houses as is in 'yurtlar' come with the territory. A well and a connected pool take their place with flowerbeds on the courtyard.

Apart from their architectural values, masjids, coffee houses, service buildings, plane trees, biryan pits, wells and pools reflect the lifestyle of Karabağlar. Coffee houses are in the center of the neighborhoods where people can do shopping, pray, rest and drink.

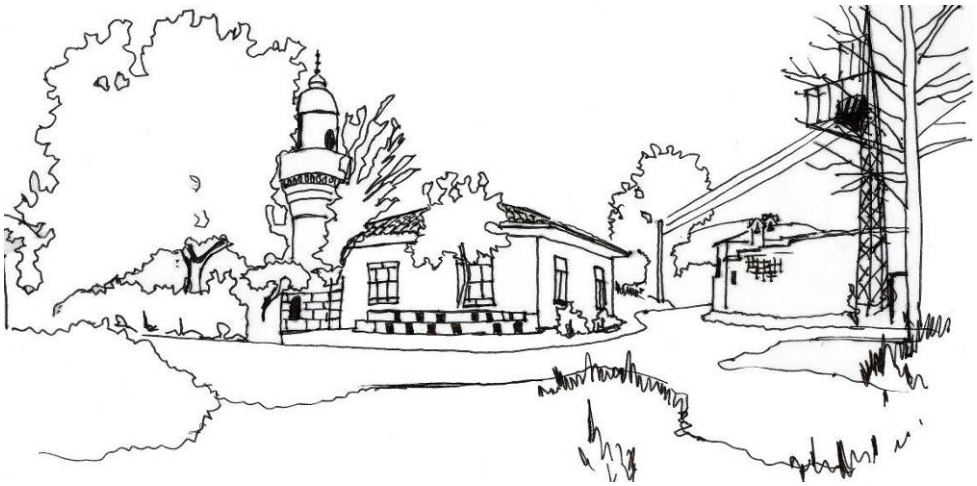

Figure 3.16 Gökkıble Coffee House (Source: Drawn by Feray Koca)

Figure 3.17 Biryan Pit in Keyfoturağı Coffee House (Source: Archive of Feray Koca)

Since 1950s, with closed economic structure of Muğla town changing, Karabağlar and coffee houses have started to lose their significance. Many coffee houses changed hands and are left to their fate. Although most of the owners of coffee houses changed by inheritance or by sale, they continued to be called with the name of their initial owners. Unfortunately, some of the coffee house buildings were wrecked in years; in addition, two coffee house nodes (Yamalı and Başoturak Coffee Houses) disappeared that today we have no information about them except for their names. Figure 3.18 displays the localities of the main nodes, encoding them with numbers. Every coffee house and masjid node is described below in detail.

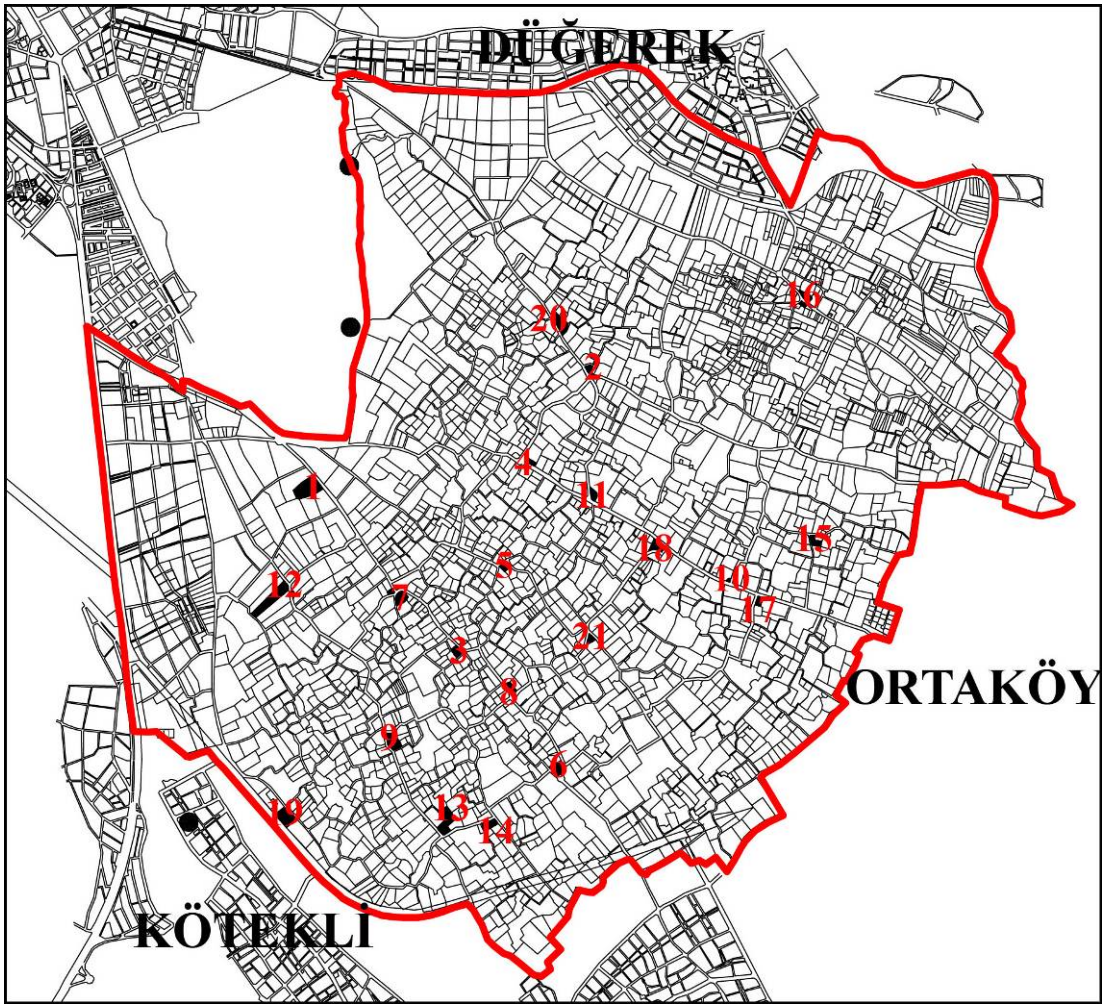

Figure 3.18 Main Nodes in Karabağlar (Source: Drawn by Feray Koca)

1: Allan Kavağı is a huge plane tree which is registered as immovable monumental asset. It is more than 10-centuries old. It is significant, as it is known as the locality where Evliya Çelebi camped. It has a hollow trunk into which one person may enter easily. The local residents believe that the tree is holy because of some local legends. Especially at nights, people feel afraid of getting close to the tree. Some also believe that the tree has a healing effect on the sick children (Figure 3.19).

Figure 3.19 Allan Kavağı (Source: Archive of Feray Koca)

2: Ayvalı Coffee House is located on the road connecting Keyfoturağı to pasture parts of Karabağlar (Koç et al., 2002). Its ownership has been taken over from waqf by Mehmet Ali Eren. It had two coffee house buildings named according to their use in summer and winter. Nevertheless, its coffee houses were transformed and started to be used as a house. Therefore, the node is enclosed with walls and is closed to public use. Its small square-planned masjid remains standing; after it was restored, it was brought into service. The

original minaret of masjid that was covered with wood and tinplate does not exist now. It has wooden trabeated, double-leaf door. Above the entrance is a marble epitaph written in a style of Arabic script. It has round arched windows with double sashes and batten fences. The end of fences has crescent motifs. The locality has seven monumental plane trees and a well in the garden. Figure 3.20 displays the restored masjid building. Figure 3.21 displays the spatial organization in Ayvalı Coffee House.

Figure 3.20 Ayvalı Coffee House (masjid) (Source: Archive of Feray Koca)

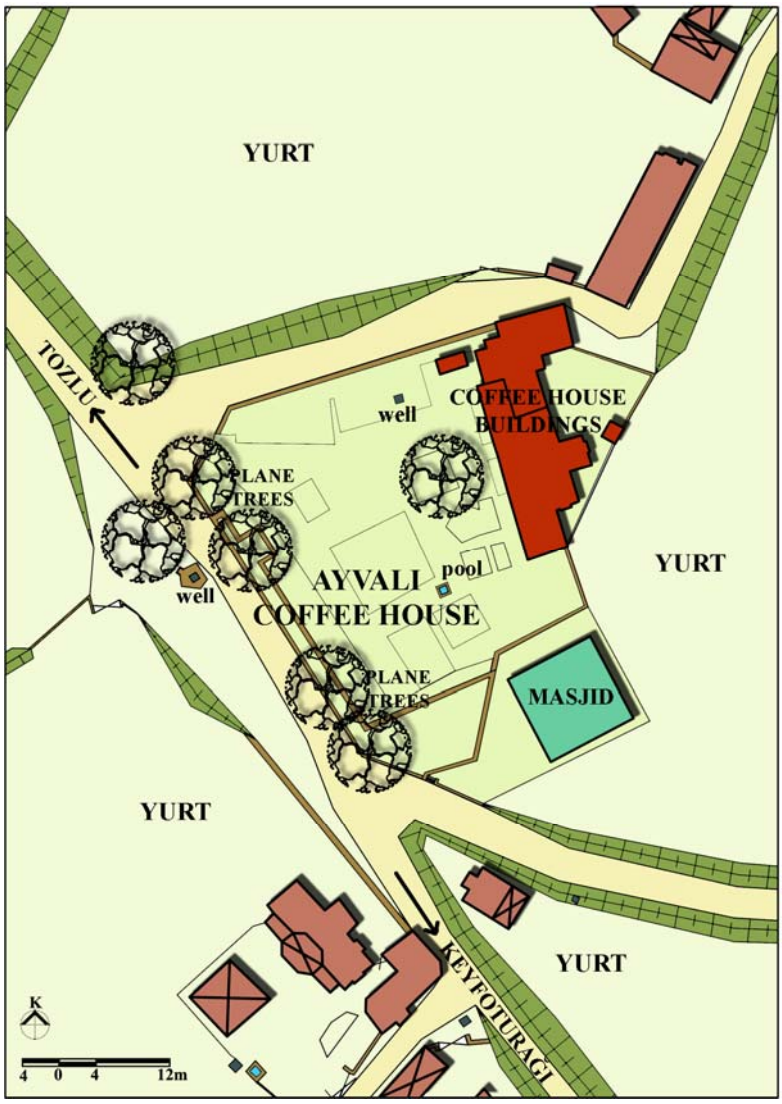

Figure 3.21 Ayvalı Coffee House Plan (Source: Drawn by Feray Koca)

3: Bakkallar Coffee House was bought by Selçuk and Bayram Kalay from Bakkaloğlu Family and constructed again to serve as a restaurant in 1980. However, since the owners could not obtain the certificate, the coffee house building was turned into a house. The subsequently constructed coffee house did not conform to local architecture (Koç et al., 2002). The node is enclosed with high walls that closed to public use. It has a square-planned masjid, but it is out of service. It has a roof with Marseilles tile. Windows are wooden

trabeated with shutters. The entrance door is round arched. There are two monumental plane trees on the square (Figure 3.22, Figure 3.23).

Figure 3.22 Bakkallar Coffee House (Source: Archive of Feray Koca)

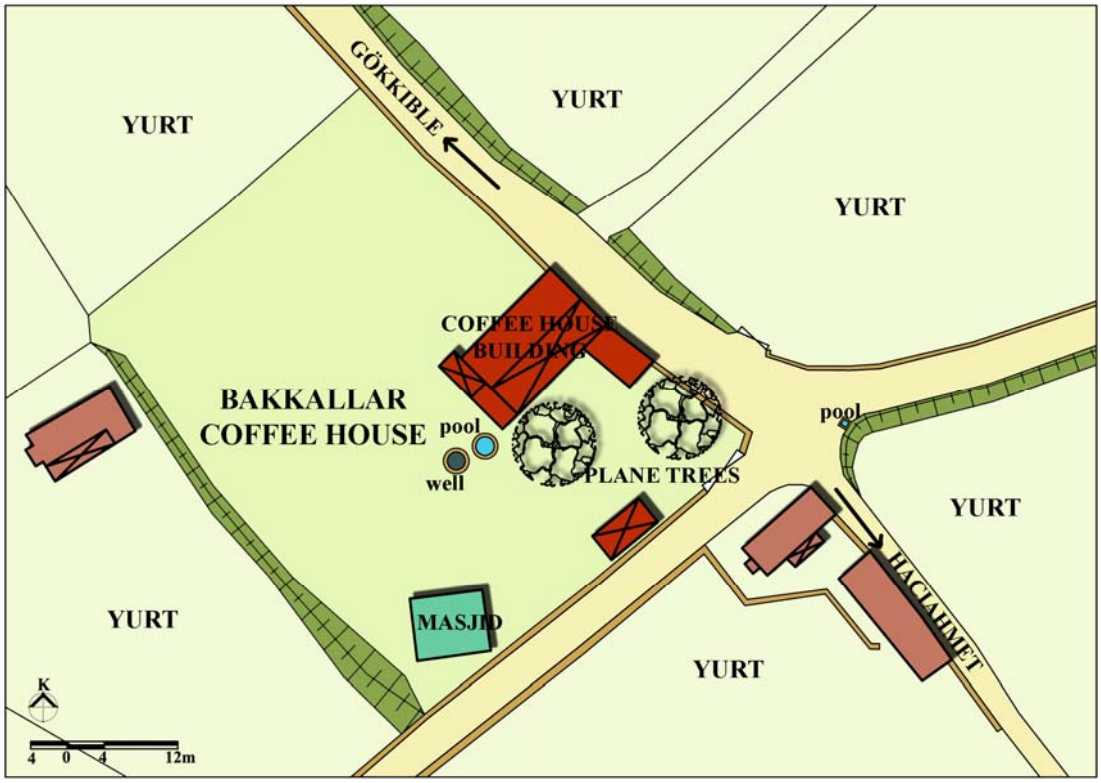

Figure 3.23 Bakkallar Coffee House Plan (Source: Drawn by Feray Koca)

4: Berberler Coffee House was first built in the 19th century; however after it passed into others' ownership, it was re-built (Koç et al., 2002). It belongs to İsmail Can Titiz. There is a small masjid in its courtyard. Its coffee house and masjid are out of service. Its square-planned masjid was utilized just in summers. The center of its hipped roof with pantile has a characteristic feature. It has a round-arched entrance and batten fenced windows. There are four plane trees and twelve poplars in the parcel. There is a well and a pool in the garden. Figure 3.24 depicts a) the coffee house building with its well and plane trees, b) masjid. Figure3.25 displays the spatial organization in Berberler Coffee House node.

a) Coffee house building

b) masjid

Figure 3.24 Berberler Coffee House (a,b) (Source: Archive of Feray Koca)

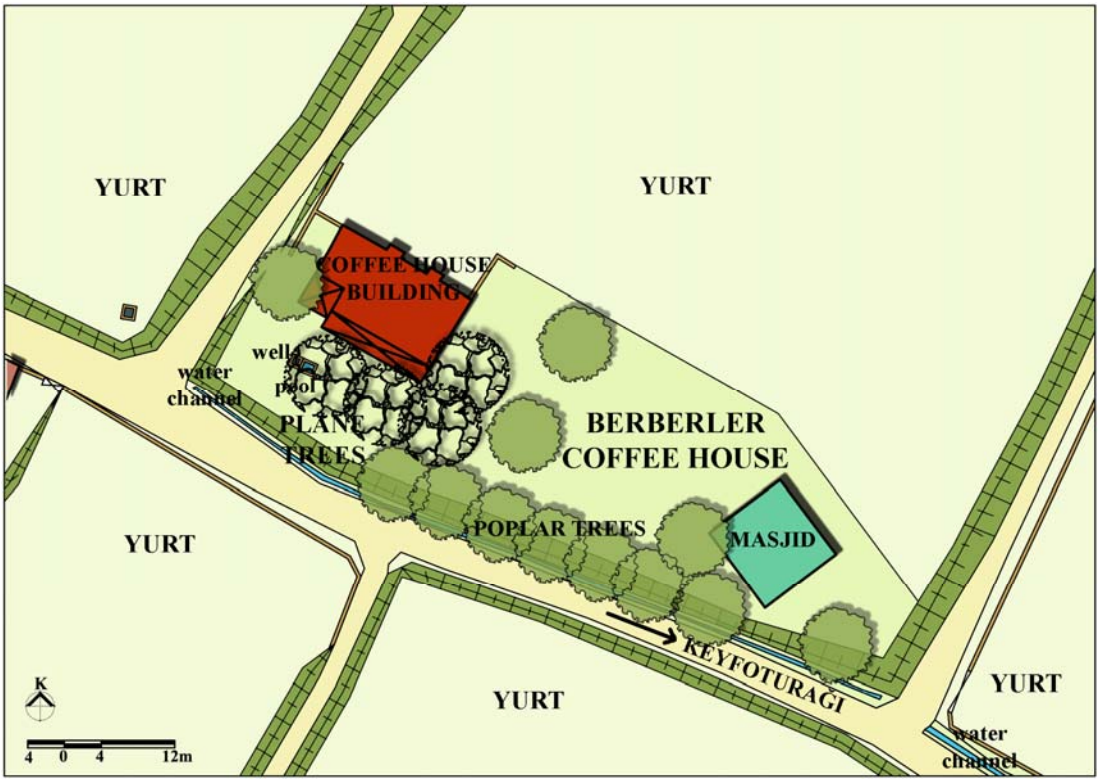

Figure 3.25 Berberler Coffee House Plan (Source: Drawn by Feray Koca)

5: Cihanbeğendi Coffee House was built in the 19th century. Its coffee house premises have been wrecked (Koç et al., 2002). Its summer masjid is out of service and is almost wrecked. The square-planned masjid has hipped pantile-covered roof. The detail in the middle of the masjid roof is significant. The parcel is used for agricultural production. Its ownership passed from Gülbekir into Yunus Sahrancı family in 2004 (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996 and Land Records gathered from Title Deeds Registry Office, 2006). Figure 3.26 displays the masjid in the node. Figure 3.27 displays the spatial organization of coffee house node.

Figure 3.26 Cihanbeğendi Coffee House (Source: Archive of Feray Koca)

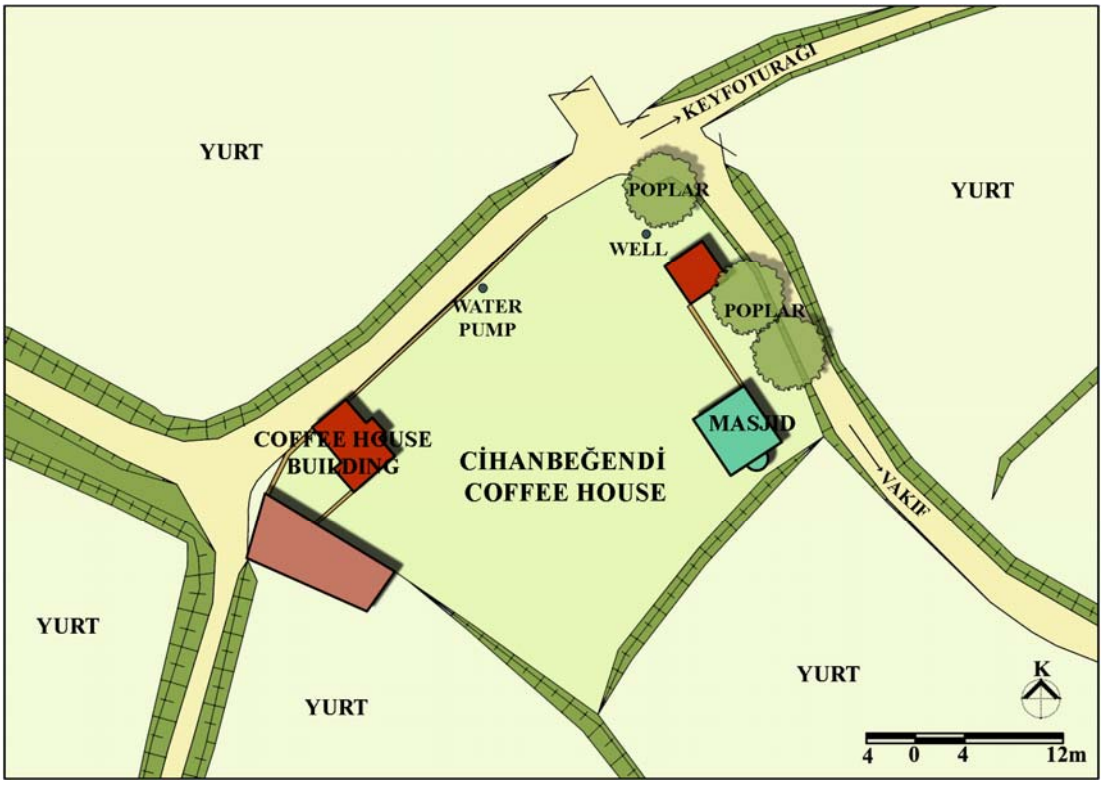

Figure 3.27 Cihanbeğendi Coffee House Plan (Source: Drawn by Feray Koca)

6: Elmalı Coffee House is known to had had a coffee house and a masjid but its masjid is almost wrecked and its coffee house disappeared (Koç et al., 2002). According to land records, it had a service building (store) with coffee house building, but it is a ruin, too. There were one plane tree and two poplars shading the coffee house building. Today, only the location of the wrecked masjid is known and is given in Figure 3.28. The spatial organization is not known because of non-existent coffee house building.

Figure 3.28 Elmalı Coffee House (Source: Archive of Feray Koca)

7: Gökkıble Coffee House was built in 1959 (Koç et al., 2002).The coffee house was used as a restaurant once, and today it is almost wrecked. The rectangle planned coffee house building has brick walls, hipped pantile roof and wooden shuttered rectangle windows. The coffee house building, grocery and bakery were located on the same common square; however, the grocery and the bakery were wrecked. Its masjid is on the other corner side of the road, and it is owned by the waqf. In 1964, Neşet Dişcigil built a minaret near the masjid, so Gökkıble Coffee house is known as the only masjid in Karabağlar Neighborhood that has minaret (except for Sece in Düğerek Neighborhood). The square planned masjid was built in masonry system with pyramidal pantile roof. It does not look like the other local masjids. There are three plane trees, pines, and poplar (Figure 3.29 a,b, Figure 3.30).

a) Grocery and bakery

b) Masjid

Figure 3.29 Gökkıble Coffee House (a,b) (Source: Archive of Feray Koca)

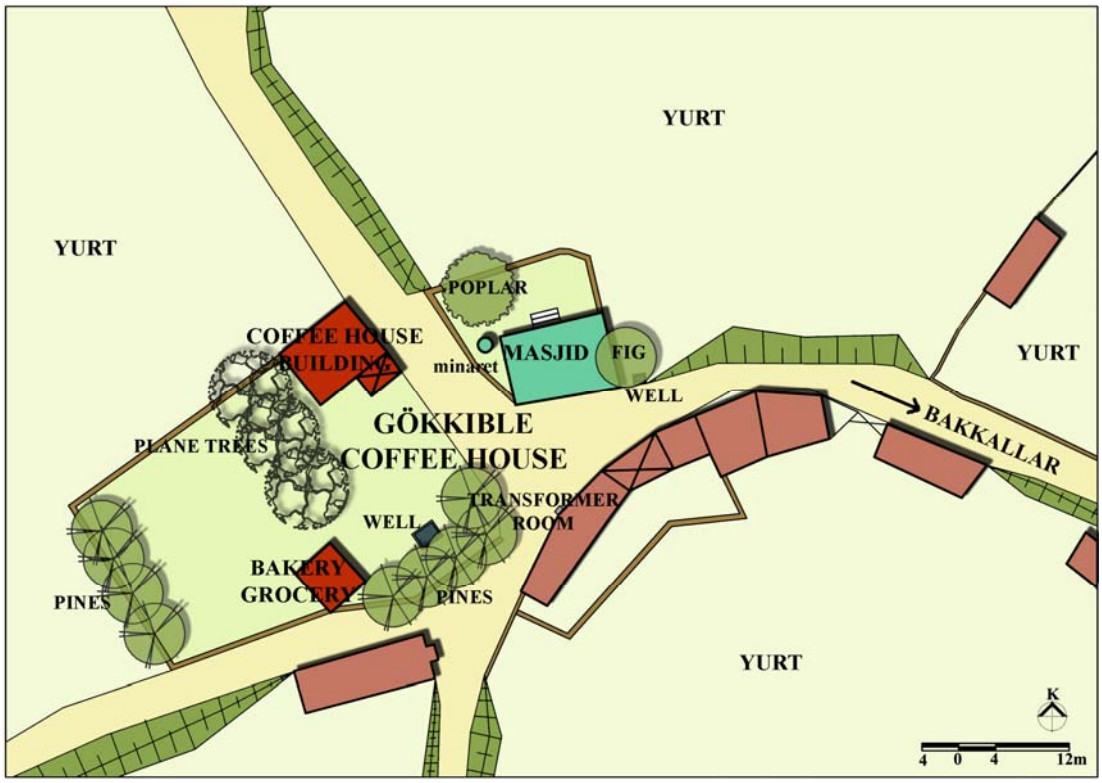

Figure 3.30 Gökkıble Coffee House Plan (Source: Drawn by Feray Koca)

8: Hacıahmet Coffee House was built in the19th century (Koç et al., 2002). Its coffee house building and masjid are maintained and used by the residents. There are two coffee houses, a masjid and a bakery in the square. It has two old plane trees and a pool. The coffee house used today was built later, so it does not conform to the local architecture character. The masjid was repaired and its windows were restored in a way nonconforming to the original appearance. Its ownership has passed from Hacıahmet Ali Efendi to Ilyas Ersoy by inheritance (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). However, according to land records, its ownership belongs to waqfs and treasury today (Figure 3.31, Figure 3.32).

Figure 3.31 Hacıahmet Coffee House (panoramic view) (Source: Archive of Feray Koca)

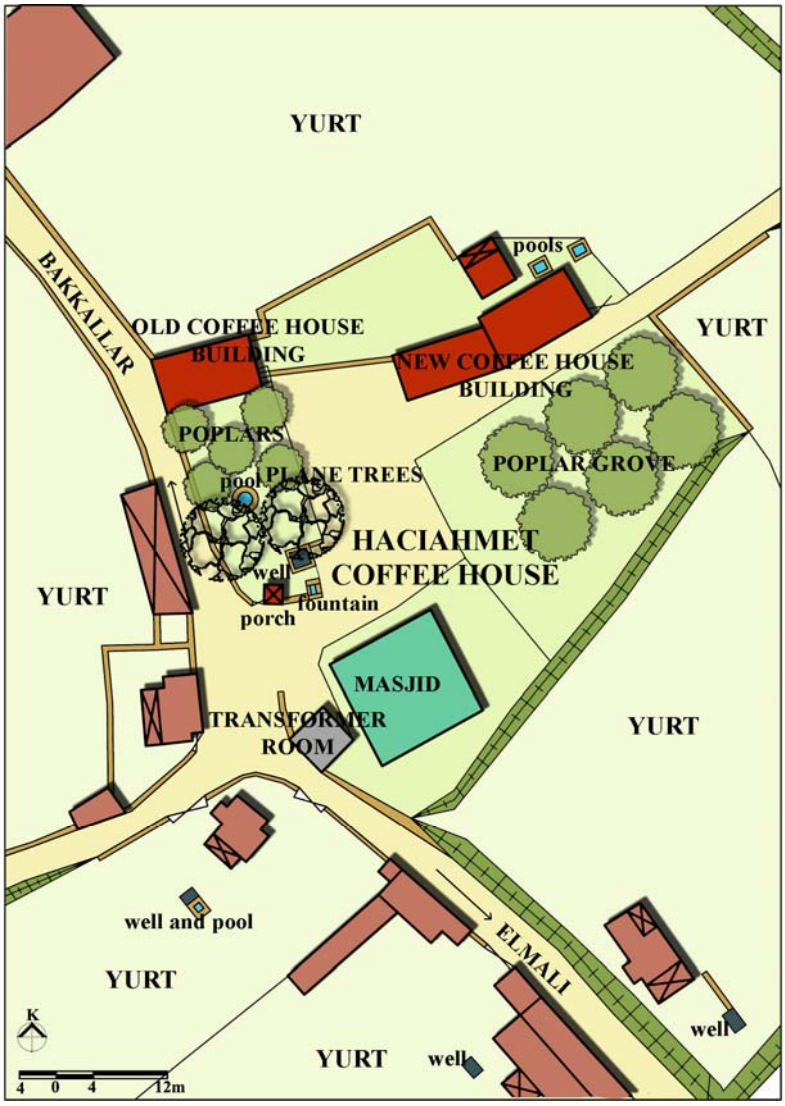

Figure 3.32 Hacıahmet Coffee House Plan (Source: Drawn by Feray Koca)

9: Kadı Coffee House was built in the 19th century (Koç et al., 2002). Its ownership belongs to General Directorate for Foundations. It has a coffee house, a grocery and a masjid, but its masjid is out of service. Its coffee house and grocery are used as a house. Its masjid has hipped pantile-covered roof. On the front façade, there are trabeated windows and a door. The facade has a rooftree and wooden shutters. There are plane trees and mulberry in the parcel, and farming is done on the plot (Figure 3.33, Figure 3.34).

Figure 3.33 Kadı Coffee House (Source: Archive of Feray Koca)

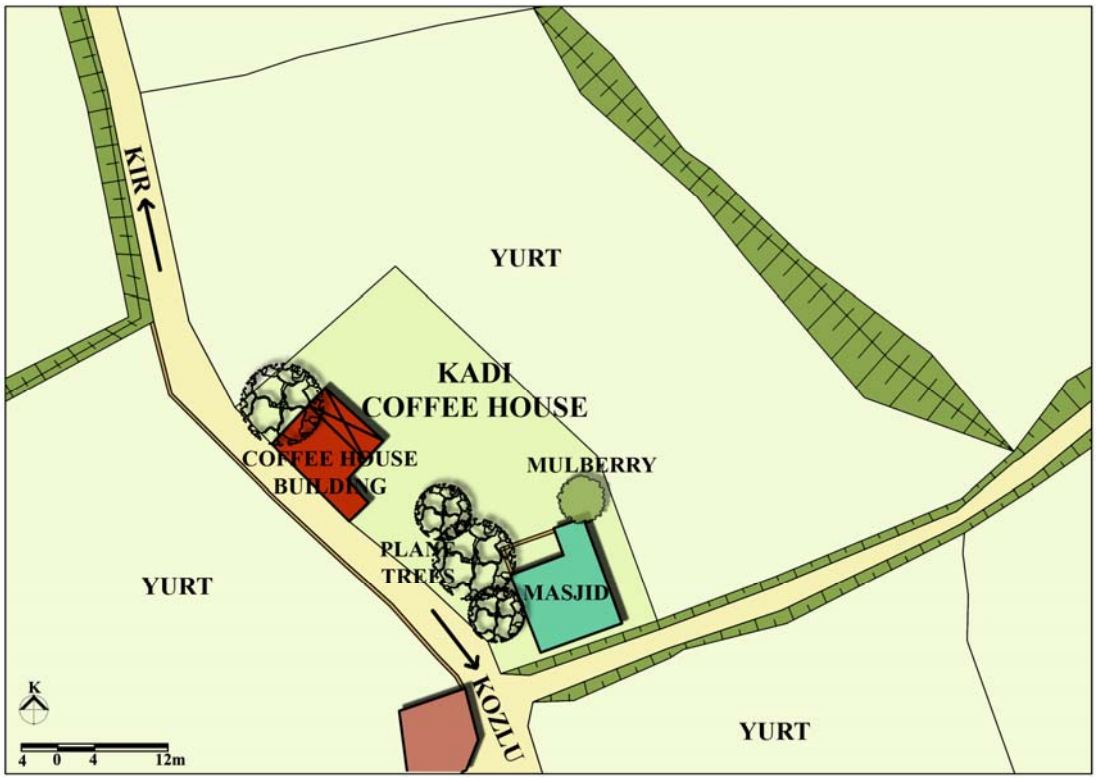

Figure 3.34 Kadı Coffee House Plan (Source: Drawn by Feray Koca)

10: Kavaklı Masjid is used as the masjid of Süpüroğlu Coffee House. Its ownership belongs to the General Directorate for Foundations. It is well kept and still in use by the residents. On the left corner side of the square, there is a wooden bedstead; on the other corner, there is a

well with water pump. There is a concrete coffin resting near the well. There is a plane tree and olive trees (Figure 3.35, Figure 3.36).

Figure 3.35 Kavaklı Masjid (Source: Archive of Feray Koca)

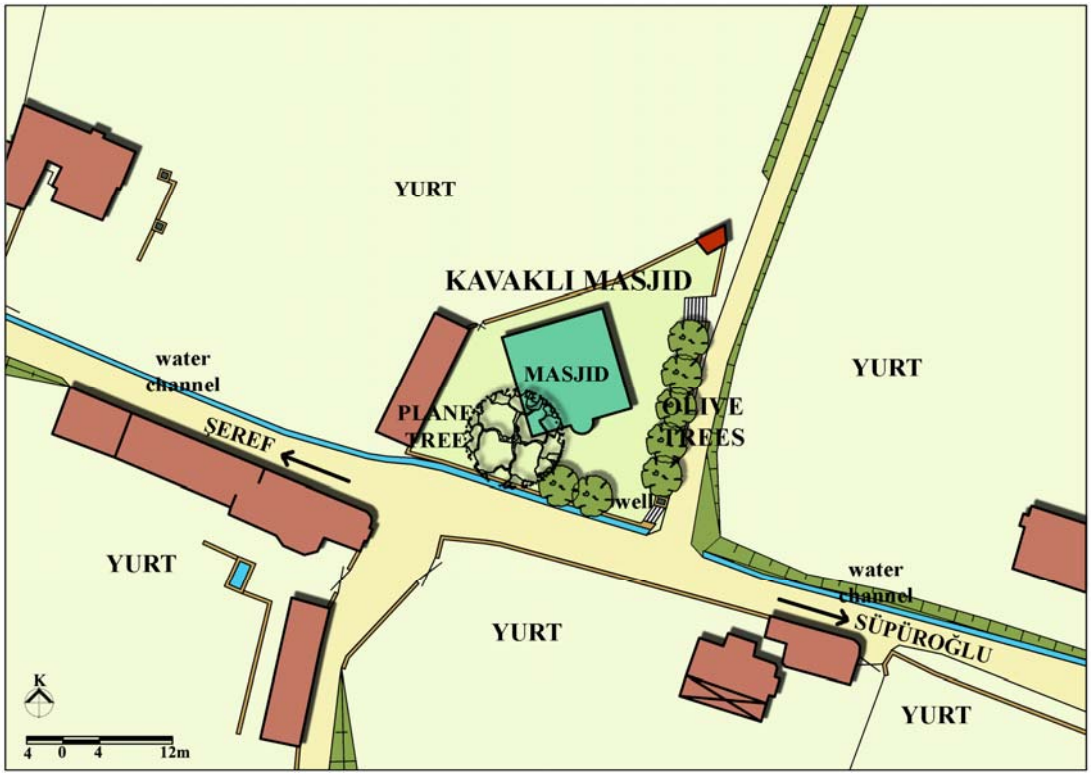

Figure 3.36 Kavaklı Masjid Plan (Source: Drawn by Feray Koca)

11: Keyfoturağı Coffee House was expropriated by the Municipality of Muğla in 1987 (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). A part of the coffee house was assigned to Improvement and Beautification of Karabağlar Organization. The municipality restored its masjid. Rectangle planned masjid has a hipped pantile-covered roof. The entrance to the masjid is provided with round-arched wooden door. The construction epitaph on the door indicates that the masjid was built in 1870. Different from other masjids, this masjid has a wooden ceiling. The residents use the coffee house and masjid both in summers and winters. Coffee house was restored in 2006. It is used as a restaurant today. Most of the cultural activities take place on this coffee house. It has a large courtyard with nine plane trees, one mulberry, three cypresses, and two poplars (Figure 3.37, Figure 3.38).

Figure 3.37 Keyfoturağı Coffee House (Source: Archive of Feray Koca)

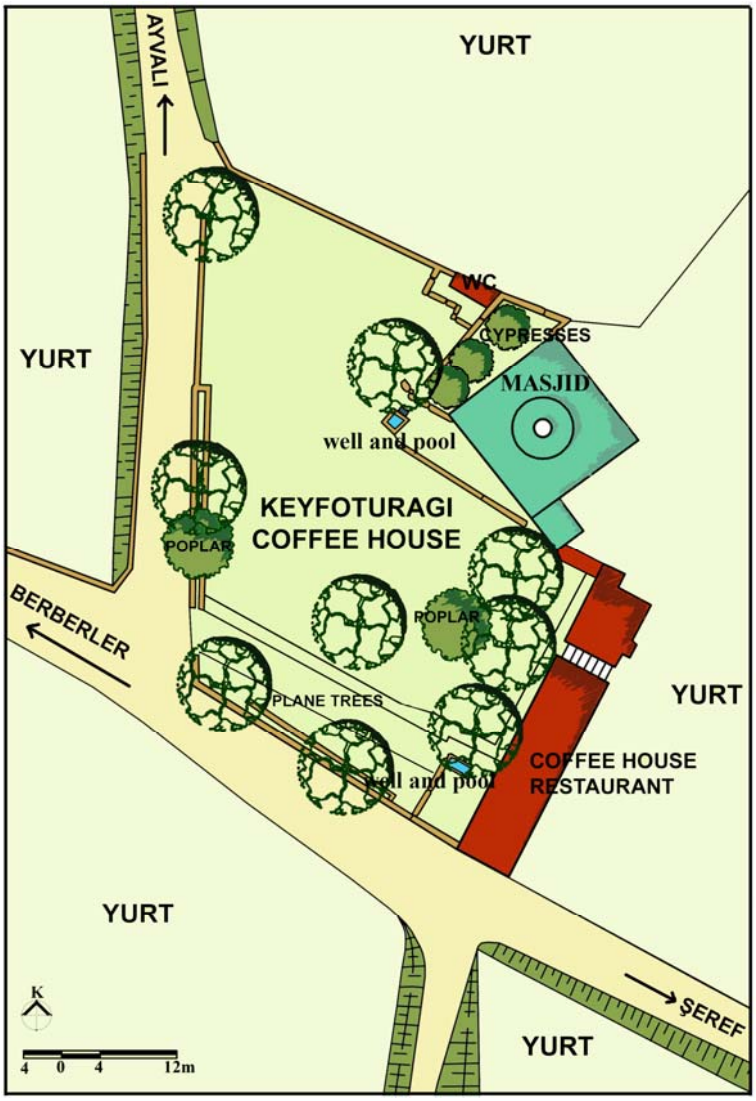

Figure 3.38 Keyfoturağı Coffee House Plan (Source: Drawn by Feray Koca)

12: Kır Coffee House is the first coffee house on the road coming from the east of Small Industry Site. The road separates its coffee house and masjid (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). The masjid belongs to the General Directorate for Foundations. It was restored later. Square-planned masjid has a hipped pantile-covered roof. It has battened fenced windows, as it is the typical feature of local masjids. In the façade, there are trabeated windows and a door. The coffee house building belongs to Ayten Savran and was converted into a house. There are two plane trees, eight poplars and one oak tree.

Figure 3.39 displays the restored masjid. Although its coffee house building is functioning as a regular house today, the spatial organization of the coffee house is estimated to be as in Figure 3.40.

Figure 3.39 Kır Coffee House (Source: Archive of Feray Koca)

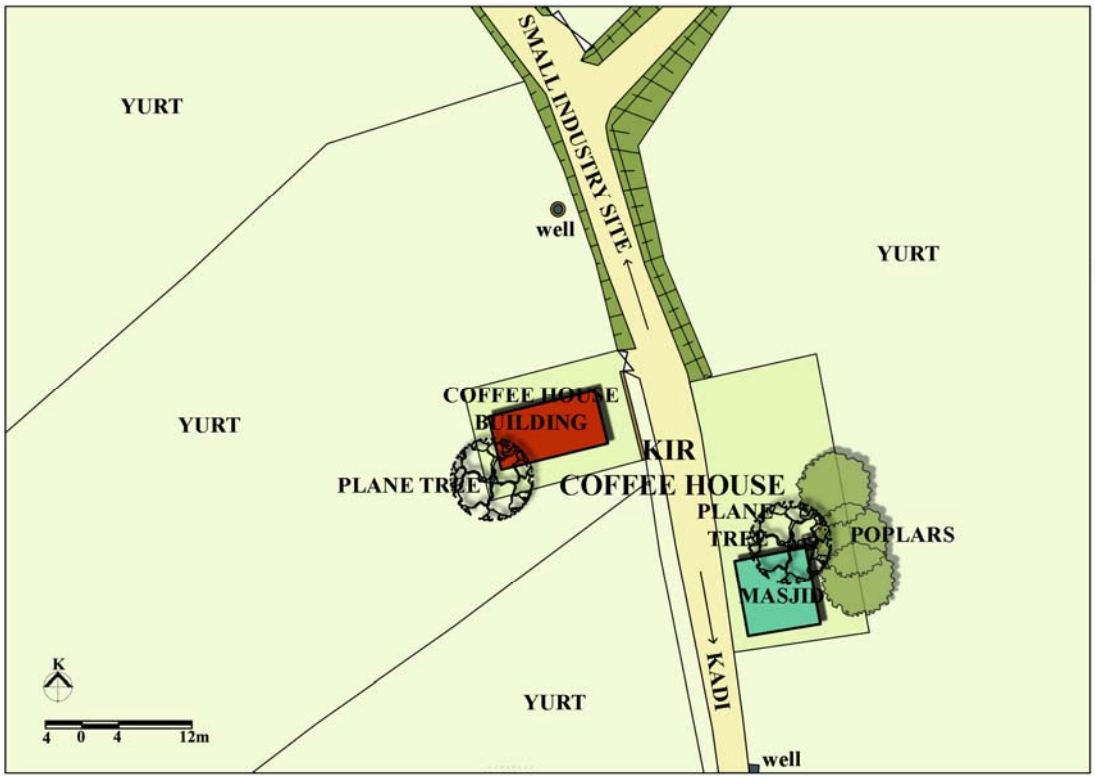

Figure 3.40 Kır Coffee House Plan (Source: Drawn by Feray Koca)

13: Kozlu Coffee House was built in the 19th century (Koç et al., 2002). The General Directorate for Foundations has the ownership of the masjid, and Süleyman Dağ has the ownership of coffee house building and. Its coffee house building was burned. Its grocery and bakery are complete ruins. Its masjid was nearly wrecked and went out of service about five years ago. Today, it is restored and is used by the residents. Its square-planned masjid has a hipped pantile-covered roof and batten fenced windows. The word 'Kozlu' comes from the walnut fruit. There are one plane tree, one walnut tree, pines, and poplars. Figure 3.41 displays the restored masjid building; however, the spatial organization of the coffee house is not known today.

Figure 3.41 Kozlu Coffee House (Source: Archive of Feray Koca)

14: Narlı Coffee House was built in the 19th century. It does not have a masjid. After it was expropriated by the Municipality of Muğla, it was used as nursery garden by the municipality. The coffee house building is made of stone masonry, and it has a hipped roof. On the front façade, there are trabeated windows and a door. One huge plane tree shades the coffee house building. There are mulberries and apple trees, too (Figure 3.42).

Figure 3.42 Narlı Coffee House (Source: Archive of Feray Koca)

15: Polis Coffee House is located between Ayvalı and Süpüroğlu Coffee houses. It belongs to Osman Uçar. It does not have a masjid (Koç et al., 2002). It was built by a retired police officer. It does not function now because it is structurally destroyed. The coffee house square is turned into 'yurt' and used for farming. There are a poplar and two huge plane trees in the parcel. Figure 3.43 displays the wrecked coffee house building on the corner.

Figure 3.43 Polis Coffee House (panoramic view) (Source: Archive of Feray Koca)

16: Sece Coffee House is located in the southeastern part of Karabağlar on the way of Düğerek. It is located in Düğerek Neighborhood. Mehmet Tombak owns it. It has two coffee houses, a grocery and a masjid. One of the coffee houses is just about to be wrecked. Its

rectangle-planned masjid lost its characteristic after it was restored. A minaret was constructed attached to the side façade of the masjid. On the front façade, there are trabeated windows and a door. A monumental plane tree shades the masjid (Figure 3.44, Figure 3.45).

Figure 3.44 Sece Coffee House (Source: Archive of Feray Koca)

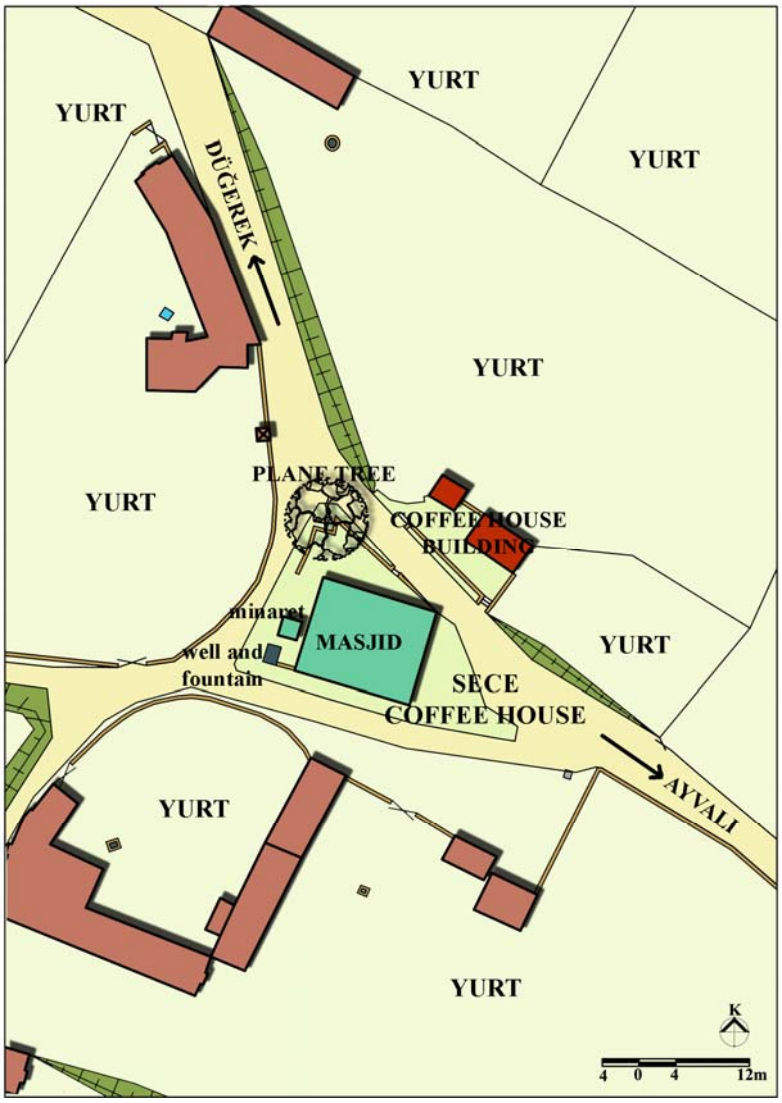

Figure 3.45 Sece Coffee House Plan (Source: Drawn by Feray Koca)

17: Süpüroğlu Coffee House was built in the 19th century. It has the largest courtyard with seven monumental plane trees in it and is used as a restaurant. It does not have any masjid but Kavaklı Masjid served as the masjid of this node (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). Zeliha-Saadettin Ünsal got its ownership. It has a bakery, restaurant and coffee house building. All three buildings are made of stone masonry, and they have hipped roofs. There is a well in the square. On the front façade, there are trabeated windows and doors. The façade has rooftrees and wooden shutters. Figure 3.46 displays the

coffee house and restaurant building. Figure 3.47 displays the spatial organization in Süpüroğlu Coffee House.

Figure 3.46 Süpüroğlu Coffee House (panoramic view) (Source: Archive of Feray Koca)

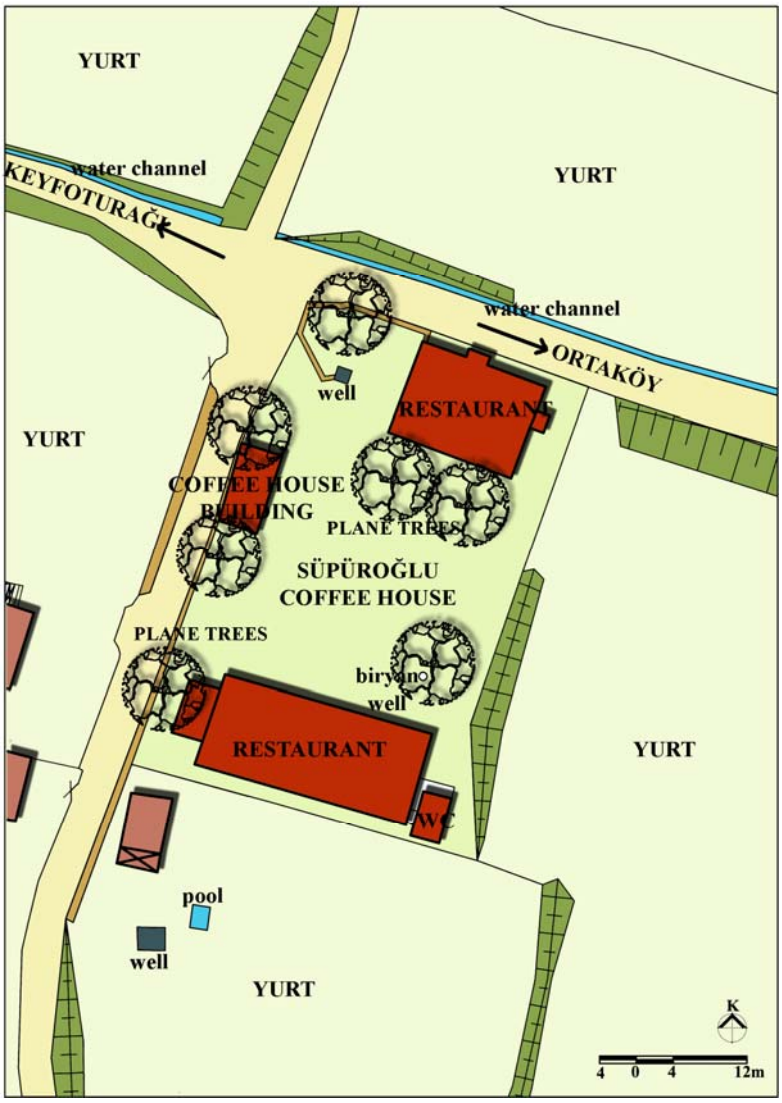

Figure 3.47 Süpüroğlu Coffee House Plan (Source: Drawn by Feray Koca)

18: Şeref Coffee House is situated between Keyfoturağı and Süpüroğlu Coffee houses (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). It was built by Şeref Turan, after whom the coffee house was named. Its coffee house building was wrecked and does not exist today. There is no remnant belonging to this coffee house; hence, there is no signboard indicating the locality of this coffee house. There is a mulberry and a poplar in the courtyard. Its well is located adjacent to the road. Figure 3.48 displays the approximate location of Şeref Coffee House.

Figure 3.48 Şeref Coffee House (Source: Archive of Feray Koca)

19: Topallar Coffee House was built in 1932 and is located on the outside of Natural Site boundaries (Koç et al., 2002). It belongs to the Topaloğlu family. Its coffee house and masjid was restored, and they lost their original characteristics. Its coffee house building is used as restaurant today. There are three old plane trees, three young plane trees, two olive trees (Figure 3.49, Figure 3.50).

Figure 3.49 Topallar Coffee House (Source: Archive of Feray Koca)

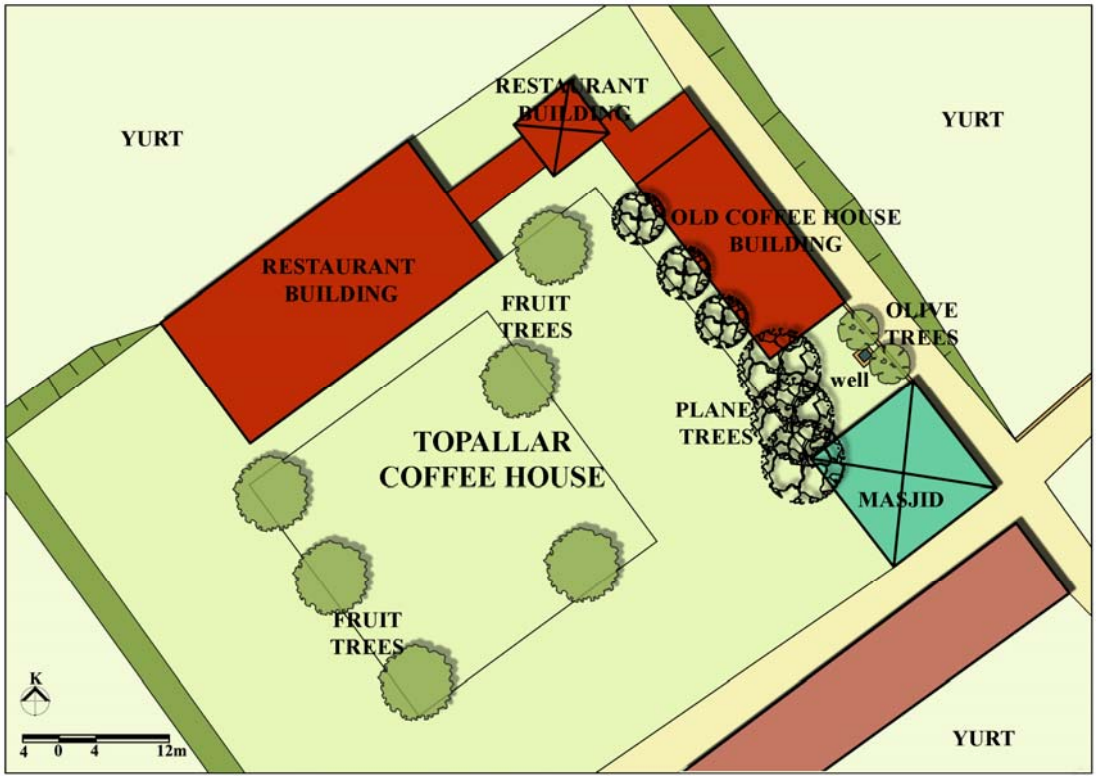

Figure 3.50 Topallar Coffee House Plan (Source: Drawn by Feray Koca)

20: Tozlu Coffee House is situated in the pasture in the southern part of Karabağlar. It has a small coffee house building that is out of service. It was built in the first half of the 19th century (Koç et al., 2002). In 1994, the coffeehouse building and its field that belong to General Directorate for Foundations were sold to Ömer Ündül, who was the father of Hayri Ündül Paşa. Its masjid belongs to the General Directorate for Foundations. It was restored and its windows were altered into round forms. It is operational in summer months. There is a marble epitaph written in a style of Arabic script above the entrance door of the masjid. It has large rooftrees. There is a stone coffin resting on the courtyard. There are one mulberry and three monumental plane trees on the square (Figure.3.51, Figure 3.52)

Figure 3.51 Tozlu Coffee House (Source: Archive of Feray Koca)

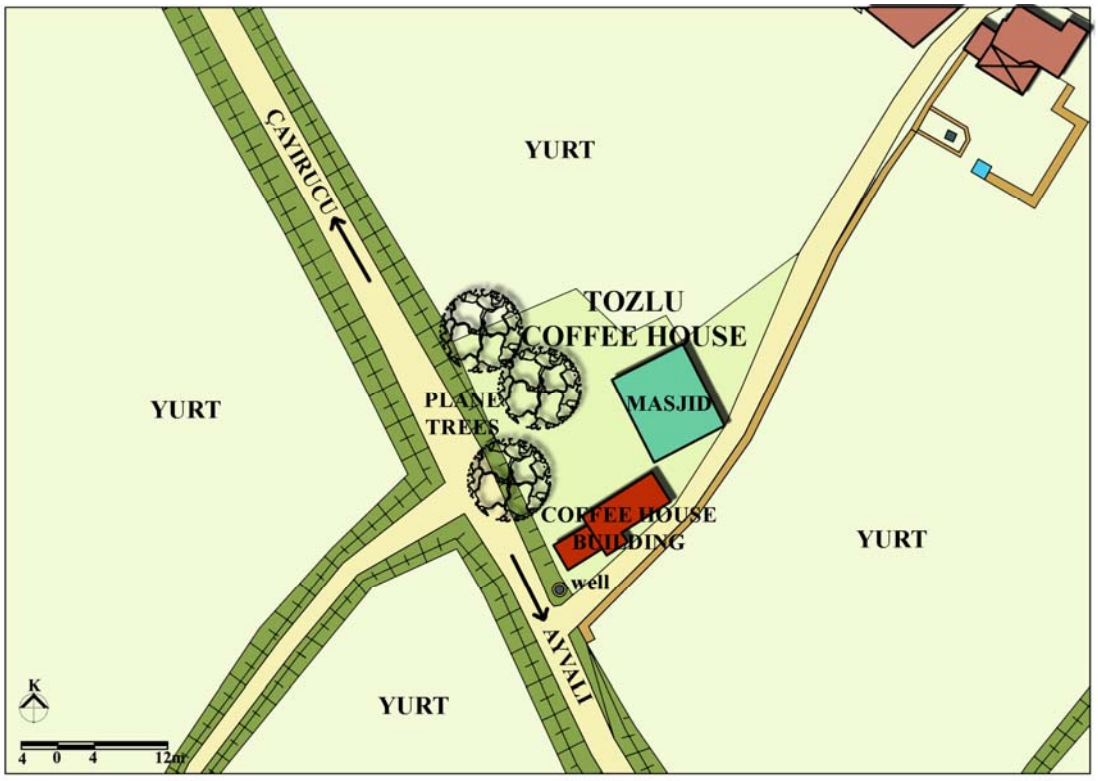

Figure 3.52 Tozlu Coffee House Plan (Source: Drawn by Feray Koca)

21: Vakıf Coffee House was built in the 19th century. There are two coffee houses; one of them was constructed subsequently. Although its old coffee house has the characteristics of traditional coffee houses, it has not been used until 2000s (Koç et al., 2002). Later it started to be utilized as restaurant (Karabağları Geliştirme ve Güzelleştirme Derneği, 1996). The ownership of the coffee house buildings is with Suat Özbek. The ownership of the masjid is with the General Directorate for Foundations, however; its masjid has been wrecked. In 1930s, it was the only coffee house that was allowed to be used as slaughterhouse because of the alum disease. The coffee houses have hipped pantile-covered roofs and local chimneys. On the front façade, there are trabeated windows and doors. Rooftrees and wooden shutters are the façade equipments. In front of the old coffee house, there is an arbor with tile roofing. There are three monumental plane trees and a mulberry on the square (Figure 3.53, Figure 3.54).

Figure 3.53 Vakıf Coffee House (panoramic view) (Source: Archive of Feray Koca)

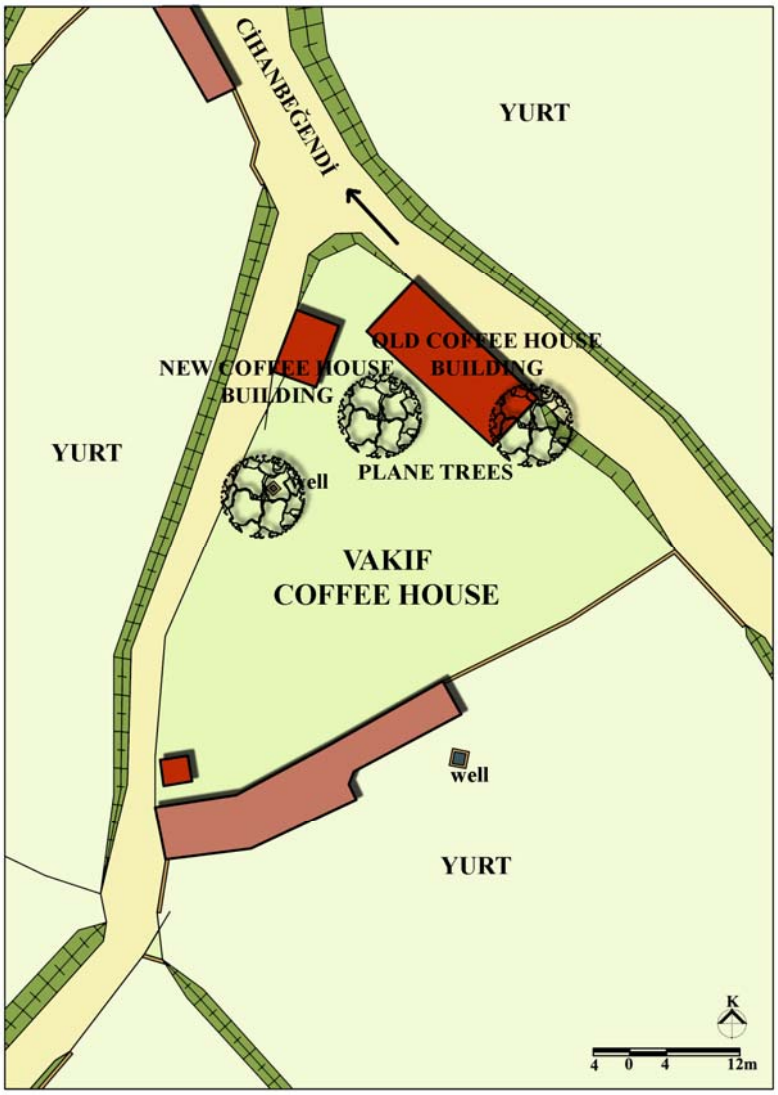

Figure 3.54 Vakıf Coffee House Plan (Source: Drawn by Feray Koca)

Yamalı Coffee House was wrecked and it has no remnant today. It is estimated to be located between Narlı and Hacıahmet Coffee Houses. Its masjid was also wrecked.

Başoturak Coffee House was known to be first coffee house located on Çayırucu. More than 70 years ago, it was wrecked.

3.4.2.4 Traditional houses

'Yurt' is the main structural component of Karabağlar. 'Yurtlar' are located side by side and around coffee houses (Koca, 2006). People live in their summer residences located in 'yurtlar'. The initial house building (residence) in Karabağlar was a 3x3 meter wooden shelter built between 17th and 19th century. These single storey buildings were composed of one or two rooms (Figure 3.55). The development of the wooden shelter depends on the factors of climate, orientation, wind direction, use of land, economy and the family.

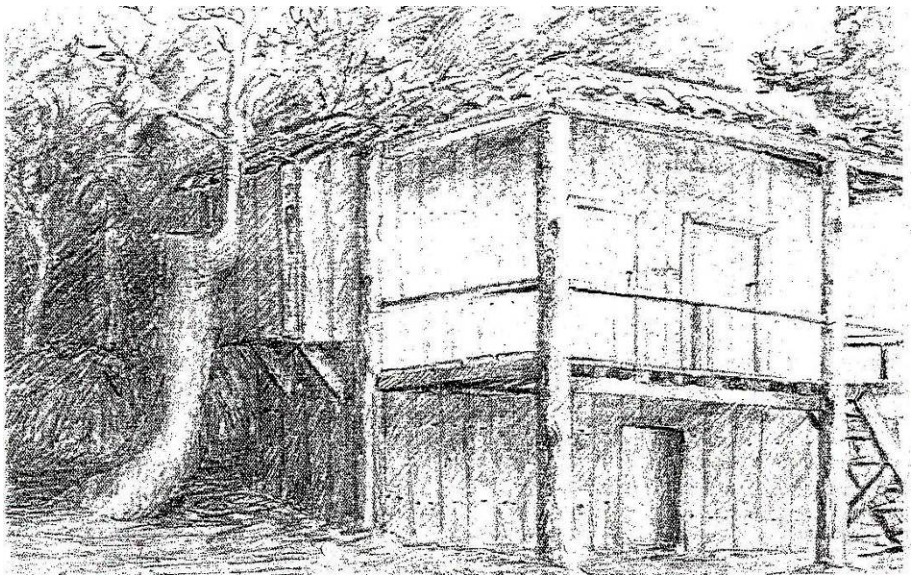

Figure 3.55 The wooden shelter belongs to Erman Şahin (Mayor of Muğla in 1973-1980 and 1984-1989) (Source: Şahin, E. 1998, Muğla Yazıları)

In centuries, the primitive shelter evolved into a house and enlarged in size. With evolution, number of rooms increased according to functional needs. He suggests the use of wood as nomadic preference because the nomads were more familiar to the use of wood instead of mud or brick (Kuban, 1995). The simplicity of these wooden structures emphasizes the familiar, comfortable and environmentally coherent architecture.

Until 1940s, in Karabağlar, 'yurtlar' were known to have a well, a pomegranate tree and a wooden shelter. Only the rich families had large residences called as *'haney'*. The plan of haney houses was similar with Muğla house plans; however, haney had no bay window. Since 1940s, new house plans such as Muğla house type, Ula house type have been built in Karabağlar. Wooden shelters were removed; instead, wooden and tiled roofs were constructed. Today, nearly all of the wooden shelters have disappeared.

The main characteristic of the traditional Anatolian houses is that the room is similar to the nomadic tent as the main component of house. Each of the traditional houses in the Anatolian countryside is the private space of a nuclear family with independent rooms, which do not have passages to each other. This building structure necessitates a common place for collective use, which is called *'hayat'* or *'sofa'*[18] (Arel, 1997). A great majority of the traditional Karabağlar houses consist of double room and a '*sofa'* in front of the rooms.

Houses in every 'yurt' are located at the corner of the farmlands to benefit from the field in the best way. Some of them have outbuildings used as storage, stall or barn.

Traditional houses of Karabağlar have inward oriented plan characteristics similar to traditional Muğla houses (Tekeli, 1993). When we compare the traditional houses of Karabağlar and Muğla, we notice the adaptation of some physical structures into 'yayla' and 'bağ' nature and lifestyle. For example, high courtyard walls that are standing parallel to roads are built for the aim of preserving privacy. In Karabağlar, we witness 'kesikler', 'kabalıklar' and trees functioning as courtyard walls. 'Irimler' were planned to discharge surplus water coming from fields; therefore, they have a depth of 1-1, 5 m in comparison to the level of field. This kind of a design achieves the privacy of house from the looks of passengers moving on the road or 'irim'. In addition, because of the inward oriented plan type of houses (except for Ula houses), front façades and the courtyards of the houses are not seen from the roads.

In Karabağlar residences, there are half courtyards or gardens, which are enclosed from just one façade. They function as passages between the house and the field. They are full of fruit trees (especially pomegranates, figs, sour cherry and quince and apple trees), annual flowers and a grapevine arbor in front of the house. Every 'yurt' has a well in the half- courtyard to

[18] It is a kind of porch or hall like room.

provide the required water. This water taken out with a pump and is used for irrigation. The surplus water is collected in small pools to be used for house works. Examples to half-courtyard organization are given in Figure 3.56.

Figure 3.56 Courtyard organization in Karabağlar

Because of overflowing and high water table, houses have sub-basements made up of stone with a height of 1,3-1,5 meters. Their floors are left as earth without any surfacing material. The sub-basement is designated as storage in 'yayla' houses because this part is cool enough to preserve foods. The ground floors were the extension of the half-courtyard and garden into the house, which serve integrated household activities (Kuban, 1995). In the past, when the

'bağ' culture has dominance in the area, grapevine products (pekmez, pestil, sucuk etc.[19]), other dried food and roasted meat were stored in these basements of the houses. Because of high northeast wind, wooden shelters are made up of battens through which wind can pass. The façades of the shelters are half-timbered, and there are no tiles on the roof. Houses usually have a fireplace made up of stone (Koç et al., 2002).

In terms of carrier system, Karabağlar houses are composed of stone masonry walls and frame system. The rear façades that are adjacent to the roads are often blind and the edge parts of the buildings are surrounded with stonewalls (except for Ula houses). The high stonewalls are connected with the house building. 'Sofalar' are carried on the studs extruding from the ground. The roof covers this 'sofa' with a large rooftree also carried with studs (Ekinci, 1985).

There are four types of houses in Karabağlar: traditional Karabağlar house, traditional village house, traditional Ula house, workers' house. Figure 3.57 displays the house typologies in Karabağlar.

1- **Traditional Karabağlar houses:** They have plan types similar to those of traditional Muğla houses. However, Karabağlar houses are smaller, simpler, and they have subbasement floor. Karabağlar houses are two-storey buildings with *sofa* in the front, side or middle. The rear façades are blind. While the rear walls are stone masonry, front façade walls are wooden framed. In the front of the house, a half-courtyard is full of fruit trees and grapevines. There is no kitchen or toilet in the house. A corner on the half-courtyard, which has a fireplace, is allocated to cooking. Toilets are isolated from the house and half-courtyard because of the cesspool pit, which would otherwise be unpleasant to have inside (Figure 3.58).

[19] 'Pekmez' is grape molasses, 'pestil' is dried fruit roll-up, 'cevizli sucuk' is made up of walnuts on a string dipped in starch grape molasses.

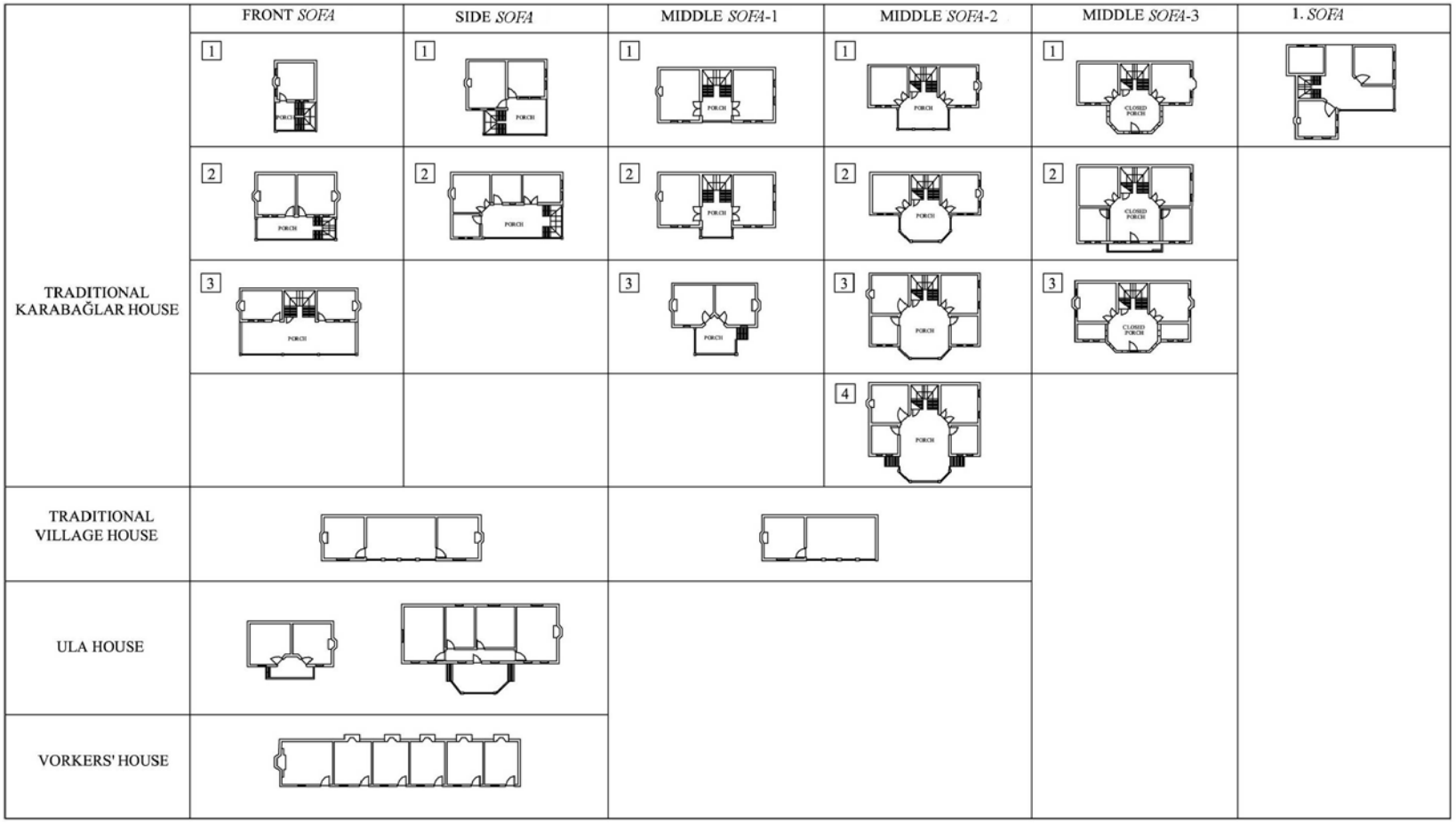

Figure 3.57 House Typology of Karabağlar

Source: Redrawn from A study of Dokuz Eylül University, 2001, Karabağlar'da Konut)

Figure 3.58 Traditional Karabağlar house types (Source: Archive of Feray Koca)

2- **Traditional village houses:** They are single storey simple houses, with one or two rooms. The roof of some village houses with one room is extended and a semi-closed space, which is utilized as tobacco storage is created. This storage is placed in the middle of the village houses, which have two rooms. The houses are made up of wooden frame system. The upper part of the half-courtyard is covered with grapevine arbor (Figure 3.59).

Figure 3.59 Traditional village house type (Source: Archive of Feray Koca)

3- **Traditional Ula houses:** They are single storey houses with two rooms and a polygonal sofa. Four façades of the houses have openings. There is a rooftree on the all façades. The subbasement height is 0,5 or 1 meter (Figure 3.60).

Figure 3.60 Traditional Ula house type (Source: Archive of Feray Koca)

4- **Workers' houses:** They are usually at the southwestern side of Karabağlar. They were built for workers who came to the area at the harvest period. They are blocks of one-room houses made up of stonewalls. The dimensions of the room are 4x5 meters square. Every room has its own fireplace and chimney. These workers' houses in general are located adjacent to the main Karabağlar house of the yeomen (Figure 3.61, Figure 3.62).

Figure 3.61 Traditional workers' house type (Source: Archive of Feray Koca)

Figure 3.62 Wrecked traditional workers' houses (Source: Archive of Feray Koca)

3.4.3 'Bağ' lifestyle and human relation with environment in Karabağlar

Life of the original inhabitants in Karabağlar was based on the seasonal migrations carried every year between Muğla and Karabağlar. In today's world, migration between distances of four kilometers may seem nonsense; however, in the past before the technological developments in transportation, the migration between Muğla and Karabağlar was a ritual, which was done with horse carriages and donkeys. Therefore, the roads and 'irimler' were designed for the passage of only one horse carriage.

This migratory replacement was a necessity for the continuity of the life because the agricultural products harvested from Karabağlar in summers were consumed in winters. Agricultural production was the main source of living, but this production has always been at self-sufficient level that barely satisfying the home economy. Life in Karabağlar used to start in April and end in October with migration starting back to the town. The families were preparing their food (vegetables and fruits) for winter by drying them. Thanks to abundant underground water, the area was very fertile and had a great variety of vegetation. Therefore, the plants mostly gown were fruit trees like sour cherry, apple, quince, almond, fig, vegetables, melon field and grape. In addition to farming, live stocking was done in Karabağlar. The fattened animals were raised in order to benefit from its meat. The animals mostly raised were cow, sheep, goat, and chicken. It is understood from its name that viticulture was the living source of Karabağlar once upon a time; however, this tradition was given up with tobacco plantation. Eroğlu (1939) stated that so many and so great tobacco was grown in Muğla town. The high quality of Muğla tobacco was well known by other towns.[20]

This migration process asserts that the lifestyle in Karabağlar is an extension of city life. The aforementioned seasonal migration of even main crafts and artisans is the evidence of the extension of city life into the Karabağlar.

The intimate relations of residents in Muğla last in Karabağlar because the initial distribution of lands of Karabağlar was done according to neighborhoods in Muğla. Therefore, residents

[20] " Muğla kazası dahilinde pekçok ve pek nefis tütün yetiştirilmektedir. Muğla tütünlerinin nefaseti dahil ve hariç memleketlerde malum olduğu için fazla izahata lüzum görülmemiştir." (Eroğlu, 1939, p. 150).

in the same coffee house localities were neighbors in Muğla town. Sometimes, the joint ownerships were the living space of two families. This structure of ownership was effective on the intimate relations. Sometimes, residents were meeting at coffee houses in order to celebrate special days (camel wrestling, wrestling and wedding ceremonies). Coffee house localities were holding different functions in a spatial organization such as praying, resting, shopping and entertaining (Ekinci, 1985).

Sözen and Eruzun (1992) consider the housing culture as the result of socio-cultural interaction of people in the region. The success of the space belongs to the lifestyles, the relations of the residents, local solutions and fulfillment of some requirements. The relation of residents with nature introduces a lifestyle that shapes and forms the space moderately. The spatial organization in Karabağlar is a result of interaction between human beings with the nature and a sensitive environmental coherence.

3.5 Property Relations and Land Tenure System

Kuhnen (1982) explains the land tenure system as an administrative system, which regulates the legal land rights of the individuals and their property relations a community. Land ownership and labor organization are the main elements of the land tenure system, and depending on the local conditions, they vary from one country, or community, to another. Social, economic, technological developments, in addition to physical conditions, are the factors that have been influential on the control and political power constitution of land tenure system. Many states design their own land tenure systems according to their natural, cultural, local conditions, and they regulate the property relations based on this system.

Land ownership is fundamentally the controlled in the society-land relations. Ownership is the right of alienation with regard to the land. Furthermore, the right to use land constitutes the basis of production. Land ownership is an effective way of controlling land use (Qviström, 2010) because control stabilizes the capital in production (Munton, 2009). For centuries, two kinds of land ownership have been observed,one of them being the right of disposition (private property) and the other the right to use the land (possession) (Günay, 1999).

According to Günay (1999), property is the act of occupying, possessing, and dominating with the aim of using, collecting its fruits and exhausting it. The use of physical space and the other fields of production emerged with private property. Property became the basis of production relations; therefore, property relations shape, structure and transform the spaces.

Private property has spread out to the world from Europeans, and it has been criticized being a product of capitalistic structure and a means of exploitation employed by the sociologist ideology. The thesis underlines one of the major negative impacts that arose with private property; arable farmlands have been the fragmented until they became useless farm units as they pass through generations by inheritance. The inheritor holding the ownership of the now small land has to sell it, and this situation leads to the emergence of landlords. This negative impact is anayzed in Karabağlar case study in the following parts of this chapter.

In order to understand the effects of property relations on cultivation, it is helpful to explain first the effects among labor, land and capital. Cultivation of land is the interplay of capital and labor on land. Labor organization controls the social relations of the community working on the land. It affects land use alternatives. Land is the basis of agricultural production. Social relations between labor and capital structure the land, and not incidentally the farmland and ownership pattern of lands (Günay, 1999).

In different social systems (feudal, capitalist, socialist systems), different property relations have been effective on the land regulation that shapes the farmland pattern. Regulating the property relations, states are the control mechanisms of land management and land rights. Needless to say, they influence the changes in land use (Günay, 1999). They put restrictions, laws, measures and regulations concerning the occupation of land, cultivation of land, rights of services, rights of access, taxes and so on. Here, how the country populations use the lands and how the lands are distributed should primarily be controlled for the cultivation of the lands to sustain (Kuhnen, 1982). Figure 3.63 summarizes the relationship between land, labor and capital in terms of cultivation.

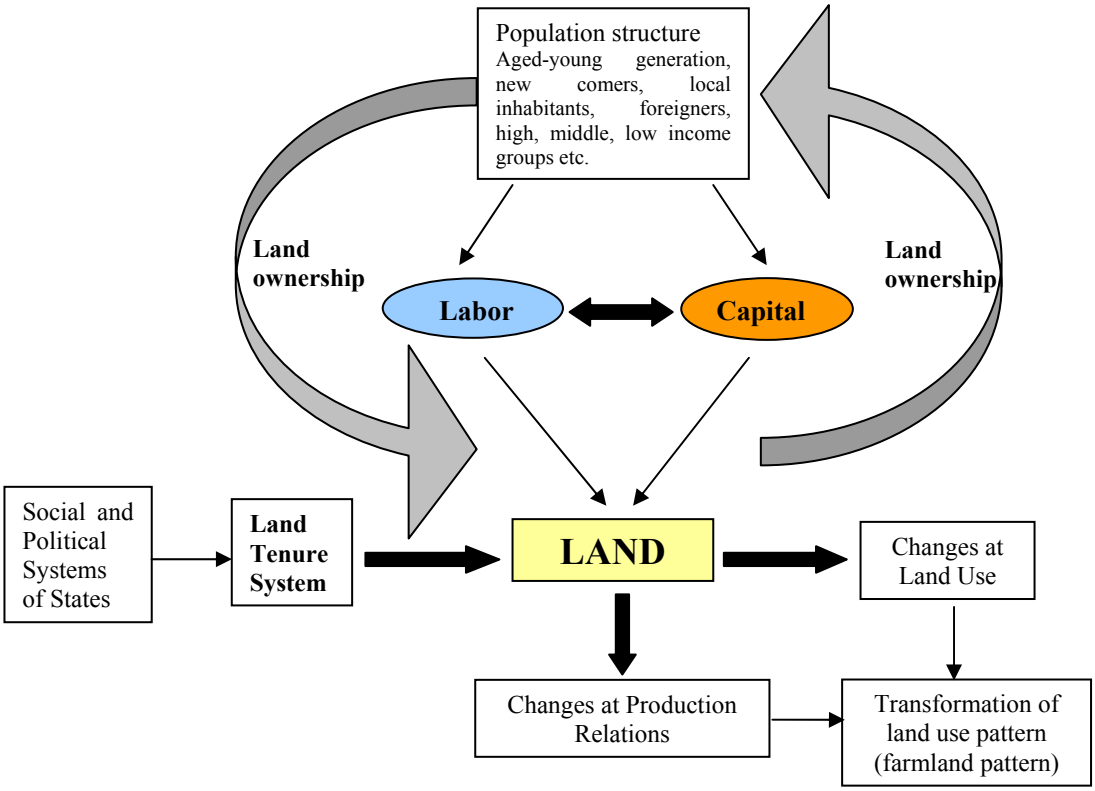

Figure 3.63 Land, Labor and Capital Relationship in terms of Cultivation

Changing occupancy situations and ownership status (purchase, tenure, inheritor, barter, life-style occupier, etc.) accelerate changes that take place in land use, even worse, increase conflicting land uses (Munton, 2009). People treat land as an asset because of the symbolic values derived from land ownership (Sikor, 2004). "...land can function as a basis for earning one's livelihood, home, a means of production, a commodity, an asset, an annuity, a power basis, or a prestige object" (Kuhnen, 1982, p.21).

With the changing ownership structure, the new occupiers of country settlements especially the life-style occupiers have a tendency to perceive their land as consumption good rather than a production asset. The withdrawal of the initial landowners and the emergence of new occupiers lead to the degradation of local traditions and spirit, which have preserved the existence of the local settlement character for centuries. In general, the local initial landowners respect the inter-generational inheritance of land and try to preserve the spirit of

the land; in contrast, the new occupiers behave according to current conditions. “The result could be a more rapid turnover of land, more occupancy change and a greater likelihood of landscape change associated with a new management regime” (Bohnet et al., 2003, p.351).

Primdahl (1999) searches the behaviors of farmers as social actors on land decisions, and he classifies them as owners and producers. While the producers deal with the management and economic decisions about production, the owners generally deal with the aesthetic assets, cultural traditions, value of the property and land holding. While producers affect land functions, the owners act on land structure. In addition, while the local inhabitants see the land as a place of production, the newcomers see the land with its landscape attributes as a natural beauty.

At this point, the land ownership emerges as an issue. Landscape amenities constitute the environmental and cultural capital of the country settlements. Duncan and Duncan (2001, p.390) accept land as possessions for the ones who hold wealth and power to control them. They express this perception so well in their following words: “The pleasure they take in their property as well as its value depends greatly upon controlling the aesthetic and spatial practices of the whole community.”

Appreciation of the aesthetics generates new categories of lifestyles, which is underlying the patterns of consumption on the land. This metamorphosis engenders a conflict between traditional land use and popular consuming land uses. Conflicts persist in functional (farming practices) and aesthetic value (consumption asset) of the land.

> Conflicts emerge particularly in places where economic and cultural value is being placed not on individual natural resources but on aesthetic and environmental values (such as ‘viewshed’ or ‘rural quality’) that derive from a totality of many individual landholdings. These are especially subject to dispute because ‘ownership’ of landscape qualities is often undefined. Deeply political contests emerge over the question of who will ‘possess’ or ‘control’ the landscape (Walker and Fortmann, 2003, p.471).

People admire the qualities of country settlements: their scenic beauty, open spaces and cultural history. However, the formation of these settlement qualities is the result of nature, land use character, cumulative work of the local inhabitants and their traditions. When purchasing the land, people want to own the property of the settlement quality; however, just as the forests and seas cannot be a subject of private property, landscape amenities could not be subject of private property. Being the owner of a land gives the residents the right to and

the responsibility of shaping the landscape and the character of the settlement coherently in a collective way. Therefore, landscape can be considered as a collective ownership and value (Duncan and Duncan, 2001). There is no one correct way of valuing the landscape and settlement character. There is a very sensitive balance between eradicating and enhancing the settlement qualities. States develop control mechanisms such as Preservation Acts to manage the working landscapes and their unique peculiarities. The origins of the landscapes and settlements give clues while directing the decisions and regulations to sustain and preserve the settlement qualities. That is, "Landscape shapes politics that in turn reshape the landscape" (Walker and Fortmann, 2003, p.482).

The case under focus in this thesis, Karabağlar, witnessed many changes in land tenure system in a historical perspective. This part explains how the ownership structure of Karabağlar has changed and how economic, social and political factors have been influential on the change of land tenure system. The interventions done to the spatial layout are studied in a historical process. Socio-economic conditions of the terms and the cultural and social variation of the residents are examined, thereof. Later, the rights and privileges of the residents, related to spatial layout and land tenure system in a 500-year period, are explained to the end of summarizing the changes of ownership pattern and relations.

Karabağlar residents consisted of private landowners; therefore, the implementation and development rights have been under the responsibility of landowners for many years. The most crucial attribute of Karabağlar is the farmland pattern formed by private landowners. The pattern of Karabağlar has many traces of changing land-society and ownership relations after the first settlement movements of Turcoman nomads. The land regulation system of Ottoman Empire, changing practices in farming, new life styles accompanying modernization and technological developments in the period of Republic and then secondary housing developments with urban encroachment have precipitated the restructuring of the property pattern of Karabağlar in about a 500-year period.

Günay (1999) indicates that after the evolution of the urban environment, the distinction between possession and ownership took attention, and it has played a noticeable role on the transformation of agricultural lands into urban, as well as affecting landlord-tenant relations. In Karabağlar, the transformation process of the possession into ownership goes back to the 15th century. 'Yurtlar' (private ownerships), coffee houses (private property with common

use) and the localities (neighborhoods) that structure the ownership pattern of Karabağlar are the remnants of the formations of nomadic tradition. The settlement character and the farmland pattern are the products of these property relations; however, changing property relations have structured Karabağlar since the 15th century. There have been many negative impacts of changing property relations on the settlement since then: deterioration of some landscape components (irimler and kesikler), abandonment of some local traditions, loss of coffee houses and the use of common square, abandonment of farming activities and viticulture, identification of ownership boundaries with rigid materials, new changes boosting private ownership. None of these has conformed with the traditional 'bağ' pattern.

3.5.1 Land Regulations and Land Tenure System in Anatolia and Menteşe since the 12th century

Land regulation and land tenure system in Muğla,Karabağlar were in parallel to and dependent on the general authority of the Ottoman Empire. Therefore, in order to comprehend the relationship between the central authority and the principalities, first, their dictated land regulations and revolutions since the 12th century are explained, and some Ottoman terms are made clearer in this part of the chapter.

After the decline of Byzantine, Seljuk Turks settled down to Anatolia in the 12th century. They were divided into six large branches that constituted Anatolian Turkish Principalities. Among these branches, Menteşe Bey who was one of the rulers of Germiyanoğulları Principality conquered the provinces of Muğla and Aydın (Niray, 2002).

In the second half of 13th century, Menteşe Principality had the sovereignty of a large area that covers the western part of antique Karia and Lykia and reaches Aegean and Mediterranean coasts in West Anatolia (Arel, 1993). This mountainous area was called Menteşe Region. In this period, Muğla was of secondary importance coming after the center of principality called Milas. The main characteristic of Anatolian towns in that period was the neighborhoods established around mosques and commercial buildings. Pious foundations (waqf or *vakıflar*[21]) were a kind of legal sources for charity houses and mosques. The income

[21] *Vakıf* was pious foundation and perpetual estate whose income was used for charitable purposes (mosques, tombs, schools, public soup kitchens, orchards, meadows, books and so on...).

of the properties is transferred to waqfs. Therefore, waqfs affected the property relations and concomitantly the space organization. During the same century, the Turcoman nomadic tribes who came from the Middle Asian steppes brought the transhumance[22] lifestyle to Anatolia, which then became a widespread tradition in the following eras.

After the 16th century, Ottoman started to dominate to the whole Anatolia. In the 17th century, the Turcoman and Yörük nomadic tribes accepted a settled life with the settlement regulations of the Ottoman Empire (Çınar, 2004). A group of nomads living on the plateaus and plains of Anatolia firstly became semi-nomads, and then gradually adopted a settled life in the vicinity of abandoned villages near agricultural lands. The transformation of nomadic lifestyle into a settled one did not change the permanence of some nomadic land use habits. Indeed, nomadic land use forms and structures were applied on the settled environment in a natural process.

The seasonal migration was an essential characteristic of Turcoman nomads in Anatolia (Soysal, 1998)[23]. Cengizkan (2002) explains the differentiation between winter and summer life in Anatolian cities as circularity, whose reflections are seen on space as two different settlements: *yaylak* and *kışlak*. Arel (1997) defines the migration of nomads between mountain/summer pasture (*yaylak*) and winter quarters (*kışlak*) as a tradition. Likewise, migration of town residents between town and '*yayla*' or 'bağ' today is the perpetuation of this nomadic tradition. This migration resulted in the emergence of countryside settlements (*bağ* and *yayla*) on large farmlands of plateaus with a scattered pattern.

Apart from nomadic lifestyle, settled communities had established their own ownership structures in towns. The economic viability of the Ottomans was principally depending on the farming. Therefore, they both strengthened waqfs and waqf-like foundations and first established *'tımar'* system, which accepted land as the main component of prosperity and

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[22] "A way of life in which people migrate seasonally with their herds, usually from lowlands to highlands and back. Such movements are necessary for the year-round care of their animals upon which they depend. Transhumance is not nomadism since the cyclical migrations are between predetermined, traditional destinations" De Wit, P. and Verheye, W. (2009) *Land Use, Land Cover and Soil Sciences.* After the sedentism movements of the nomads, we can specify transhumance for Karabağlar.

[23] Christian population has never been a part of this migration.

development. The new conquered lands were adjoined to the state lands and distributed to the timar holders (*tımarlı sipahi*) who were responsible from the control of soil cultivation. However, in the end of 16th century, some timar holders started to abuse their duties and in the 17th century, they owned some of the state lands and got the control of lands. This property change influenced the cultivation of lands and in relation economic structure of the Ottoman State.

In conclusion, with the Land Edict (*Arazi Kanunnamesi*) of 1858, private property became legal with Deeds Regulations. With the Land Edict, Menteşe state lands were converted into the private property of timar holders and other influential persons.

Thus far, land regulations and land policies of Ottoman Empire in Anatolia and Menteşe Region are explained to make the conditions and difficulties of that period clearer. Transformations on lands and evolution of land tenure system in Menteşe Region, Muğla and Karabağlar, on the other hand, can be explained in three different periods:

1. From the 17th century to the beginning of the 19th century
2. From the beginning of the 19th century to 1950s
3. From 1950s to the 21st century

3.5.1.1 From the 17th century to the beginning of the 19th century

According to Koç et al. (2002), the initial settling process in Karabağlar started with the movements of Turcoman nomads who were living near Kütahya. After the settlement process of Turks in Anatolia, they moved to the southern part of Anatolia because of drought. However, Cribb (1991) clarifies that the reason for the transition of nomadic society to a sedentary society is the search for order by political powers rather than an ecological adaptation; therefore, Karabağlar can be considered to be the result of sedentary movements that started in the 17th century.

According to legend (Koç et al., 2002; Koca, 2004), when nomads first settled down in Menteşe region, some of them settled down at the skirts of Yılanlı Mountain, which is situated in the north of Karabağlar and Düğerek plains. At that time, Karabağlar Plain was full of elm trees that created jungle-like dense vegetation. A Turcoman nomad named Kahya

opened a way by trimming the trees and shrubs in Karabağlar. When he reached a suitable location, he settled down, farmed the lands and cultivated millet initially. Then he realized that the soil was very fertile for any kind of vegetable production. This suitable location was first called with the name of this Turcoman nomad, 'Kahyaoturağı'; then it changed into 'Keyfoturağı'. After this discovery, the governor of Muğla (*Muğla Mutasarrıfı*) of that time opened a road from Karabağlar to Muğla, and distributed the lands of Karabağlar to Muğla residents. Karabağlar was then divided into neighborhoods similar to the neighborhood order of Muğla. This division is given in Table 3.3 and in Figure 3.64.

According to neighborhood divisions, only some coffee house localities were similar to the neighborhoods of Muğla town, because Süpüroğlu, Ayvalı, Keyfoturağı, Hacıahmet and Kadı Coffee house localities were the first established neighborhoods in the 17th century. The construction years of the coffee houses and masjid buildings on these neighborhoods explains this case.

Table 3.3 Neighborhood determination in Karabağlar according to neighborhoods in Muğla (Source: Koç et al., 2002, p. 6)

MUĞLA	KARABAĞLAR
Karşıyaka Neighborhood	Süpüroğlu Neighborhood
Müştakbey Neighborhood	Ayvalı Neighborhood
Emirbeyazıt Neighborhood	Kahya Oturağı (Keyfoturağı) Neighborhood
Karaahmet Neighborhood	Hacıahmet Neighborhood
Keramettin Neighborhood	Kadıkahve Neighborhood

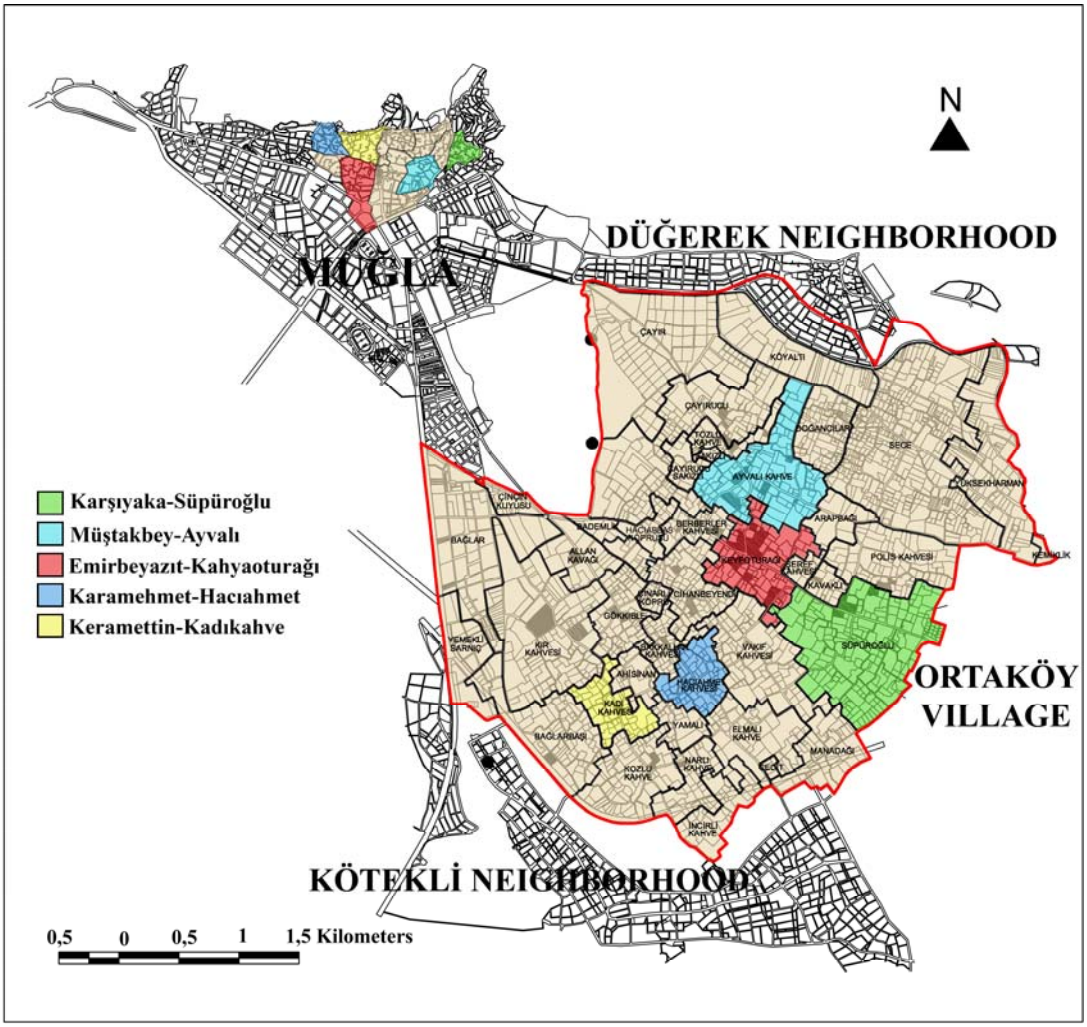


Figure 3.64 Corresponding Neighborhoods in Muğla and Karabağlar (Drawn by Feray Koca)

Karabağlar has a wide range of architectural qualities and structures that constitute a spatial diversity. The complex of buildings (*külliye*) composed of mosque, fountain, masjid and other service buildings were constructed by waqfs as a result of sedentary movements and they were the center for the new neighborhoods for newcomers, that is, Turcoman nomads. In Karabağlar, it is known that masjids or summer mosques in every node (*coffee house*) were constructed by waqfs and this process explains how the initial residents, Turcoman nomads, settled in Karabağlar. At the end of the 19th century, coffee houses were serving

travelers with camels[24] who conducted the transportation of agricultural products and used Karabağlar for accommodation (Koca, 2006).

Evliya Çelebi visited Muğla and Karabağlar in the 17th century. He describes Karabağlar and its outstanding 'bağ' pattern. His description gives significant information regarding Karabağlar and the cyclical movement of Muğla residents between Muğla and Karabağlar in that period. Other significant documents are waqf documents.

Ertürk and Atasoy (2010) indicate that in waqf land management system, '*yayla*' and '*bağ*' were agricultural enterprises, which yield significant income for the landlords and pious foundations. With a reference to Mete (2004), Ertürk and Atasoy (2010) mention that there was *'beybağı'* in Karabağlar. As it is understood from its name, its possessor was a kind of small Islamic monastery (*zaviye*) and the annual income of this monastery was 1500 *akçe*[25] in total. Based on waqf documents[26] related to Menteşe Region, Yiğit (2009) exemplifies that there was a 'yurt' with its house and well in Karabağlar, which was dedicated to Hacı Bayezid Masjid located in Muğla town, and this 'yurt' brought in 50 *akçe* in a year. There are similar documents proving that some 'yurt' in Karabağlar were dedicated to waqf buildings and owners (see Appendix A). Some influential landlords such as governors of sanjaks were accommodating in Muğla town and they were harvesting crops from the lands of Karabağlar and Muğla. According to dividend books, some 'yurt' in Karabağlar were dedicated to waqf establishments and the main economic activity was viticulture until the beginning of the 19th century.

3.5.1.2 From beginning of the 19th century to 1950s

When the relationship between land and society is investigated at the province of Menteşe in the 19th century, it is observed that there are private ownerships as independent small farm

[24]At the end of 19th century, almost all notables in Muğla (eşraf) were the owners of grand camel caravans.

[25] It is a kind of money used by Ottoman Empire.

[26] The copy of original documents which are related to lands of Karabağlar and which are retrieved from Detailed Waqf Book with the number of 338 are given in Appendix A.

managements that were accepted as the basis of Land Edict[27] of 1858. This legislation tended to preserve the status quo as far as agrarian property relations in order to consolidate the small land ownership (Stirling, 1993). Therefore, it transformed state owned lands of Menteşe into private ownership. This does not mean that wide private ownership structures emerged because the implementation of this legislation was the supporter of volunteering-based settlement on uncultivated lands by means of the leader of the nomadic tribes. Distributed titles were not the indication of inviolate property rights; instead, they were the possession rights of the lands for agricultural production (Keyder and Tabak, 1998). The Land Edict intended to prohibit transition of common lands of a village to the private property of influential persons. Thus, it aimed to prevent the villagers to be the laborers of powerful landowners. However, it could not prevent timar holders to get the property rights of some villages on country settlements of Menteşe and its neighborhood. The capital accumulation gathered from the harvested products provided more power and fortune to the rich landowner families (Aktüre, 1993).

After Land Edict, with the transformation of state owned lands into private ownership, powerful landowners became richer with their land incomes. With private property, the land fragmentation continued with the following sequence of delegates (*mütesellim*), müslim judge (*kadı*), Ottoman cavalryman (*sipahi*), officers, tobacco planter, and tradesmen. With the establishment of the Republic, the fragmentation increased. Today there are no waqf lands in Muğla (Aktüre, 1993).

At the end of the 19th century and at the beginning of the 20th century, tobacco plantation (Reji Company) became widespread in Karabağlar and later it became the main agricultural product. Dramanian immigrants[28] were the first to introduce the tobacco plantation to the region. At first, tobacco was just planted to meet the personal needs, but later it gained commercial value. Although Turks did not have any information about the plantation of tobacco, it was observed that the demands of English market had been influential on the plantation (Tekeli, 1993). Just after 1960s, agricultural products diversified. However,

[27]This legislation was accepted after the declaration of Administrative Reform (Tanzimat) in the Ottoman state, Aktüre, S. in Tekeli, İ. (1993, pp.38-39)Tarih içinde Muğla.

[28] The immigrants who came from Drama, Macedonia after the War on Balkan Peninsula.

tobacco is still the most cultivated and profitable agricultural product of the area (Güner, 2001).

Powerful landowners and the '*ayan*', that is, the provincial notables emerged in relation to tobacco plantation (Tekeli, 1993). Keyder and Tabak (1998) describe the transfer of property rights from the 'ayanlar' to nomads in their book. Land was a source of power for the 'ayanlar'. They bought and consolidated the small agricultural enterprises and established large farmsteads. The 'ayan' was employing nomads from Aegean islands, nomadic tribes, and migrants who came from eastern Anatolia. Nomads were the main farmers in the 19th century. At first, nomads were working for the 'ayanlar', but later lands were given to the nomads in order to make them settled. Thus, the nomads got the property rights of these lands and defined their lands with hedges.

There are some negative effects of tobacco plantation on the poperty pattern in terms of changing practices and spatial organization. The tobacco yeomen employed workers from near villages. In order to provide workers accommodation; the tobacco yeomen built workers' houses made of stone that do not conform with the traditional buildings of Karabağlar. These single-storey collocated workers' houses had flat roofs extending through the road. Tobacco yeomen bought more than one 'yurt' and they joined them under single ownership by destroying 'kesikler' and changing farm sizes. Owing to tobacco production, initially, the 'bağ' pattern disappeared, and then the sizes of the 'yurt' and farmlands enlarged (Sapmaz, 1996).

At the beginning of the 20th century, inheritors and newcomers became the new owners. After 1923, property rights for large farmsteads were transferred from yeomen to local residents. Since then, Karabağlar have entirely had a function of summer residence for Muğla residents without agricultural profit.

In his book titled 'Muğla Tarihi', Zekai Eroğlu (1939, p.143) described Karabağlar as follows:

> Karabağlar is a very famous summer resort of Muğla. It is located at the southeastern side of Muğla town. To reach the closest part of Karabağlar takes 45 minutes or one hour while the farthest part takes one and a half hours. Karabağlar covers approximately an area of 25

> kilometers square. In winter, due to rainfalls and flooding, the land is a bit silty and very fertile. From the beginning of April, cultivation is possible on these lands.[29]

Eroğlu (1939) describes setting of Karabağlar when there was no technological development in transportation, so it was taking more than one hour on foot to move around Karabağlar.

From 1936 to 1939, Recai Güreli was the governor of Muğla who worked for the planning of Muğla town. He had proposals for the economic development of Karabağlar. He proposed roads with a width of 16 meters in total (8 meters channel+ 8 meters road) to make agricultural profit from the farmlands of Karabağlar with intensive farming activities. He presented this proposal to the central authority in Ankara. Ankara left the decision to Muğla governor. However, Şükrü Bey, who was the engineer in public works at that time, and Mustafa Karamuğlalı convinced Recai Güreli to retract his planned interventions.

It was a right decision of Muğla Authority to abandon the proposal of Recai Güreli. If his decision had been implemented in Karabağlar, the farmland pattern, coffee houses, 'irim' and road network, 'kesik' and natural vegetation, 'bağ' lifestyle and seasonal dependency on Muğla town that constitutes the essence of Karabağlar could have disappeared.

3.5.1.3 From 1950s to the 21st century

Technological progress was another factor that affected ownership relations in Muğla. In 1900s, the plow took the place of primitive plow in Muğla. In the middle of 1950s, mechanical and technical progress in agricultural production introduced tractors that took the place of animal power. More than 600000 tractors were used to speed up the cultivation in Turkey. Nevertheless, the desire to use tractors led to many tenants to be out of work. Small landowners rented their plots to tractor-owners to be a float; however, this process could not hinder the out migration of the local inhabitants (Kuhnen, 1992). Concordantly, in 1950s, the first use of tractor and other vehicles was observed in the fields of Muğla. At the end of 1960s, the pace of technological improvements speeded up the transportation developments and at the end of 1970s, with increasing personal mobility, the automobiles started to be used

[29] "Muğla'nın Karabağlar namile maruf bir sayfiyesi vardır. Kasabanın cenubi şarkisinde kaindir. Kasabaya en yakın kısmı üç çeyrek, bir saat ve en uzak kısmı da bir buçuk saattir. Karabağlar, takriben 25 kilometre murabbalık bir sahayı ihtiva etmektedir. Kışın yağmur suları, seller buralarda toplandığı için hafif milli ve çok münbittir. Bu topraklardan nisandan itibaren istifade mümkündür."

in the setting of Karabağlar. Buses of municipality started their tours in Karabağlar. Dirt roads and 'irimler' were filled with material and were heightened in order to avoid drained water. However, this intervention resulted in the damage in drainage system linked with 'irimler' that changed the orientation and covering area of the ponding and flooding areas (Koca, 2006).

In 1970s, with socio-economic conditions, the emergence of new professions resulted in a change in lifestyle in Karabağlar. New generation was not eager to do farming; adversely they preferred to live in the city from then on by giving up farming. Elderly cultivators generally carried on with the farming practices. They were generally composed of old couples who did not have any income apart from farming. After these elder population died, some of the young generation let 'yurtlar' take care of themselves and some of them sold their 'yurtlar' to newcomers who were part of a different culture and social life (Koca, 2006). Bohnet et al. (2003) describes the newcomers as lifestyle or residential occupiers who do not have an agricultural background. In Karabağlar, the newcomers generally purchased small farm holdings after the initial owner died or retired. They changed the elements of their built and natural environment. They sometimes trimmed, sometimes removed 'kesikler', or sometimes widened 'irimler' and furnished enclosure of their ownership with wire or wooden fences and stonewalls. Jackson (1969) explains the reason for putting boundaries as to keep intruders out and to keep own possession in. These antagonistic ways of organizing space started to become dominant in Karabağlar. In the past, trust in the community of Karabağlar was more than it is today such that they did not need any unnatural barrier for the enclosure, in contrast; they formed 'kesikler' as natural barriers to provide privacy.

Some of the newcomers pulled down unpretentious, naturally well-adjusted traditional houses and built huge and showy summerhouses. Meanwhile, traditional 'bağ' farming based on field-farm parcels was replaced by hobby farming based on residential parcels. This replacement damaged the distinctive character of Karabağlar. Moreover, the quality of the amenities of natural landscape elements and traditional architectural structures, which once attracted people to live in here, lessened.

After the second half of 1950s, plateaus and inland regions started to become new focus of the summerhouse tourism (Cengizkan, 2002). In addition, the crowdedness in coastal settlements and the chaotic structure of cities directed people towards country life again.

Proximity to the city center of Muğla, the high amenity values and landscape components were attractive factors for the tourists and city residents to make them settle in Karabağlar. At the beginning of 1980s, after the secondary house ownership gained popularity as the indication of richness, high-income groups of the cities started to buy lands from Karabağlar (Koca, 2006). New road systems full of traffic arising from second-houses created a random pattern, which undermined the use of traditional common squares (coffee houses, masjids) and annihilated the original farmland pattern and its intended use. These user groups were not very concerned about farming for their livelihood because they had other income sources. Hobby gardens took the place of the fields and farmlands, well-designed gardens took the place of traditional courtyards. Apart from second house owners, some of the new generations of the local households left farming and introduced part-time farming and non-agricultural jobs (Kuhnen, 1992).

Until the 21th century, Karabağlar witnessed a series of changes in technological developments and its repercussions on the ownership structure. Since the 19th century, the speculative alterations arising with development plans continued to transform the spatial layout and ownership relations in Karabağlar.

3.6 Conclusion

In brief, 'yurtlar' (subject to private ownership) that form the distinct property pattern, specific road network (irimler) and specific hedgerows (kesikler), traditional houses that are clustered around coffee houses, abundant underground water, intimate relationships of residents, seasonal life cycle and the socio-cultural structures are the main features that are peculiar to Karabağlar.

In Karabağlar, property relations are encoded on the coffee houses and on the common squares by giving the owners' name to the communal property although these coffee houses were subject to private property. Communal property has been held in trust with intimate and respectful relations of residents for centuries. Changing ownership structure and changing identity of occupiers culminated in the disappearance of coffee houses and other landscape components both physically and practically. This social and physical transformation ascertains worries about the loss of landscape assets and particular settlement character. Hence, the essence of Karabağlar landscape as a product of common efforts of the initial

landowners can be perpetuated just by preserving areas with their mentality, that is, by living in trust and communion.

Karabağlar constitutes a cultural landscape on a specific geography and presents organization of spaces according to lifestyles. Landscape components and qualities have created pleasant and attractive values for town residents for years. However, transforming landscapes with changing ownership structure and the conflicting land uses between productive and consumptive uses have almost resulted in an irreversible chaotic setting in Karabağlar. To prevent the negative impacts of this transformation and to provide the perpetuation of initial character of Karabağlar all depends on the preservation regulations and their appropriation by the community.

Thus far, socio-spatial structure and transformation of the settlement is held in terms of property relations since the 12th century. In the next chapter, the transformation process will be examined in terms of land use regulations with development plans after the establishment of the Republic.

CHAPTER 4

LAND USE CHANGES IN MUĞLA KARABAĞLAR WITH DEVELOPMENT PLANS AND CHANGING SOCIO-ECONOMIC CONDITIONS

4.1 Introduction

Land use changes are not just the consequence of morphological transformation of the lands with natural evolution or regulations resulting from property relations. The decisions of the local administrations, their land regulations and policies regarding development plans are effective on the management of land utilizations according to changing economic and social conditions.

In general, development plans are the predetermined guiding plans in which local planning authorities propose the way of land utilization. Land use planning, as a part of development plan, makes crucial suggestions for the secured control of the orderly land development for the future by compromising between competing and conflicting uses (Thomas, 2001).

While deciding on a management approach, understanding and assessing the process of landscape and land use changes, its physical, social and economical effects, the needs of the society, environmental benefits are significant in order to gain positive outcomes and to keep up with the dynamic conditions (Goodwin et al., 2000). Land use planning is required to meet the needs of transforming settlements, to provide improved management and to adapt land use policies according to changing circumstances.

The main objectives of land use planning can be defined as:

> Land use planning creates the prerequisites required to achieve a type of land use, which is sustainable, socially and environmentally compatible, socially desirable and economically sound. It sets in motion social processes of decision-making and consensus building concerning the use and protection of private, communal or public areas (Deutsche Gesellschaft für Technische Zusammenarbeit GmbH, 1999, p.21).

Controls on land use goes back to the Roman Empire, and land regulations were first developed by the Western civilization by defining setback lines and boundaries. After World War II, with increasing mobility of the people, improved road system and changing housing patterns, and urban encroachment on countryside became a problem for the local administrations that necessitated further land use regulations.

In the last century, the main aim of land use planning has become sustainability and livability in the whole world. Stockholm Conference in 1972 was the first conference that approached the understanding of environmental-based sustainable development. Second, World Conservation Strategy in 1980 fostered development with sustainable utilization that is compatible with conservation. Later on, the report of the Brundtland Commission (World Commission on Environment and Development) titled 'Our Common Future' in 1987 highlighted safeguarding the environment and natural resources for the future generations. TheEarth Summit or United Nations Conference on Environment and Development in 1992 accepted sustainable development as a standard assessing development objective and land use planning as the fundamental way of achieving sustainability. Johannesburg meeting in 2002 emphasized efficient use of lands, efficient implementation of farming activities and use of natural resources (De Wit and Verheye, 2009).

Today, sustainable development attempts to provide economic and social cohesion, ecological preservation of natural and cultural heritage, and balanced intergenerational equity in terms of environmental, economic and social dimensions. In order to achieve a sustainable pattern of land use, planning and regulations necessitates an effective resolution of unexpected conflicting land uses.

Conflicting land uses are "the non-compatibility of land uses because they mutually exclude or adversely affect each other when situated together or adjacently" (Evert, 2001, p. 450-451). Sometimes conflicts arise when land use policies neglect the population needs and cannot be effective against the complexity of emerging problems (Figure 4.1).

With sustainable development, master plans and zoning regulations are prepared and accepted for the future of the regions. Municipalities have to consider the regulations and the amount of the housing for the new development areas in the cities. Environmental and economic concerns are considered as the part of sustainable land use regulations.

Figure 4.1 Conflicting land uses between user groups (Source: Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (1999) Land Use Planning**,** Methods, Strategies and Tools, UniversumVerlagsanstalt ,Wiesbaden)

In terms of country settlements, existence of settlements depends on the land uses considering environmental coherence, the perpetuation of the settlement character and protection of natural and cultural beings (resources). The maintenance and enhancement of settlement qualities and values require particular consideration. As the settlement character changes from community to community with perceptions, the value given to the landscape varies for communities. When a visitor cannot understand and capture the landscape and land use changes, a local resident may have to live with these changes and their potentially negative impacts. These differences in perception may lead to conflicting responses to changes (Goodwin et al., 2000).

Actually, two types of actors are effective on land use changes. Initially, residents, retailers, industrial companies are the actors who provide the mobility in space, and secondly, political authorities and developers are actors influencing decisions and conditions for mobility (Couch et al., 2007).

Development plans are the justification of land use planning in a legal context and defines the responsibilities of these two actors: authorities and communities for planning. They organize the procedures for land regulations and the functions for development controls. The plans carry out land use policies for changing conditions and needs to ensure currency, and later to manage future growth. Development plans set the framework of the development process and direction by solving land use problems (Thomas, 2001).

The main land use problems on country settlements surrounding towns and cities are the encroachment of urban developments on farmland pattern and arising conflicting land uses. Urban developments are fragmenting lands by creating pocket of farmlands between residential settlements. In addition, sometimes this transformation leads to the loss of productive potential of farmlands by creating non-conforming land uses. Land use policies focus on the solution of the problems of conflicting land uses. Nevertheless, because of the political approaches, sometimes local administrations may lead to the emergence of these problems with development plans. Sometimes, changing conditions and inflexibility of the development plans may create pressures and foster conflicts on the land use and the society. Ingersoll (2006) states that urban encroachment, uncontrolled transformation of lands and arising land use conflicts are all result of a plan with disorientation.

In Muğla, in some periods, commercial entrepreneurs have considered the land as a resource for investment, and sometimes, land rent that emerged with failed land legislations and regulations resulted in land speculations. Also, sometimes alternative land uses that became popular for economic income transformed lands of Karabağlar, Düğerek and Kötekli settlements. Moreover, changing socio-economic conditions were very effective on the land use decisions and their appropriation by the community.

Therefore, in this chapter, the development plans implemented so far are evaluated for the purpose of observing the legitimized land use transformations on the farmland pattern of Karabağlar. Development plans show the decisions of the local administration on the form of land use and the initiation of measures for conservation practices. The main objective of the plans was to provide a planned growth of the city in the specified directions; however, they have had many socio-spatial impacts on Karabağlar and Muğla lands since the 19th century. Every decision and plan left marks on the pattern of Muğla and Karabağlar. This chapter

evaluates the ordinances of the development plans and their consequences on the spatial transformation of the lands in Muğla and Karabağlar.

4.2 Land Use Changes with Development Plans in Muğla- Karabağlar Continuum

Until the 19th century, Muğla settlement was located at the slope of the southern Oyuklu Mountain, and it is surrounded by vineyards and orchards (bağlar and bahçeler) at the spot where it intersects with the plain (Yenen, 1980).

Neighborhoods were formed around coffee houses and religious buildings such as mosques and masjids. Neighbourhoods included both organized commercial elements (retailers and coffee houses) and religious elements (mosque, masjid and a fountain) on a common centre or square. In every neighbourhood, there were open public squares where inns, mosques and coffee houses were shadowed by plane trees (Yenen, 1980). This structure was similar to the one in Karabağlar as presented in Chapter 3. The property of religious structures belonged to waqfs.

The first administrative land use changes in Muğla occurred in the 19th century with the shift of city center and the establishment of new residential and commercial areas around new city center. The first planned city development started with the establishment of the Republic and the city started to grow geometrically through Muğla Plain around the new city center. This geometrical growth continued untiltopographical conditions were suitable. When the morphological structures of the landscape hindered the growth, the city continued to sprawl toward south in the following years.

The development of city had not been based on a specific plan until 1930. Master builders were responsible for the building activities in the city at that time. These master builders were also the creators of coffee houses in Karabağlar. However, competent people from outside of the city had prepared the projects of public buildings.

The systematic development happened after the implementation of city development plans (Tekeli, 1993). The development on the plain was at first single one-storey houses, but with progress, multi storey houses and cooperative houses appeared on the vineyards and orchards of Muğla Plain, and the new road system fragmented these lands.

With changing socio-economic conditions, the demands for new land uses have transforming effects on the farmlands (vineyards and orchards) in Muğla and Karabağlar plain such that the city is growing in south, east and west directions based on topographic convenience. Some of the decisions and regulations that are accepted with development plans are threatening the existence of Karabağlar, its natural and cultural assets and its character. With development plans, administrative limits and the territory of the authority are extending. Figure 4.2 displays the changing administrative boundary and the size of territory according to development plans in different years. As it is explained in the following parts of the chapter, latest development plans have some deficiencies in that they do not have a well-defined content. Therefore, the extension of city has speculative effects more than a massive invasion of the city through the farmlands of Muğla-Karabağlar Plain.

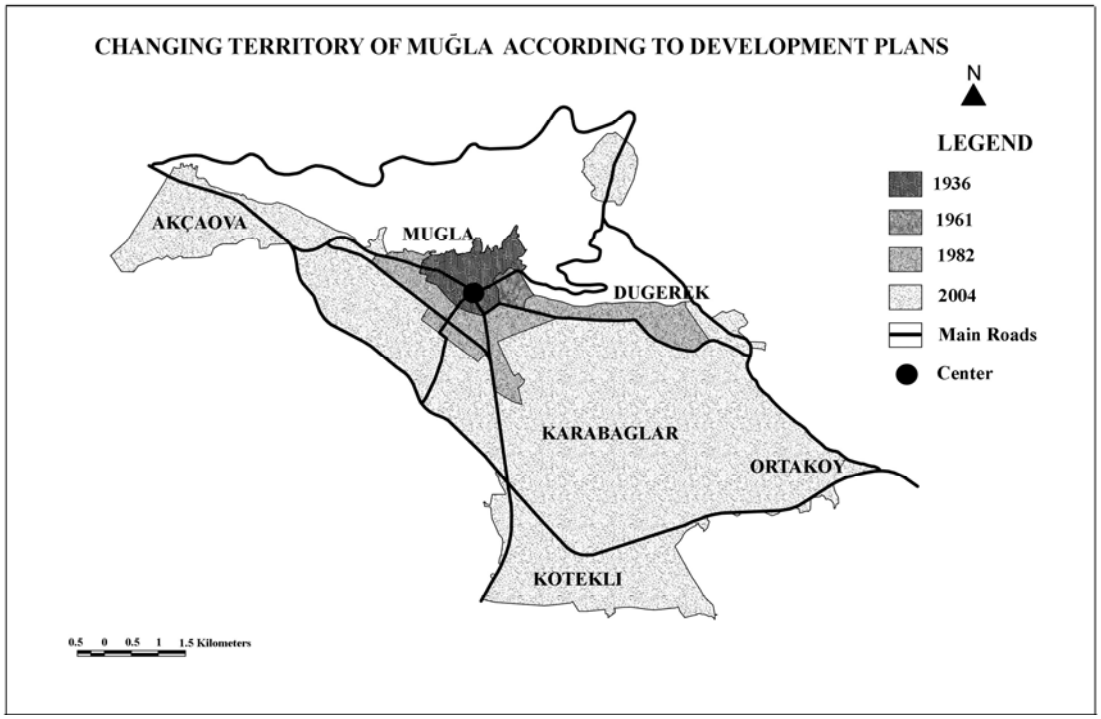


Figure 4.2 Changing territory of Muğla According to Development Plans (1936-2004)
(Source: Drawn by Feray Koca according to development plans)

With modernization, changing closed economy of Muğla town and changing social structure of the community, the interdependency (the seasonal circularity) between Muğla and Karabağlar started to lose its significance. This dramatic change had negative effects on the physical structure of both Muğla town and Karabağlar. Farmland pattern that constitutes the spatial organization of Karabağlar changed throughout the years. While 'bağ' lifestyle that was the outcome of seasonal circularity was vanishing, changing land utilizations resulting from new land users created a new lifestyle that transformed the essence of Karabağlar.

4.2.1 Development Plans

For the province of Muğla, four development plans have been prepared since 1936. Every plan opened orchards and vineyards of Muğla Plain into housing development and prepared the first conditions of transformation process. Every development plan period has different population-based, socio-economic, administrative and physical dynamics that lead to the transformation of spaces. Every period added a new structure, pattern and character to the city form and while the city is spreading, the orchards and vineyards are displaced with urban developments and shrunk (Table 4.1).

Table 4.1 Main dynamics leading transformation of space in Muğla with the decisions and implementations of Development Plans

DEVELOPMENT PLANS AND MAIN DYNAMICS LEADING SPACE TRANSFORMATION				
Dynamics For Transformations	**1936**	**1961**	**1981**	**2004**
POPULATION	Approximately 11 000 urban	Approximately 14 000 urban 31 000 rural increasing migrations from rural settlements to cities	Approximately 28 000 urban 33 000 rural increasing urban population , increasing migrations between cities	Approximately 50 000 urban 40 000 rural Villages converted into neighborhoods and the transformation of rural population into urban.

Table 4.1 Main dynamics leading transformation of space in Muğla with the decisions and implementations of Development Plans (Continued)

SOCIO-ECONOMIC STRUCTURE	Self-sufficient economy-depends on agriculture and handcraftsmanship	Economic growth-small industry popularity of sea holidays Banks and Agricultural Credit Cooperatives are opened.	International expansion-modern industry and commercial progress Increasing mobility and car ownership Changing lifestyle, increasing officialdom	Privatization-tourism, modern industry and commercial progress Booming mobility and car ownership
ADMINISTRATION-DECISIONS AND IMPLEMENTATIONS	The Ministry of Public Works prepared the plan. Municipality sold gardens and fields to private entrepreneurs.	The Ministry of Labor and Social Security supported workers to take credits for cooperative housing. The funds of Bank of Turkish Estate Credit. Transformation of public lands into private property. Subdivision and parceling of arable lands of Muğla-Karabağlar Plains.	Bank of Provinces prepared this plan. The emergence of second houses in Karabağlar Düğerek Village as the new development direction and some cooperative houses. Muğla University was established. The small industrial area was launched. Preservation of traditional city pattern	Administrative ly growth Changing administrative territories. Kötekli, Düğerek, Yenikoy Villages became the new neighborhoods Advanced highways and beltways are constructed

Table 4.1 Main dynamics leading transformation of space in Muğla with the decisions and implementations of Development Plans (Continued)

URBAN FORM	Two centers: Republican Square and traditional center, large boulevards, a new proposed residential area Organic city pattern and geometrical growth	A new center Urban concentration around the new center. Cooperative houses and new residential areas developing at the south of the city	Second homes in Karabağlar Residential development at the southeastern part of the city Highway-Beltway Networks	Leapfrog development Dispersed settlements Transportation dependent settlements Widespread strip commercial areas

The first Development Plan was approved in 1936. In 1930-35, with the legislation of 'municipality', every municipality had to fulfill the responsibility of preparing development plan. Therefore, the City Science Committee of The Ministry of Public Works prepared a plan with the scale of 1/1000 (Doğru, 2006) (Figure 4.3).

The new focus of the city was Republican Square. Some administrative structures such as Government Building, Governor's Residence, and Community's Center were located on this square. The construction of some of these buildings continued until the end of 1948. Five main roads were connected to this circular Republican Square. The concept of boulevard was first used with this plan in Muğla. Republican Square was connected to Marmaris and Aydın Highways. Many new roads were constructed and new public investments were done. The new geometrically created settlement located in the south of the old center was in contrast with the old organic pattern of the city (Tekeli, 1993). The city developed around the new boulevards. In 1939-1943, the graveyards in the city were moved to a grove of 3000m^2 area at the south slope of Hamursuz Hill on the way to Karabağlar (Yenen, 1980).

In the years of World War II, in Turkey, the income of the municipalities was so inadequate that this situation led to the failure of the application of development plans. In order to meet the expenditures, municipalities sold the city lands to private enterprises. In line with

requirements, the municipality of Muğla wanted to sell the small orchards and gardens in Kozyeri (the location which is called Big Pool Park) and Kükürtçü (today the south of old bus terminal), which were accepted as residential areas in the development plan. Nevertheless, the plots were sold gradually. The development of these residential areas just happened after 1950s (Tekeli, 1993). The stadium of the city was constructed on the expropriated lands of Kusuoglu and Iskender Orchards and on Kazancı Şeyh Graveyard at the southeastern side of the Republican Square.

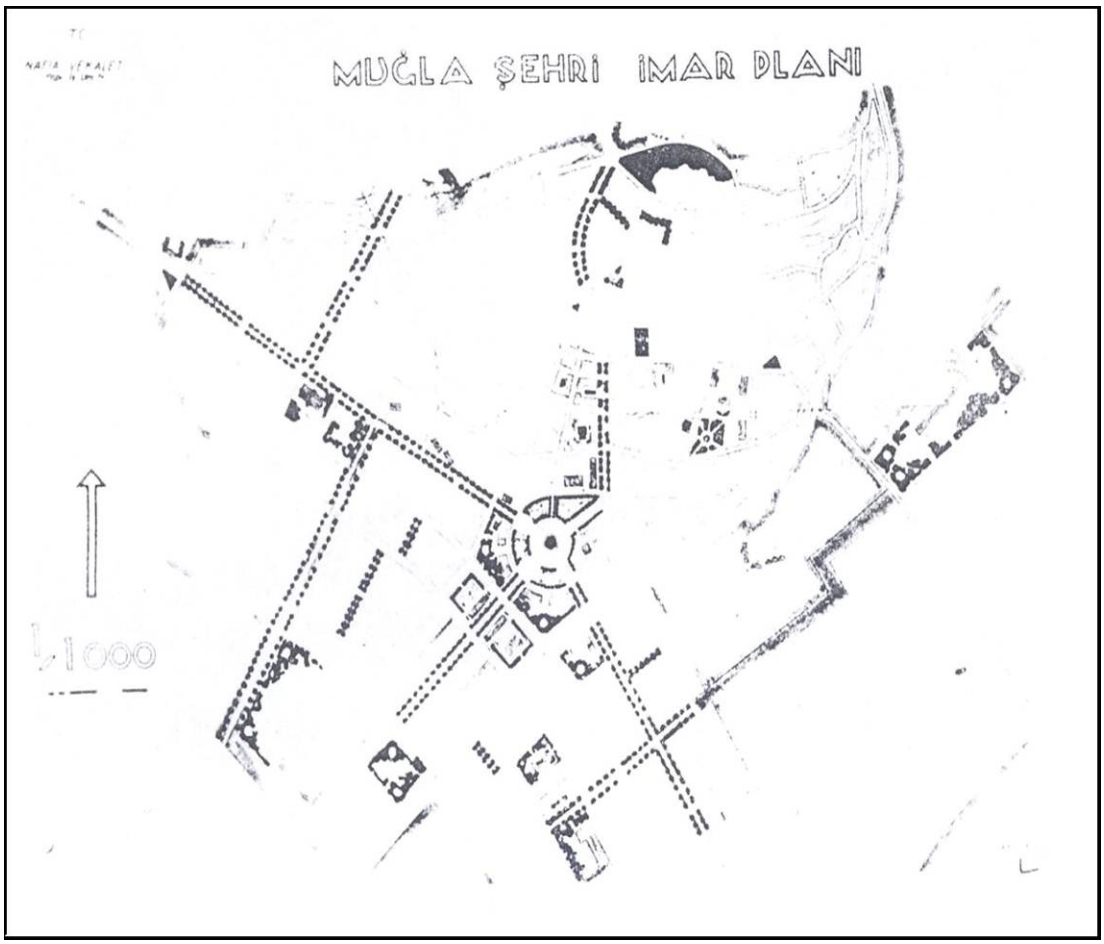


Figure 4.3 Development Plan of Muğla in 1936 (Source: Muğla Municipality)

In 1959, while abovementioned developments were implemented in the town, Karabağlar was still saving its original pattern. Although highway construction started, no roads or dividing element was crossing Karabağlar yet as it is seen from the aerial photograph (Figure 4.4). Kötekli and Düğerek have not urbanized yet and together with Karabağlar and Ortaköy they were part of large fertile plain.

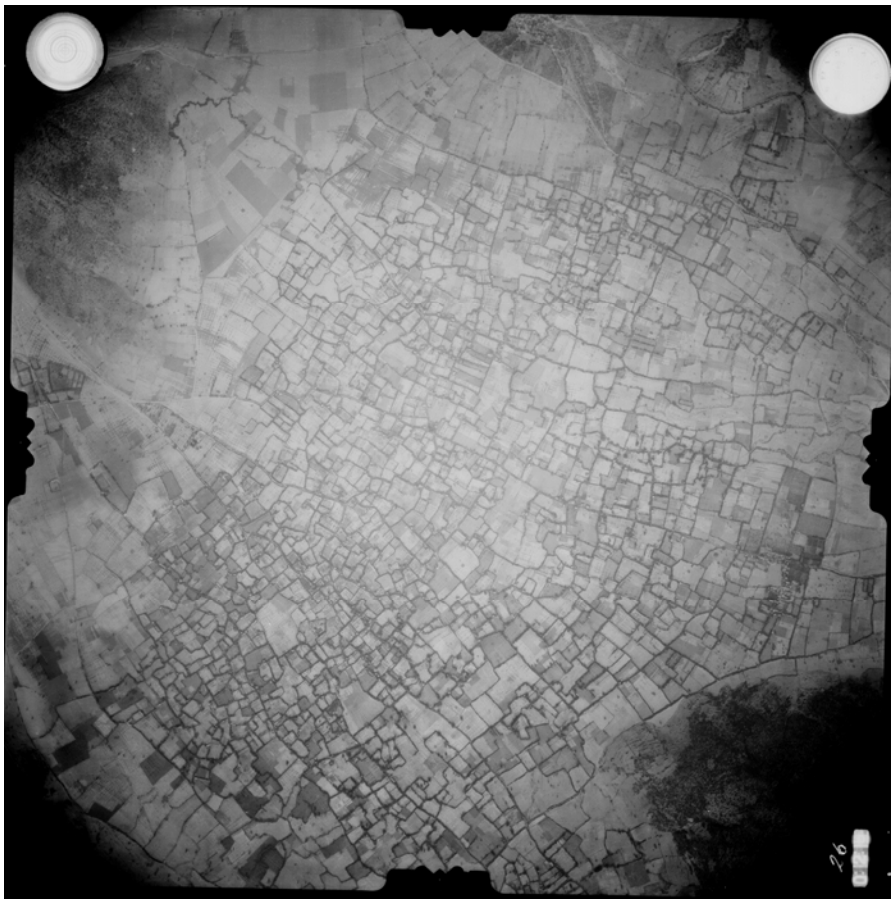


Figure 4.4 Aerial photograph of Karabağlar in 1959 (Source: General Command of Mapping)

The second Development Plan was approved in 1961. This plan was a continuation of the plan of 1939. Changes in the social life of the people had been influential on the use type of

the buildings. High-income groups and young generation moved to the modern residential area in the southern part of the city. The old generation continued to live in the traditional houses in the old city pattern. This old part of the city had transportation and infrastructure problems (Akçura, 1993). After the new generation moved, the city center of the 19th century and some commercial buildings lost their functions and they were abandoned to their fate. The modernization process accelerated the development of transportation and the new modern residential areas. The city started to spread through the orchards and vineyards of the Muğla Plain (Figure 4.5).

In Turkey, after 1948, with the law of 'encouraging construction of building', private and state owned lands of the administration were transferred to the municipalities by the treasury to be given to housing cooperatives in order to meet the housing needs. The Ministry of Labor and Social Security supported workers to take credits for cooperative housing via the funds of Bank of Turkish Estate Credit. This initiative encouraged land speculation rather than housing construction, and a large portion of public lands in the hands of the city was passed on to private ownership. Uncontrolled land and housing market was the beginning of unplanned urbanization. Some empty lands reserved for parks and sport activities, and farmlands have been the subject of special parceling (Özcan, 2000). This cooperative initiative was effective in Muğla in 1970s. Many officials benefited from the land allowances of municipality and some cooperative houses such as Öğretmen Evleri, Emniyet Kooperatifi and İmar Bakanlığı Blokları were constructed on the orchards of Muğla.

In the new residential development areas, permission for construction was initially given to single one-storey houses. After 1960s, the multi-storey apartment buildings including cooperative houses became widespread on the same lands (Yenen, 1980). Many private landowners sold their lands to contractor companies in return for freehold flat. This process enabled the middle class to pay the increasing land prices by sharing. The young generations who wanted to own a modern apartment building but did not have satisfying income had a chance to own a flat with cooperative houses. As a result, the displacement of the city population through south and east speeded up (Niray, 2002).

a) Hamursuz Hill and behind;Karabağlar

b) Muğla Plain

Figure 4.5 Residential areas sprawling through the orchards and vineyards of Muğla Plain in 1970s (a,b) (Source: T.C. Devlet Arşivleri Genel Müdürlüğü (2009) Osmanlı Belgelerinde Muğla,Muğla Belediyesi Kültür Yayınları Tarih Dizisi 3)

In this period, water resources of the city were connected to the city water supply network, therefore the orchards and farmland of Muğla Plain, which had been irrigated with the water

resources by that time, were left drying and this process accelerated the subdivision and sale transactions (Niray, 2002). Although Muğla developed with planning, some plan decisions opened the way of parceling the arable plots. Speculative movements and decisions in order to provide economic advantage from urban development have been the triggering effects for building concentration.

The economic structure of Muğla has started to alter after 1960s. Banks and Agricultural Credit Cooperatives opened their branch offices in Muğla. There were no large industrial investments; instead, small production branches such as craftsmanship were widespread. In this period, the only active industry was the limekilns, lime and kiln plants (Niray, 2002).

In 1941, after the earthquakes that continued for days in Muğla and around, the Science Committee of the Ministry of Public Works did a damage assessment. According to the damage assessment report of Science Committee, Muğla Lime was found to be a strong binding material in mortar that creates less damage against earthquake. In 1940s, with the effect of westernization and modernization movement, popular tradesmen and businesspersons of Muğla initiated an industrial plant project survey in order to establish modern industrial plants. According to this survey, Muğla Lime was determined to have high quality material that has higher market share in comparison to other limes mined in Aegean Region. Therefore, in 1969, Muğla Lime Plant was launched on the side slope of Hamursuz Hill with the leadership of Muğla Chamber of Commerce and the incentives of Ministry of Housing with a paid capital of 500.000 TL (Öztüre Holding, 2010).

Site selection was done according to proximity to Muğla City Center (4km far), the convenience of transportation to markets, cheapness of labor market, the convenience of providing electric and fuel supply, and accessibility of labor force. The plant began test production in the end of 1971. In 1982, the plant witnessed an economic trouble and Special Provincial Administration of Muğla became the main share partner of the plant. In 1992, shares of Provincial Administration of Muğla are privatized. Today, 108 workers and contractors are working at the plant, and it has an economic contribution to Muğla city (Öztüre Holding, 2010).

Öztüre Holding (2010) claims that site selection was done according to the conditions of 1969. Having no urban structure around and the proximity to the city were influential factors

for the site selection decision. This statement indicates that Karabağlar was not considered as breathing space of Muğla at the time and its conservation for future generations was out of the question. The dust and granule that the plant emitted have destroyed the trees and vegetation of Karabağlar (especially elm trees) and its environment for years. The land cover of Hamursuz Hill was changed and destroyed with limekilns. In addition, the decision of site selection was a significant factor that led a small industrial area to be launched close to this area in the ensuing years.

The third Development Plan was approved in 1981 (Figure 4.6). Bank of Provinces prepared this plan. The objectives of this plan was prepared with an awareness of the urban sprawl and was aiming to prevent the sprawl of the city through the arable fields and orchards which were located at the southern part of the residential areas (Osmay 1993). However, an industrial area started to appear at the southeastern side of the city on the farmland pattern of Karabağlar; therefore, the lands in the eastern part of the city were opened for the new development.

In this period, the increase in private car ownership and the changing lifestyles resulted in the emergence of second houses for speculative or recreational purposes. The popularity of sea holidays left its place to hobby gardens inside regions on plateaus. 'Bağ' and 'yayla' life were in fashion again with the consequence of the crowdedness in coastal settlements. In 1980s, high-income groups started to construct showy summerhouses on Karabağlar rural settlement.

After 1980s, while the rate of migrations from rural areas to urban centers was diminishing, the rate of migrations between cities increased. After 1985, a new period, in which urban population was higher than the rural population, started. Until the end of 1985, Muğla had not witnessed an excessive immigration. After 1985, the urban population started to increase because of the officials who chose to stay in Muğla. In order to provide accommodation for the newcomers, the axis through Düğerek Village was chosen as the new development direction of the plan and some cooperative houses (41 Evler, 112 Evler) were constructed around this route.

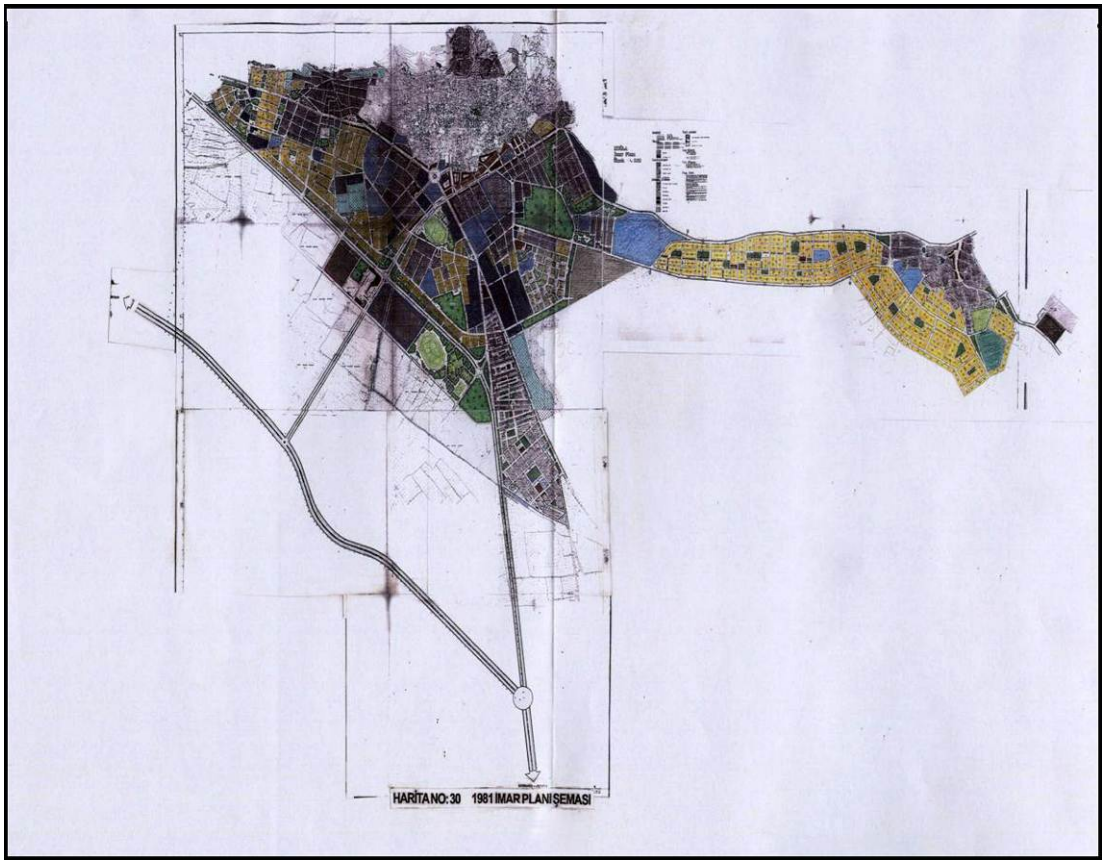


Figure 4.6 Development Plan of Muğla in 1981 (Source: Muğla Municipality)

With increasing mobility and car ownership, the capacity of the main roads in Muğla city center became inadequate to meet the traffic density of intercity transportation, therefore, beltways that cross the length and breadth of Muğla and Karabağlar Plains were planned. Muğla-Marmaris-Denizli Beltway and Düğerek Highway were two main roads that changed the traffic density of the city.

In 1982, Muğla-Denizli Highway and Muğla Beltway that cross and fragment Muğla and Karabağlar Plains were constructed. Many farmlands on the route of highway were expropriated by the General Directorate of Highways.

Roads are the linear edge barriers that lead to anthropogenic degradation of the environment by changing the composition of the landscape patterns and causing ecological disturbances.

Road systems destroy vegetation on the route and around, interrupt hydrologic flows, fragments habitats, subdivide the arable working farmlands and change the land cover (Hawbaker et al., 2004). Roads maximize human activities and potential human disturbances on the landscape.

Muğla-Denizli Highway has not just been a physical barrier for landscape composition; it has led to land use changes along the arable farmlands and orchards that it has crossed. It bisected the large plain by distorting farmland patterns within existing settlements and shaped the land use patchwork (Figure 4.7).

Roads always bring new land uses with it and these new land uses, such as housing developments and strip commercial developments, increase the densities on roads. On Muğla-Denizli Highway, commercial structures such as roadside restaurants, service areas, rest stops, motels, and recreational areas were constructed and the density of residential units increased along the road. The increasing commercial and housing developments induced increasing density of populations.

Figure 4.7 Muğla-Denizli Highway bisects Karabağlar Plain (Source: Achieve of Feray Koca)

Changes in land uses around road corridors[30] and increasing density on roads transformed the particular character and the whole appearance of Karabağlar. It became a roadside recreational area waiting to be consumed by the travelers and visitors. In addition, new land uses necessitated further transportation network demands. In Karabağlar, numerous dirt roads are paved and connected to Denizli Highway in a reticular network by dissecting the farmland pattern. "In conclusion, a road network disrupts horizontal natural processes, and by altering both landscape spatial pattern and the processes, it reduces biodiversity" (Forman and Alexander, 1998, p. 222).

In Karabağlar, there is an ecologically sensitive hydrological formation depending on the landscape components of 'düden' and 'irim' and 'kesik'. Denizli and Düğerek Highways are dividing the area by altering the surface flow of rainwater. In this system, removal or replacement of one of the landscape components or any minor element may cause a disastrous effect in the whole system.

> Compacted saturated or nearly saturated soils have limited permeability and low drainage capacity. Wetland road crossings often block drainage passages and groundwater flows, effectively raising the upslope water table and killing vegetation by root inundation, while lowering the downslope water table with accompanying damage to vegetation (Forman and Alexander, 1998, p.218).

Briefly, roads may lead to floods by increasing the speed of water flow and sediment transport. In Karabağlar, soil erosion, sediment transport and accumulation along the roads are creating blocking effect for surface flow, so surface water cannot reach the destination wells known as 'düdenler'. Consequently, water accumulates and disperses to the area, changing the surface areas of ponding and flowing.

Roads require infrastructure. The negative impacts of roads on land use goes beyond the area that is used just for road. This means ecologically effected area is much greater than the road corridor. "Edge effects imposed by roads can result in the degradation of a larger percentage of habitat than is covered by the roads themselves; up to approximately 10 times the amount, assuming a depth-of-edge influence..." (Saunders et al., 2002, p.210).

[30] Road corridor refers to "the road surface plus its maintained roadsides and any parallel vegetated strips, such as a median strip between lanes in a highway" (Forman and Alexander, 1998, p.208).

According to research done by Hawbaker et al. (2004), the density of roads and landscape patterns are directly affected by environmental variables, housing developments, and large population allocations. At this point, the following questions could be posed: "Do roads lead to development, or does development lead to roads?" (Forman and Alexander, 1998, p. 221). Housing development and road density are significantly interrelated, and in this debate, the most significant factor is not known in terms of cause-effect relation.

McGarigal et al. (2001) investigate the effects of roads by measuring the road density and changes on landscape configurations, and they point out that the cumulative impacts of roads on landscape may not be significant over a short-term period like 10 years but in the long term, the impacts can be remarkably destructive. Forman and Alexander (1998) indicate that an estimated 15-20 percent of US lands are directly affected ecologically by roads. This is a huge rate, and Turkey has similarities with the US in terms of private car ownership and road utilization. Furthermore, site selection for road necessitates sensitive precautions, nevertheless, as in the case of Karabağlar, in Turkey; highways are drawn as a straight line on a map with a ruler by the authorities without considering the existing landscape pattern, hydrological structure and the potential effects of roads. Actually, Denizli Highway can be considered more sensitive to the environment when it is compared with the other examples in Turkey.

Another development in 1992 was the establishment of Muğla University in Kötekli Village. This progress has brought an increase in the population (newcomers, especially young generation) and the housing demands.

Kötekli village has been observed to have a rapid increase in population since 1992. There are physical and economic reasons behind this increase. Kötekli village was initially part of Muğla-Karabağlar Polje. It is located in the southern part of Karabağlar and at the junction point of Muğla-Marmaris and Muğla-Denizli Highways. The growth of Kötekli Village depends on the development of a road network and university. After the establishment of Muğla University in Kötekli Village, Muğla city started to spread along Muğla-Marmaris-Denizli Highway Junction.

The small industrial area in Muğla was launched in 1992 as well. There are 349 industrial offices, and approximately 2000 workers are employed in these offices. The Lime Plant has

been working actively as the other industrial foundation since 1969. In 1992, after the establishment of military units (infantry regiment) at the west slopes of Hamursuz Hill, nearly 85 limekilns located on the west side of the hill were closed. In Düğerek Neighborhood, sand-gravel pits are operated (Güner, 2001). Nevertheless, because of these limekilns and sand-gravel pits, land cover on Hamursuz Hill and Düğerek deteriorated and accordingly, the altered flow of surface water had negative outcomes on the ecological formation of Karabağlar.

The plan of 1981 was sensitive to traditional city pattern and its preservation. In 1979, the traditional pattern of the city was defined as Urban Site based on the preserved properties of the area. A conservation plan that was giving importance to the cultural assets and the values of the pattern was ratified and implemented (Osmay 1993). After Karabağlar was registered as third grade natural site in 1977, a conservation plan for Karabağlar was prepared and approved in 2002.

The fourth Development Plan was approved in 2004 (Figure 4.8). This plan was aiming to provide sustainable development of the city and livability by conserving natural and cultural assets and establishing a strong linkage between dispersed village settlements (Muğla Development Plan, 2004).

Because of the topographical threshold, Muğla city had to develop in a plain basin; however, the proposed east and west development directions led to the development of some existing villages as the new neighborhoods of the Muğla city. Düğerek and Kötekli Villages became the new neighborhoods of Muğla (Muğla Municipality Official Website, 2010).

Most of the settlements (villages) on Muğla Polje have an increasing population and expanding territories because of high accessibility with developed road network and topographical conditions.

The university has a socio-economic contribution to the city life today. The accommodation opportunities in the university campus are limited and 66 percent of the students and 86 percent of the academic and administrative personnel are staying in Kötekli village, surrounding villages and Muğla city center. This situation results in the increase of housing rents and booming of construction sector. Around new housing areas and along the

highways, many outlets and strip commercial blocks started to appear. First, gas stations and roadside restaurants were built; later, shopping centers, outlets, restaurants, service stations, and storage units that constitute the strip commercial developments arose around Muğla-Marmaris-Denizli Highways (Güner, 2001).

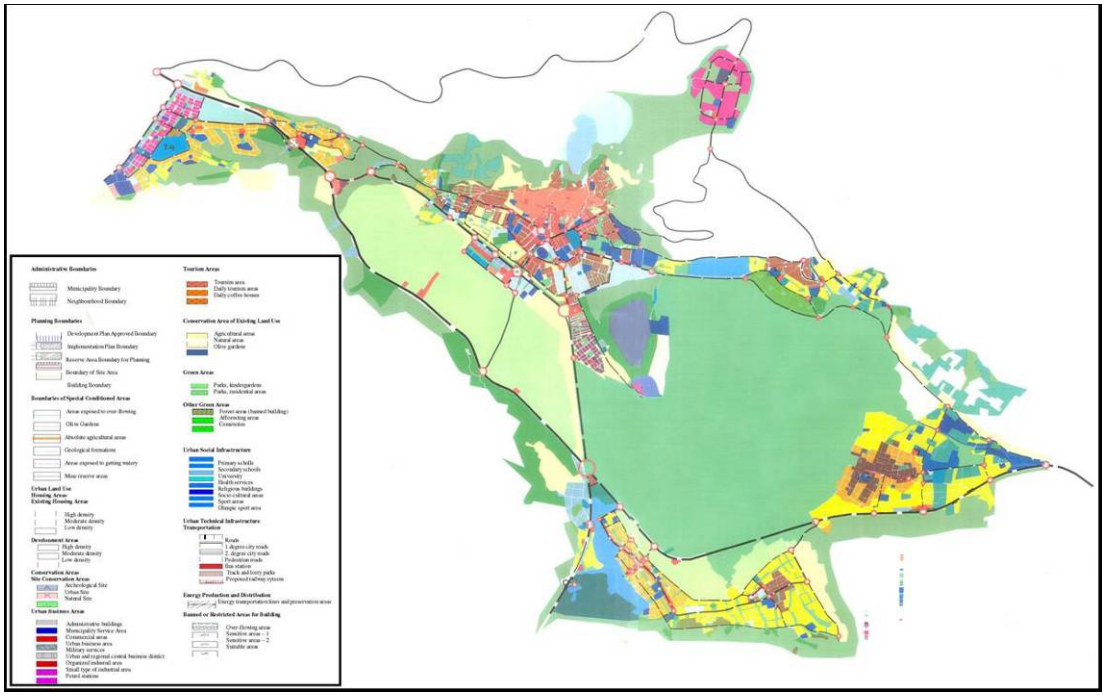


Figure 4.8 Development Plan of Muğla in 2004 (Source: Muğla Municipality)

The new housing development areas were planned in the recently developed neighborhoods to provide the housing requirements of the increasing population. Additionally, a new housing area with cooperative houses is proposed and implemented in Akçaova Village and Kötekli Neighborhood. It is proposed that the existing industrial area be moved to Akçaova, and it is planned to be opened to commercial and residential development (Muğla Municipality Official Website, 2010).

The new plan is proposing tourism and recreational facilities on the main boulevard (Uğur Mumcu), connecting Kötekli to the city. Today, the new commercial enterprises, shopping centers and outlets started to appear on both sides of the boulevard. The land prices increased on this axis. The farming plots of Karabağlar and Muğla Plains have been subjected to subdivision and transformed into building plots in relation to land speculations.

Bahl (1968) asserts that leapfrog pattern of urban development emerge as a result of urban land speculations. He defines leapfrog development as the most costly and the most often attacked form of sprawl: "a subdivision separated from the periphery of the urbanized area by some amount of land which is either completely vacant or unused for urban purposes" (Bahl, 1968, p.199). Because of topographical requirement in Muğla, development plans are proposing a spread through south, east and west directions. This spread displays a leapfrog development type, which has environmental, social and economic costs. Today, it does not seem as a threat for Muğla, because the content of the plans are blank in that proposed development areas are more than required. Therefore, development plans create just speculative advantage and risk the future of open lands.

Besides, some consequences of this speculation may be two-sided. Most of the landowners may be satisfied with the increase in land price or speculation; however, this undamaging satisfaction may cause fragmentation of landscape, and conversion of working farmlands or raw open lands into more intensive uses of urban activities (Couch et al., 2007). In Muğla, speculative housing developments have usually accompanied environmental degradation, diversified land use patterns and hybrid landscapes that lead to unsustainable changes of land uses and conflicts.

If the land use changes and fragmented landscapes are presented via comparison of aerial photos, a tremendous transformation of the farmlands is observed spatially. Figure 4.9 displays Muğla and Karabağlar in three different years (1972, 1992, and 2010).

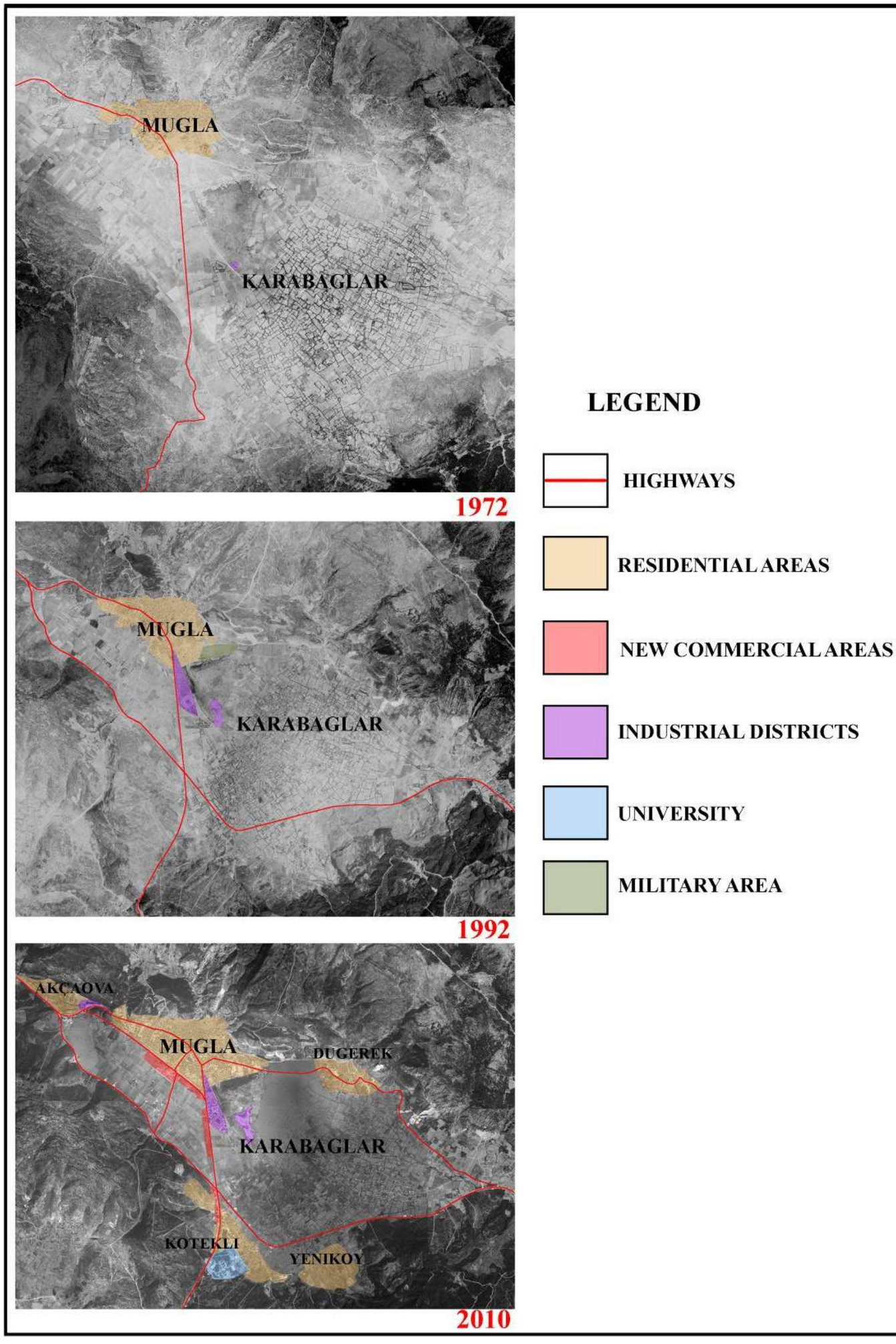


Figure 4.9 Comparison of Aerial Photographs of 1972, 1992 and 2010.

(Source: General Command of Mapping and Google Earth)

In 1972, there was no highway between city center and Karabağlar. The transportation was provided with narrow dirt roads. Karabağlar and Muğla Plains were not fragmented with highways and urban developments. In 1992, the traces on the map give clues about the developing residential and industrial areas and transportation networks. The landscape pattern in Karabağlar seems more fragmented and the parcel sizes are smaller in 1992. In this map, the location of military area is seen on the opposite side of Hamursuz Hill.

In 2005, the gradual growth of Kötekli Neighborhood and the university area is observed in the map. In addition, spreading pattern of other residential neighborhoods such as Akçaova, Düğerek and Yeniköy are observed. In this map, the lime plant enlarges its activity area and limekilns.

4.2.2 Conservation Plan of Karabağlar

Karabağlar was accepted as natural site in 1977. Conservation oriented development plan of Third Grade Muğla/Karabağlar Urban and Natural Site was approved by the Municipal Council and Muğla Conservation Committee in 2003. Dokuz Eylül University, Department of City and Regional Planning prepared the plan with an emphasis on conserving the area by proposing new land uses. Nevertheless, the plan has some deficiencies about the preservation of the overall character of the settlement:

- The boundary of conservation plan does not coincide with the ecologic boundary of Karabağlar.
- A detailed investigation of the landscape components and biodiversity are missing.
- The plan is rather dealing with the regulation of the density of the second homes and minimum and maximum conditions.
- The priority of the plan is on the development of tourism and recreational activities.
- The land use decisions of the plan do not consider the geomorphologic structure and hydrological problems of the area thoroughly.
- The plan lacks the methods of conserving the landscape components, pattern and overall settlement character and controlling developments.

Karabağlar starts on the hillsides of Yılanlı and Hisar Mountain and spreads through the plain. It integrates with Muğla and Düğerek Plains and covers an area of 48km^2. In terms of geomorphologic and hydrologic formation, the plan necessitates the evaluation of all the plains as a unity. Nevertheless, conservation plan boundary excludes some parts of Karabağlar Plain (Figure 4.10). According to land registry data, since 1950s, Karabağlar district is known to be greater than the natural site both spatially and administratively. To some extent, the highways are observed to be chosen as the boundary of the natural site. The selection of frame of reference as a subsequently constructed structure that bisects the plain has been a deficiency in the conservation plan, which promotes the expansion of urban development through the last limit where conservation plan ends.

The particular character of Karabağlar is contingent upon the unique landscape components (irimler, kesikler, düdenler) and their spatial organization in the area. Regrettably, unique cultural and natural landscape elements are changing or disappearing, and there is no record or documentation about this alteration or lost. Barlas and Koca (2006) introduce two landscape components of Karabağlar with their functions and assets. This introductory study proclaims the degradation of the landscape with land use changes and construction activities. For instance, the length of 'kesikler' is determined as approximately 230 km totally and this number is decreasing year by year. The authors attempted to make the two landscape components of Karabağlar, 'irim' and 'kesik' evident in comparison to hedgerows in the world literature; however, there are other spatial components (coffee houses, yurt) that are waiting to be explained and be redounded to the world literature. Scientific identification, registration and a detailed inventory fieldwork of the landscape elements, and natural and cultural heritage that constitute the particular character of the area are lacking. Furthermore, the biodiversity map of the area has not been prepared yet; therefore, a list of indigenous species, plants on 'kesikler', their ecological niche and the path of the fauna are missing. Because of lack of registered natural vegetation and fauna, what has been lost for years could not be known. Furthermore, necessary controls and measures have not been taken actively, yet.

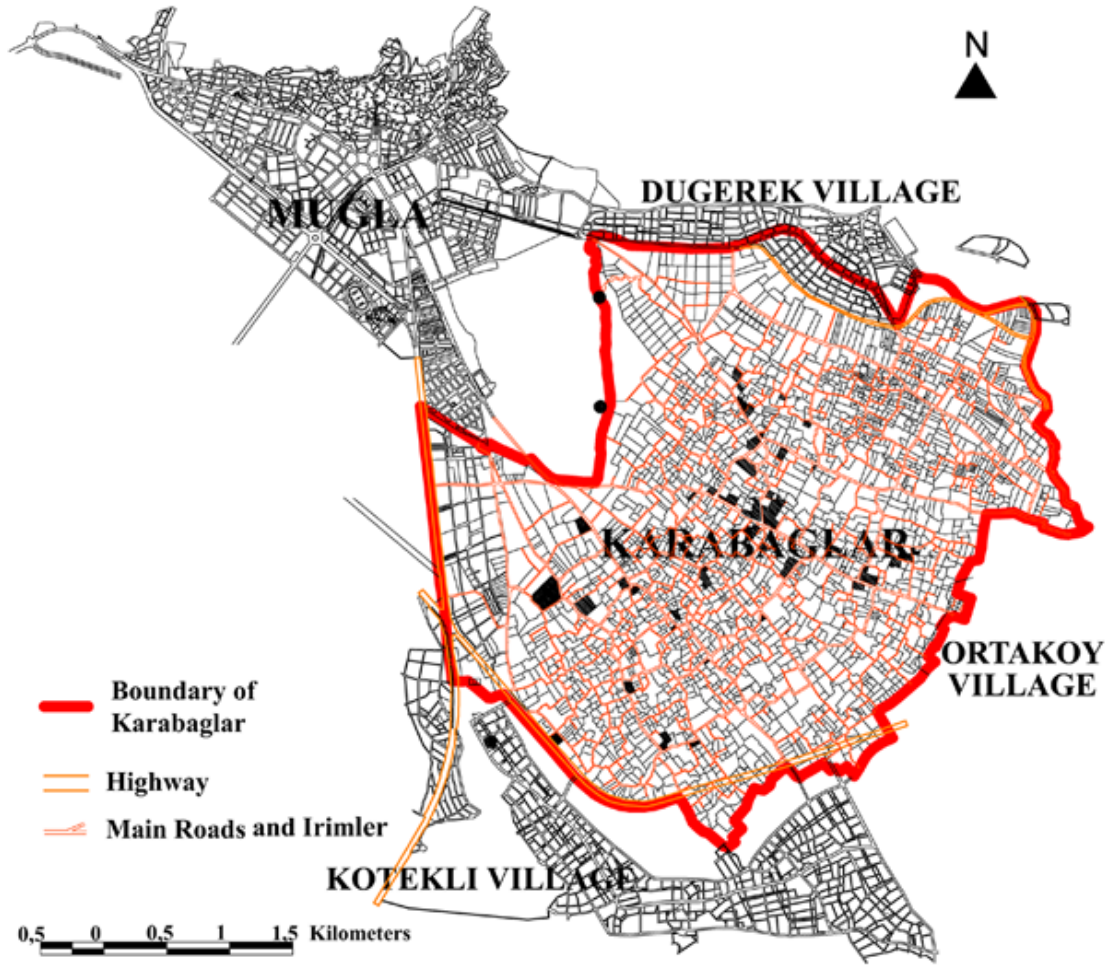


Figure 4.10 Boundaries of Karabağlar Natural Site (Source: Adapted and Redrawn from the "Conservation Oriented Development Plan", Municipality of Muğla)

Karabağlar is known to be the summer place of Muğla residents for years; however, the seasonal dependency and cyclical migration between Muğla and Karabağlar are more than a second home possession phenomenon. In the past, the dynamics behind this migration were based on the requirements of production for house economy and recreation. The society was tied to land for occupational reasons, especially to earn their living. The farmland pattern of the past that was created with minimum conditions and demands of contented society is challenged today with consumption society and their multiple demands, which form different mosaics of landscape patterns.

Consumption of second homes is the expression of changing lifestyles, housing preferences, land use and spatial organization on country settlements. Demands for recreation, higher income, increasing mobility and greater leisure time are the main motives of the formation of second homes (Dijst et al., 2005). Increasing urban density stimulates the proliferation and consumption of second homes. Tourists and seasonal residents may lead to functional changes on land uses with commodification of the farmlands.

> … where agricultural land use has lost grounds to more profitable uses such as urban developments, recreational facilities and infrastructures. The idea is that a recreational version of urban sprawl, especially by means of second homes has in itself become an important agent of change in many rural areas (Oliveira et al., 2006).

The increasing second home ownership engenders the displacement of local farmers with new comers. Second homeowners are considered as 'communities of limited liability' who are little interested in the local problems that do not directly bother them (American Society of Planning Officials, 1976).

Stedman et al. (2006) indicates that rapid increase of second homes on countryside is the outcome of poorly regulated plans and if the land use is unregulated, the environmental detrimental impact is inevitable. Karabağlar Conservation Plan displays an inefficient approach and provision to the conservation problem of Karabağlar by focusing only on the land subdivisions and construction conditions. As a result, it could not prevent speculative subdivisions or amalgamations that destroy the farmland pattern. Ineffectual measures, the understanding of country settlement preservation as the regulation of housing density, and the lack of a professional scientific committee who specialize in biodiversity are the weak aspects of the plan.

Working farmlands are the main cultural landscapes that define the peculiar character of the area. Indigenous values and specific characteristics of the farmland pattern contribute to the overall particular character of the settlements. Perpetuation of the qualities of the past depends on the consideration of changing conditions of past and present. "External factors and processes that have shaped the development of an agricultural landscape over time need to be considered to better understand its historic function, current appearance, and potential preservation strategies" (The Massachusetts Department of Conservation and Recreation, 2009, p. 6).

Karabağlar Plan decisions that allow the conversion of traditional land uses into popular consuming land uses are the discrepancies in terms of preservation practices. The inadequacy of local land use regulations creates conflicts on the environmentally sensitive lands of Karabağlar.

Zoning planning, which is accepted as a conventional and outdated method of preservation and farmland protection in the world, is utilized in this plan. The area is divided into four zones and every zone regulation is defining different subdivisions and land uses. The plan is giving priority to land uses of consuming recreational activities as well as residential developments, however, the plan is leaving management problems of these recreational facilities undefined and unsettled.

According to Karabağlar Conservation Plan Report, the minimum subdivision conditions are determined as follows (Figure 4.11) and the percentages of the zones are given in Table 4.2:

- In the First Zone, the minimum subdivision lot size is 3000m^2
- In the Second Zone, minimum subdivision lot size is 5000m^2
- In the Third Zone, minimum subdivision lot size is 5000m^2
- In the Fourth Zone, minimum subdivision lot size is the same with the minimum subdivision lot size of Düğerek Residential Development Plan

In 2007, a new regulation, with the item 5578, amended the legislation of the soil conservation and land use. According to this amendment, the size of agricultural plots is redetermined to prevent the fragmentation of lands not to lose its economic viability especially on the lands without development plan. The minimum agricultural parcel size is determined as 20000m^2 on certain agriculture and special product lands, 5000m^2 on planted agricultural lands, 3000m^2 on modern greenhouse lands and 20000m^2 on marginal agricultural lands (Ministry of Agriculture, 2007). From 2007 until now, this regulation has been applied in Karabağlar. However, this amendment is not suitable if we consider the fact that Karabağlar has never been an economic asset for the town economy. Karabağlar was a result of economic requirement and preference of the society for house economy. Besides, Karabağlar was a lifestyle in which people refreshed with seasonal circularity. Therefore, preservation the farmland pattern, which was formed with the environmentally coherent practices of initial inhabitants, is just possible through the prevention of subdivision as well

as amalgamations. A well-defined conservation plan prepared only for Karabağlar and its 'bağ' pattern is needed to preserve the existence and characteristics of Karabağlar.

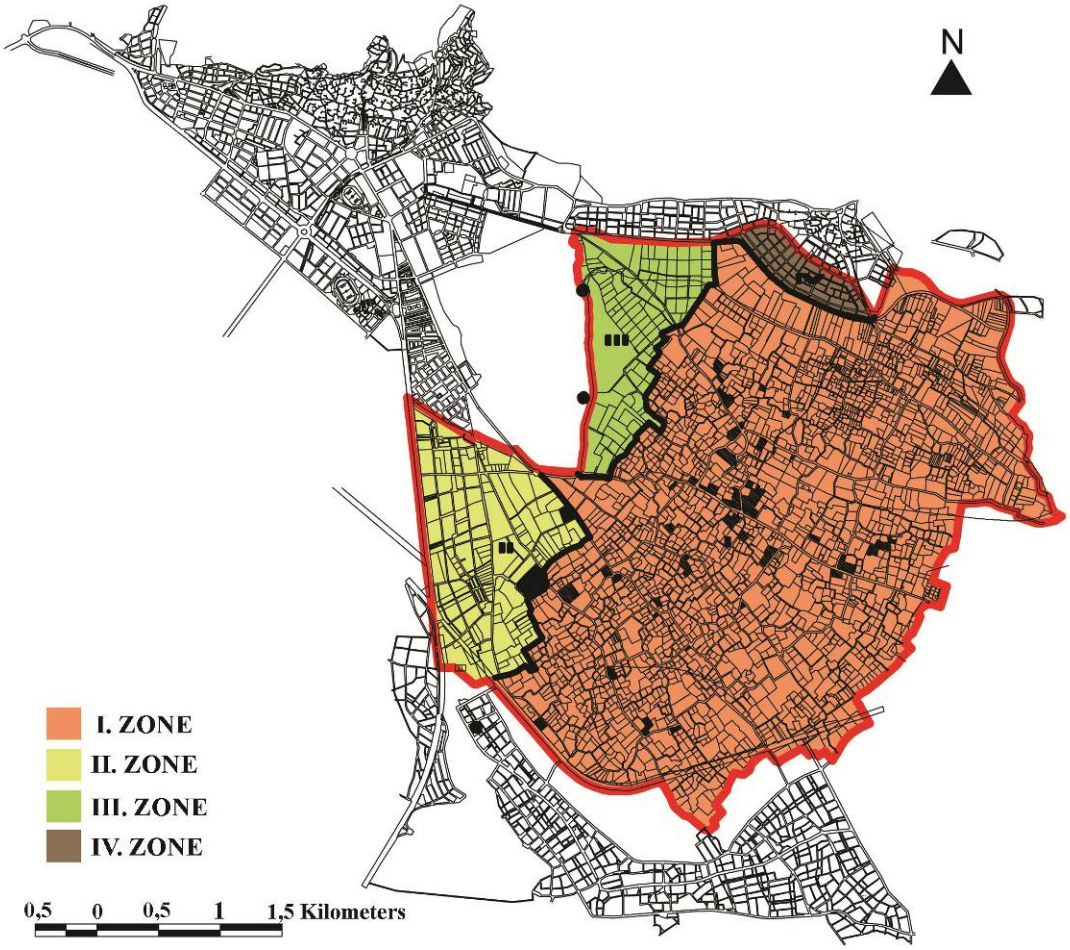


Figure 4.11 Zones of Karabağlar Conservation Plan

Table 4.2 Percentage of Zones in Karabağlar

Zones	Area(km^2)	%
I. ZONE	11,95	77
II. ZONE	1,94	13
III. ZONE	1,28	8
IV. ZONE	0,33	2
TOTAL(Karabağlar Natural Site)	15,50	100

Recreation and tourism constitutes the largest industry in the world. Recreational land developments have a potential to pre-empt the unique natural resources. As mentioned in Chapter 2, tourism and recreational activities are not environmentally friendly activities and demand high-level public services, infrastructure and a road network. In Karabağlar, narrow dirt roads, private wells, and modest traditional houses have been local minimum infrastructure standards for farming society and working farmlands for centuries. Nevertheless, tourism and recreational activities demand further infrastructure standards to gain profit from the lands. However, they result in soil degradation, ground water depletion, destruction of flora and fauna, ground and surface water pollution, increased traffic, increased litter and increased flooding and runoff because of grading of dirt roads, paved surfaces and changing land covers. Before proposing recreational development, the suitability of the area should be examined and carrying capacity for intensive development should be measured. Karabağlar Conservation Plan lacks a detailed investigation of geomorphologic, hydrological and soil properties that keep the ecological system in the area.

Local governments are the main institutions responsible for the control of the quality of development. When the local land use controls are weak, the pressures and negative impacts of recreational development on countryside may be detrimental. The plan lacks land use regulations and control of them. There are conflicts of authorization for the implementation of conservation plan decisions. With these deficiencies, the plan needs a revision.

4.3 Conclusion

For years, a spectacular amount of vineyards and orchards of Muğla has been opened to housing development. Dynamics of changing socio-economic conditions, exchange of population, and legitimated development proposals have transformed the town and countryside pattern, the structure of the society and land use character. Political decisions of the state, legislations and laws, and development plans have been effective for sometimes defined, sometimes undefined and spontaneous formation of the movement lines with the help of land subdivision process of ownership relations.

The spatial layout and socio-cultural context is changing day by day. The topographic structure of the area is not a limit for the spread of the city today. Land use changes and its spatial effect on the character of the settlements are inevitable. It is hard to overestimate future changes and conflicts. Therefore, planning should be designed flexible enough to cope with the land use changes. A particular approach, which not only adopts certain measures to avoid speculative housing but also defines and maintains the land use character with all its features, should be considered and taken. The environmental coherence should be set and the plans should be assessed by adopting a comprehensive approach.

Existing land uses and compatibility of proposed land use with surrounding land uses are two main land use issues that should be determined by the decisions of development plans. Plans should include a long-term spatial vision and monitoring and implementation framework for local development strategies.

In this chapter, in terms of development plans, the land use policies, their legislative effects and proposed strategies for conservation of Karabağlar and Muğla farmland pattern (vineyards and orchards) are assessed in different periods in their own socio-economic conditions. In the next chapter, the results of field investigation regarding land allocations and land use changes in Karabağlar are evaluated with perceptible and tangible analysis.

CHAPTER 5

FIELD ANALYSIS ON MUĞLA, KARABAĞLAR

5.1 Introduction

In the previous chapters, the transformation in Muğla and Karabağlar is presented in a historical context in terms of land-society relations with the regulations of administrations. Pros and cons of the development plans and their responsibility on the space are evaluated to attain the implementation and control problematic of the plans. The investigation asserts that the development plans, changing socio-economic conditions and some administrative decisions prepared the conditions for the transformation of farmland pattern and social life that were once structured depending on seasonal circularity in Karabağlar.

The transformation of farmland pattern with road network, industrial area, and urban commercial and residential developments cost the loss of unity and harmony of the unique landscape of Karabağlar, loss of farmland practices of 'bağ' lifestyle that once provided a significant contribution to the house economy and a gradual change of the identity of the local community.

In the last century, with modernization, the landscape of Karabağlar witnessed many changes. Main transformation of landscape led to depletion of groundwater table, damaged hydrological system, degradation of landscape, abandonment of 'bağ' lifestyle and replacement of polyculture farming with monoculture farming, abandonment of migratory traditions and dissolution of local socio-spatial organization and inhabitants. Depending on the spread of strip commercial and residential constructions, increasing subdivision rates resulted in the problem of fragmentation of farmland pattern in Karabağlar. This unique area and its sensitive environmental coherence started to be corrupted.

Once, living in Karabağlar and maintaining farming activities within a 'bağ' lifestyle was the main economic obligation for local residents. Today, landscape qualities and particular character of the area, which are the remnants of traditional 'bağ' lifestyle, are the main stimulants that attract populations to Karabağlar. The socio-economic restructuring of the society alienated people from the maintenance of seasonal traditional activities such as viticulture farming, live stocking, and preparing stock food for winter. Unfortunately, in order to provide economic viability of the area, the conservation plan proposed new non-compatible land uses such as tourism and recreational facilities instead of the perpetuation of existence of 'bağ' settlement and reforming dwindled 'bağ' lifestyle. Consumption interests of tourism and recreational facilities enabled the landscape desirable for urban developments. Conservation practices mainly dealt with the distribution and the density of second houses and recreational structures that are far from being coherent with the existing farmland pattern. Practices display that the implemented conservation plan is completely a dead loss to preserve the essence of particular 'bağ' character.

This research examines transforming farmland pattern, land use conversions, and consequently the loss of particular settlement character with statistical analysis of empirical study. Later, it forms a basis for transforming setting of Karabağlar while seeking an explanation to how conservation measures and strategies can be effective to tackle with the negative impacts of transformative process. Therefore, parcel sizes, their distribution in the locations and functions, land allocations (subdivision and land amalgamations), and their reasons are examined to deal with the problematic of the perpetuation of settlement character with original farmland pattern and viability of the settlement. Later, the evaluation of questionnaire that is applied to the residents of Karabağlar is performed to obtain information about the composition of the residents, their general land use tendencies and their approaches to conservation of Karabağlar.

Three kinds of empirical data set are evaluated in this field analysis: spatial data, land records and questionnaire. While a sample of questionnaire is given in Appendix B, a detailed evaluation technique of the related data is given in Appendix C. This chapter interprets the outcomes of the data process and concludes with an explicit evaluation and inference related to Karabağlar.

5.2 Spatial Analysis of Land Records

This section of the chapter evaluates matched data related to registered title deeds and maps in terms of main formations and transformations.

5.2.1 The Localities ('*Mevkiler*')

Karabağlar Natural Site is combination of two districts: Karabağlar and Düğerek[31] (Figure D.2 in Appendix D). According to the locational thematic map (Figure D.3 in Appendix D), there are approximately 2890 parcels divided into 48 clusters with different locality names. In general, pattern arising from regular spacing tends to form clusters after several generations. A clustered settlement form emerges because of a large range of farmland sizes. Karabağlar presents a clustered settlement type. On several counts, these clusters (localities) correspond to the neighborhoods in Muğla town. Every cluster has its own node and provides service to the residents from these nodes. In the node of the localities, coffee houses, masjids, service buildings, wells, fountains and plain trees constitute spatial organization.

According to the locational thematic map (Figure D.3 in Appendix D), the locality of Sece has the largest area with 458 parcels in Karabağlar Natural Site. In this locality, the majority of parcel size is smaller than 3000m^2. The smallest locality is Kemiklik with just two parcels. Every locality has different characteristics in terms of their names and nodes.

There are 20 localities called with the name of the coffee house and masjid that they have. Among these localities, eighteen of them are inside the boundary of Karabağlar Site, while two of them are outside the site (Topallar and Kötekli Coffee Houses). Some of them are not used today (Polis, Tozlu, Vakıf, Cihanbeyendi, Gökkıble, Kadı, Berberler), whereas some are turned into house (Ayvalı, Kır, Bakkallar), and some are destroyed; only a signboard with a name on it shows their location today (Şeref, Kozlu, Elmalı). Among them, just four of them are actively used (Keyfoturağı, Narlı, Süpüroğlu, Hacıahmet). A great majority of

[31] However, the administrative boundaries of these two districts do not overlap with the boundary of the site. This is one of the handicaps of Karabağlar Conservation Plan. Figure D.3 in Appendix D is prepared according to the data on parcels located in Karabağlar Natural Site.

the coffee houses is wrecked and has been left to their own fate. If any preservation measure is not taken, the wrecked ones will disappear in the following years.

Every locality is composed of a coffee house, a masjid in the center and is surrounded by 'yurtlar'. Coffee houses and masjids are the symbolic centers of these localities. These localities are like the living cells of the main organism. Among all the localities, the locality of Keyfoturağı is of importance as it was the initial camping area of the settled nomads, and it was located in the center of the area (plain). Once the coffee houses had been the camping areas of the nomads, later they turned into the common meeting squares of the inhabitants. These common squares reflect the social life of the inhabitants with shared culture and norms, shared values and beliefs and joint property[32] of the coffee houses. Beyond functional use as meeting space, coffee houses have been the active spaces of commutual trade between handicraftsmen.

In these localities, coffee houses, some of the plane trees more than 100 years old, masjids and traditional houses are the important natural and cultural assets of Karabağlar. There are 51 immovable cultural and natural heritages that must be preserved and there are 15 cultural properties (beings) that must be preserved (Table E.1 in Appendix E and Figure D.4 in Appendix D). Among 51 immovable cultural and natural heritages, twelve of them are located in Keyfoturağı. With the feature of being central and its historical constitution by Turcoman Nomads, Keyfoturağı has the majority of cultural properties.

Transformation of human settlement patterns is a dynamic, spatial and temporal process. Generally, previous density patterns indicate potential residential growth in different periods in a particular area; therefore, housing density and population growth are significant drivers for pattern changes. In addition, increasing population and density affect the composition and characteristics of the residents (Hammer et al., 2004). According to the 14th population census done in 2000, there are 1175 registered houses and approximately 4000 people living in Karabağlar. In terms of housing density, 40 percent of the parcels have a housing unit. In the last decade, with increasing recreational demand of populations, the composition of residents in Karabağlar changed, and correspondingly the number of housing units increased.

[32]Joint property (*Müşterek mülkiyet*) was very widespread in Karabağlar, because of propinquity relations and reciprocal trust of residents.

Especially, tremendous modern house buildings[33] started to replace the traditional small housing units. There is not a uniformity of housing density in Karabağlar; housing units have a tendency to structure clusters around the nodes of coffee houses and masjid. In addition, housing density changes according to districts.

With a decision in Karabağlar Conservation Plan, 0,35 percent square kilometers from the northern part of Karabağlar has been attached to Düğerek residential district,which is regulated with Düğerek Development Plan. Therefore, there are two districts in the site. In Karabağlar district, cadastral parcels were registered in 1965 and were divided into 43 localities. Düğerek district got title deed in 1958. It has five known localities in Karabağlar Natural Site.

Names of localities in Karabağlar District: Çayırucu, Çayır, Süpüroğlu, Keyfoturağı, Marmaris Yolu, Ova, Çinçin Kuyusu, Bağlar, Ula Yolu-Ova, Allan Kavağı, Kır kahvesi, Gökkıble, Bademlik, Hacıabbas Köprüsü, Çınarlı Köprü, Cihanbeyendi, Berberler kahvesi, Ayvalı, Çayırucu-Sakızlı, Tozlu kahve, Sakızlı, Bakkallar kahvesi, Arap bağı, Şeref kahvesi, Polis kahvesi, Kavaklı, Vakıf kahvesi, Manadağı, Mana kuyusu, Elmalı kahve, Cedit, Hacıahmet kahvesi, Ahisinan, Yamalı, Elmalı kahve, Narlı kahve, İncirli kahve, Kozlu kahve, Kadı kahvesi, Bağlarbaşı, Yemekli sarnıç, Karabağlar yolu
Names of localities in Düğerek District: Kemiklik, Yüksekharman, Sece, Doğancılar, Köyaltı

5.2.2 Farmland Sizes and Land Uses

Eastwood et al. (2004) indicates that farm size varies according to geographies. Population density, land use, land ownership, and topography are the main factors affecting the sizes, locations, and shapes of the farmlands. Economic Research Service (2010) explains that the average farm sizes in EU are smaller than the ones in U.S. According to the statistics in 2007, the average farm size in the EU (with 27 countries) was 34,1 acres (13, 76 ha), while the average farm size in the US was 418 acres (169, 16 ha). However, farm sizes change

[33] In terms of appearance, modern house buildings are similar to traditional house buildings, however they differ in terms of construction techniques, sizes and inner space organization.

from country to country in that among the EU countries, United Kingdom has an average of 171 acres (69,20ha) whereas Hungary has an average of 7,2 acres (2,83 ha).

According to 2000 World Census of Agriculture (Food and Agriculture Organization of the United Nations, 2010), the average farm size in Turkey is 5,99 ha and there are 3,076,649 farm holdings and 18,434,822 ha agricultural area. These ratios display that the average farmland size in Turkey is lower than EU and the US. According to the percentages of farm holdings and sizes given in Table 5.1, many agricultural holdings are at a size of 2-5 ha farmland in Turkey with a percentage of 30,9.

Table 5.1 Measures of the distribution of farm size of FAO World Census of Agriculture in Turkey (Source: Food and Agriculture Organization of the United Nations, 2010)

Year	% hlgs <1 ha.	% area <1 ha.	% hlgs 1-2 ha.	% area 1-2 ha.	% hlgs 2-5 ha.	% area 2-5 ha.	% hlgs 5-10 ha.	% area 5-10 ha.	% hlgs >10 ha.	% area >10 ha.
2001	16,9	1,3	17,5	4,0	30,9	16,0	18,2	20,6	16,5	58,1

Grigg (1966) states that farm size is not the only indicator of production. Soil fertility, intensity and effectiveness of farming are also indicators of production. In addition, there may be differences in a country in terms of average size of farmland, so national average may be misleading. Hence, in Western Turkey, the farmlands are more fragmented and small because sequence of mountain series disenables the formation of large plains. The property structure has also influences on the size and distribution of farmlands.

In agricultural master plan of Muğla, it is clarified that the size of agricultural enterprises in Muğla is diminishing perpetually due to subdivisions with heritage. The average size of agricultural enterprise is 3,3 ha and 60 percent of them are between 0-1,9 ha in Muğla. This number is 5,9 ha in Turkey, while it is 16,9 ha in the countries of European Union. In Muğla, the agricultural enterprises are predominantly formed with the combination of small pieces

of lands. All these factors cause a decrease in productivity, and an increase in the cost and marketing problems. In addition, according to SWOT analysis of strategies improved for the province of Muğla, Karabağlar was considered as an opportunity and in terms of ecological agriculture strategy, Karabağlar was found suitable for sustainable agriculture. To improve ecological agriculture, an incentive project for the production of organic products was proposed and implemented by Agricultural Provincial Directorate, and this project was financed by Special Provincial Administration (Ministry of Agriculture and Agricultural Provincial Directorate, 2004).

According to Figure D.5 in Appendix D, in Karabağlar district, in terms of parcel sizes, the majority of the parcels are smaller than 5000m^2 with a count of 2050 parcels. This farm size is below the average amount of national average farm size. However, in Menteşe Region, topographical factors allow only the formation of small karstic plains at the bottom of the valleys, one of which constitutes Karabağlar. The farmland sizes in Karabağlar are small when we compare them with the other regions of Turkey because of this topographical condition.

In order to examine the distribution of farm sizes in the area, Table E.2 in Appendix E is prepared according to entire parcel information on Karabağlar and Düğerek districts. According to means table, the average parcel size in Karabağlar Plain is 3416, 99 m^2, and the largest parcel has a size of 75971m^2 in the locality of Bağlar. The average largest parcel size is in Bağlar (22186, 63m^2), and the average smallest parcel size is in Marmaris Boulevard (363,33m^2). Bağlar is located behind Marmaris Boulevard. There are large and medium-sized parcels in this locality. It is poor in terms of natural vegetation; therefore, it has urban development potential because of its closeness to Marmaris Highway. Marmaris Boulevard is not located in Karabağlar Natural Site and the Industrial Block with its small parcels is decreasing the average parcel size of this locality. In the table, there are many small parcels with the size of 1m^2. These small sizes show the values of well, transformer or fountain.

Table E.2 in Appendix E presents the localities of Karabağlar district. According to the land records, Muğla Plain, which is composed of Ova and Marmaris Boulevard localities, is part of Karabağlar district. This information proves that before the construction of Muğla-Marmaris-Denizli Highway (1982), the plains which are called by the name of the

neighborhood today (Düğerek, Kötekli, Muğla, Karabağlar) were parts of a unity. The development of road network, strip commercial developments and the decisions of conservation plan have been the fundamental drivers of land fragmentation in Karabağlar since1950s.

Farmland size and their distribution have a direct link with historical process of transformation. In the history of Karabağlar, there have never been large farmlands; the reason for this kind of distribution may be a self-sufficient (house) economy and historical formation of the area. As Eroğlu (1939) indicated, the farmland size ranges between 500m^2 to 30000m^2 in Karabağlar, but for the most part of the area, they are between 3000-5000m^2. Although there is some evidence (waqf document) of economic contribution of farmlands to the income of powerful landowners in Ottoman Period, in general, farmlands in Karabağlar contributed to house economy and met the recreational needs of the town residents. This self-sufficient economy took its place on the local market with desirable popular and organic products such as fruit-vegetable-melon of Karabağlar (‘*yayla kavunu’, ‘yayla domatesi’*). In addition, in history, the governor of Muğla (Muğla Mutasarrıfı) first distributed the lands, each with 1000-2000 m^2 lot size, to Muğla residents (Koç et al., 2002). This was the initial formation of Karabağlar, which structures the farmland pattern in Karabağlar.

The ownership structure also influences the farmland pattern and land use conversions. Farmlands may not be composed of one block of parcel or single property; sometimes they are composed of a number of separate parcels or properties. These farms are generally fragmented because of subdivision practices (Grigg, 1966). In Karabağlar, the property relations have been rather complex, so the great amount of land has been transferred by inheritance from generation to generation. The parcel configuration in Karabağlar is normally the result of this inheritance process. In addition, particular landscape components (irim, kesik), ponding areas and the requirement of excess water discharge are effective on parcel sizes, their forms, locations and directions. The interconnected relations of ‘irim’, ‘kesik’ with fields are explained in Chapter 3.

Apart from parcel size, land use and its structure defines the general tendency of farmland practices. In Karabağlar, farming has played a long-standing crucial role in the economy and ecosystem of Muğla because the existence of landscape components, ecosystem balance,

persistence of natural resources and the groundwater are based on the maintenance of farming activities. The quality of soil fertility is very high in Karabağlar. This existing farmland pattern, which is the outcome of farming practices of residents for centuries, abundant ground water and soil fertility make the area unique. The conversion of existing land uses into residential or commercial uses will undoubtedly bring about transforming farmland pattern.

In the boundary of Karabağlar Natural Site, the registered parcel qualifications that define the land uses and their distribution in the area are defined with a map in Figure D.6 in Appendix D. A great amount of the area is quite rural with the parcels of fields (1663); the others are characterized by fields with houses. The are 8 registered mosques, 17 registered coffee houses, bakery or grocery and 8 public wells or channels in the Natural Site.

The density of fields exists on the northwest of Karabağlar Natural Site, which is observed to be a ponding area. The rainwater coming from hillsides of Düğerek, Deli Dere, Yeniköy, and Dereköy overflows on the pasture and creates a large pond by joining with Karamuğla and Basmacı creeks. In winters, 23 percent of the area becomes pond because of the floods, and 15 percent of the area overflows. For example, it is observed that 92, 6 kg rain dropped on one square meter in March 2006 and October 2006, and most of the houses and farmlands were flooded. Fortunately, with partial evaporation, drainage process with the help of porous soil and flow in groundwater with 'düdenler' (ponors), overflowing water is gravitated until summer months. Because of ponding problems, in this location, the housing density is used to be low.

The relation between parcel qualification and parcel size (m^2) is examined (Table E.3 Appendix E) in order to find out the areas that fields and building lands cover. Beyond the boundary of Natural Site, the entire parcels of Karabağlar District are evaluated. Eventually, the parcel count is calculated 4499, which is nearly two times greater than the parcel count of Natural Site (2890). This asserts that the boundary of conservation plan does not coincide with the ecologic and district boundary of Karabağlar. The results ascertain that there are 1235 building lands totally, which are left to Düğerek residential area, Muğla industrial block, Marmaris Boulevard and Ortaköy residential area. Unfortunately, since 2002, with conservation plan, different subdivision provisions for these building lands have been

allowed. There are 2963 fields and 2079 of them are smaller than 5000m^2. There are 42 recorded vineyards that can be considered very low for a 'bağ' settlement. Once, Karabağlar was popular with its vineyards that were the subject of the travel book of famous traveler writer Evliya Çelebi; however, the count of recorded vineyards shows us how they have disappeared from the landscape configuration of Karabağlar through the years.

5.2.3 Land Allocations

According to data obtained from Register of Deeds Office of Muğla, the distribution of land allocations according to years ascertains both the change of society structure and the general tendency of land transformations in Karabağlar (Table E.4 in Appendix E). It is observed that the maximum rates of purchase and sale occurred after 1990s, which might be the indication of a great transfer of land between local inhabitants and the newcomers. In 1960s, while the rate of donation and caretaking were very high, it decreased and does almost not exist today. This result is the indicator of changing society and emergence of individualization.

1990s was a progress in communication technologies that spread to the whole world in a network. Insatiable capital started to search for profit beyond the boundaries. Personal investments on land, real estate and virtual commodities became popular and limitless for societies. With increasing investments and growing consumerism, people's ideals changed related to their social standards and occupations. Societies' way of life, their preferences and value of judgment changed gradually, and consequently, alternative lifestyles emerged against traditional lifestyle. The increasing importance of leisure time and its spatialization became a growing trend. In Muğla and Karabağlar, this change of lifestyle came into prominence with the abandonment of farming practices; 'bağ' lifestyle and seasonal migration, which all have fostered the existence of Karabağlar for years.

According to interviews done with the local landowners, social relations of the society in the past were based on trust and respect. They could even have donated their farmlands to their neighborhoods or could have utilized them as joint property. Actually, the common use of coffee house squares that are private property is an indicator of this trust, respect and

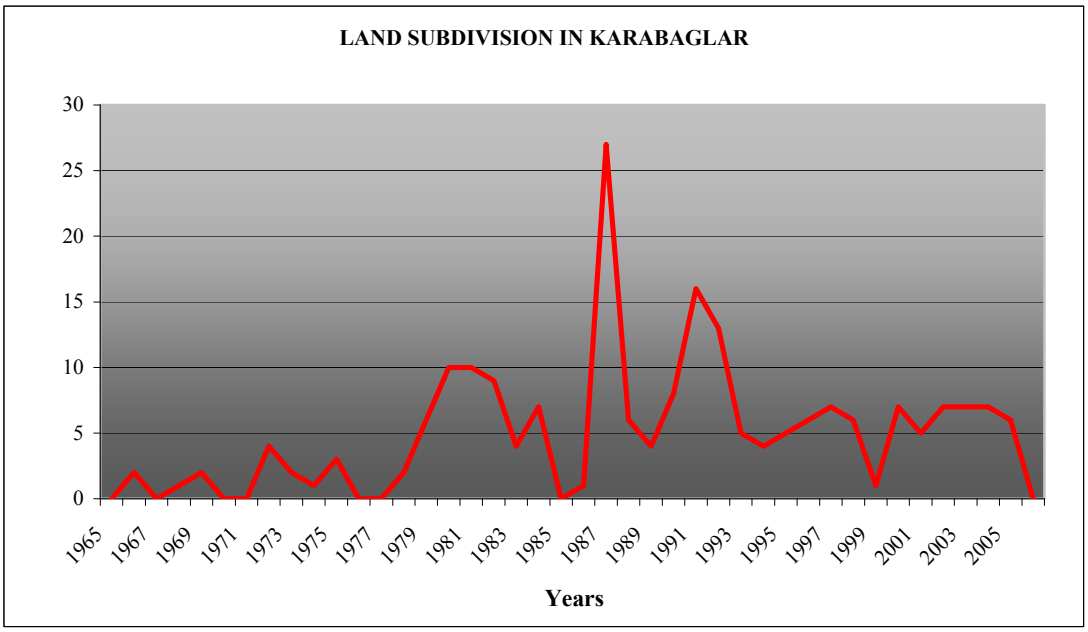
coexistence. Today, the relations of consumption society are based on the capitalist commercial treaties, so land is a commodity rather than a production and living unit.
Land subdivisions and amalgamations are the significant determinants of transforming landscape and important decisions of administration, therefore, land subdivisions and land amalgamations are determined and the questions below are examined:

- In which period did the transformation of land (land subdivision, land amalgamation) happen and what are the reasons behind this transformation?
- In which locations did the transformation of land (land subdivision, land amalgamation) happen and what makes these locations different from the others?

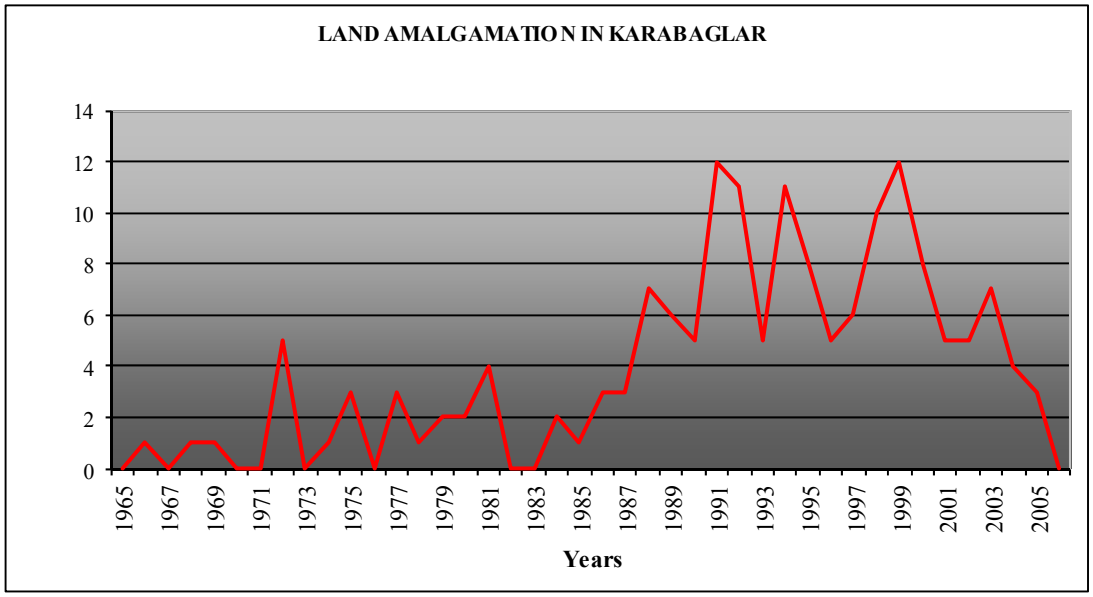
According to the graphics of land subdivision and land amalgamation of Karabağlar in different years (Figure 5.1 and Table E.4 in Appendix E):

- After 1965, both land subdivision and land amalgamation had increased until 1990s and after 2000, both lines are observed to have declined until now.
- The maximum land subdivision is observed between 1980-1990
- The maximum land amalgamation is observed between 1990-2000

In chapter 4, the main decisions of administration are defined. In parallel to these decisions, the implementations and technical restructuring in 1980s were influential on land subdivisions. In 1980s, improvement of the road system in Karabağlar and arrangements of the water channels provided an economic value to Karabağlar and revitalized the social life. Within this development, municipality buses first started their tours in Karabağlar in order to meet the transportation needs of the residents. This was rather a recent application that triggered the start of mobility in Karabağlar. In 1980-1990, Karabağlar and Düğerek were connected to electric network of the city. With modernization, the changing opportunities and technological conditions made Karabağlar more attractive for the society. The period between 1980 and 2000 witnessed a permanent and gradual dispersion of the population, brought about by improved transportation network, telecommunications, and other technological innovations. All technological developments were attractions for the populations.



a) Land subdivision



b) Land amalgamation

Figure 5.1 Land subdivision and amalgamation in Karabağlar according to years (a,b)

Since 1980s, Karabağlar farmlands have met the second housing needs of city dwellers and provided them with plenty of open space and agricultural products. Therefore, in order to

meet the demands of second housing, lands were divided into smaller units. In terms of buying preferences, second housing was more popular during the mid-1980s than it was a decade earlier. The society, in the search of alternatives to new remoteness and wilderness against seashores, started to prefer tableland tourism. Abandoned and almost neglected hereditary lands of Karabağlar regained their new generation landowners with subdivision process.

The construction of industrial block was another factor for the subdivision of the lands of Karabağlar. The land of Ova, which was one of the closest localities to Muğla, was opened to the development of industrial block. In 1982, the lands were first transferred to Industrial Block Legal Entity of Muğla with the item 35 of the Development Plan Law numbered 6785. This process was the beginning of transformation of fields into building lands of industry.

Another fact of subdivision was the increase in prices due to speculations that bring smaller farming units into construction. The change in the volume of the space has brought forth a qualitative change in farmlands. Second house demands and the unique landscape quality of the settlement were enough to create a land speculation increasing the prices. The new investments of the society were to the lands in Karabağlar to construct their own fancied second home by restorating the old traditional houses or reconstructing a new one. The lands once utilized for farming were replaced with hobby gardens and grasslands.

While maximum increase in land subdivision is observed in 1987, maximum increase in land amalgamation is observed in 1991 and 1999. However, 24 percent of the land amalgamations were ended up with land subdivisions in the same years. The reason behind these amalgamations was to enlarge lot size in order to meet minimum subdivision conditions. It is certain that a pattern composed of larger farms directs urban development away from productive farmland, and it is considered to be supportive of farming. However, in Karabağlar, land amalgamations do not have this kind of aim because the locations of these amalgamations are rather observed in development areas such as peripheries of main roads, university area, or industrial block.

According to Figure D.7 in Appendix D, land subdivisions and land amalgamations are especially seen in the southwestern part of Karabağlar in the localities of Çinçin Kuyusu,

Ova, Marmaris Boulevard and at the peripheries of the main roads (Marmaris Road, Denizli Road) because of the speculative land prices. Most of the urban business enterprises are located along the roads; therefore, land allocation activities have taken place on these localities. If we make a categorization according to the conservation plan zoning regulation, the maximum land subdivisions and amalgamations are observed in the Second Zone that fits in the southwestern localities that we mentioned earlier (Table E.5 in Appendix E).

In Düğerek, the land subdivision and land amalgamation are observed in Köyaltı locality because of its closeness to the Düğerek village. According to the conservation plan, this locality was categorized in different zoning, in which Düğerek Development Plan is valid.

5.2.4 Expropriations

In the period of 1958-2006, 372 expropriation activities are done (Table E.6 in Appendix E). According to the table, the activities of expropriation for the road and green area were especially done in 1980-1990. According to the report of Municipality Activities, after 1980s, the road system in Karabağlar was improved and the transportation service of municipality became active in Karabağlar. This activity explains the reason for expropriation for roads. Redevelopment application was done after 2000 in accordance with the construction legislation of the conservation plan. Amount correction is generally made to increase the size of the parcel in order to reach the minimum subdivision ratio and to do legal arrangements arising from the conflicts between the landowners after 2000s.

The largest amount of area condemned for road construction is especially seen in the localities of Ova and Ula Yolu (Table E.7 in Appendix E). These two localities are near Marmaris Boulevard. According to the annual values of average traffic in one day, 2690 vehicles were recorded on Muğla-Denizli Highway in 2007. In terms of size, these amounts may be considered harmless but in the long term, roads have considerable adverse effects on the environment as explained in the fourth chapter.

5.3 The Questionnaire Analysis

This section puts forth the results of questionnaire analysis in accordance with the main and secondary goals given in Appendix C. 200 respondents were chosen from the landowners who possess minimum a 'yurt' in Karabağlar. Many of the respondents were eager to answer to the questions and kind enough to give permission taking their photographs. Therefore, the results help to find out the composition of the inhabitants and their lifestyles.

5.3.1 Results Related to Parcel

Land allocation is the way of acquiring land use rights, and it reveals the socio-spatial and economic structure of the area. In Karabağlar, land allocation is categorized in six different practices as barter, caretaking, donation, heritage, purchase, and rent among 200 landowners (Table F.1 in Appendix F). The practice of purchase makes up 59 percent of all the practices. This means that land allocation in Karabağlar occurs mostly with purchase activity. Inheritance takes the second place. Former ownership status of respondents also confirms that the landownership is transferred between generations by inheritance. According to Table F.1 in Appendix F, 84,5 percent of former owners are from Muğla. 12,5 percent of them are from the nearest villages of Muğla. The other 3 percent of former owners are from different provinces of Turkey.

While land transfer was achieved through inheritance in the past, in the last decade land transfer is made via purchases, which has increased because of speculative land prices. Residents started to consider lands in Karabağlar as an investment more than an economic dependency. In Table F.5 in Appendix F, a cross tabulation of land allocation and years of land allocation is calculated in order to find out the kind of land allocation recorded in years. According to the results, after 1990, the activity of purchase is recorded very high and after 2000, the activity of rent is recorded very high. In 1980-1990, the activity of heritage is recorded the highest. This process reinforces the argument that the former generation left their lands to new generation in 1980-1990 and after 1990s. The lands in Karabağlar gained a speculative value, so the new generation sold their lands to newcomers or rented their lands to people coming from nearest villages and who could not afford the rental prices in the city.

The social and physical existence of Karabağlar depends on the seasonal circularity that occurs every year between Karabağlar and Muğla. This seasonal dependency has been a kind of economic survival of the town residents throughout centuries. The dynamic relation between Muğla town and Karabağlar has evolved with the changing needs of the inhabitants. With modernization, changing social and economic conditions eroded the mutual interaction and seasonal dependency between Muğla and Karabağlar. However, according to the respondents in the questionnaire, 78 percent of the inhabitants still prefer seasonal migration that has been a traditional activity between Karabağlar and Muğla city center for centuries. However, this preference of migration is an adapted version of modern life and has no economic base. The seasonal users include traditional users, part-time farmers and hobby farmers. The rest are permanent residents who could not afford the rent in the city center. The permanent users originally consist of village migrants who choose Karabağlar because of its closeness to urban services. Today, because of the developed transportation system, town residents can reach Karabağlar any time in any season; however, because of floods and ponding problems in winters, residents prefer to live in Karabağlar just in summer months.

According to the results of questionnaire analysis, the parcel sizes range between 462-25000m^2. 61 percent of parcels have a size of 1000-5000m^2. Parcels with the size of 5000-10000m^2 come in the second place with 24, 5 percent. This data confirms that the majority of lot sizes in Karabağlar are 1000-5000m^2.

Seven different agricultural managers are determined. These are fellow partner, gardener, kinsfolk, neighbor, self, tenant and worker. Some lots are left uncultivated. According to Table F.1 in Appendix F, 88 percent of the inhabitants carry out agricultural management by themselves, which means that farming enterprises in Karabağlar are small and only they, themselves, maintain the farming activities and deal with the difficulties of management. In Table F.4 Appendix F, a cross tabulation of parcel size and agricultural manager is calculated in order to find out the choices of the agricultural managers for farming the lot size. 63,6 percent of the landowners are doing farming practices themselves and using a farming lot with a size of 1000-5000m^2. However, tenants prefer farming lots larger than 5000m^2. Tenants are usually observed to be the tobacco producers or commercial farmers who migrated from nearest villages. They do commercial farming to make a profit.

Because of small plots of land in Karabağlar and their non-commercial structure, the farm profit is at micro level. Respondents who are landowners preferred to mention the profit they make instead of their agricultural income; therefore, agricultural profit of 2006 is evaluated and is categorized under five values. 85, 5 percent of the landowners explained that they are earning at the self-sufficient level. This means that they do not have any extra earning from agricultural products. They cultivate in small quantities with polyculture production that meet their personal requirements only. The other values that include numerical expressions indicate the profit categories.

Because the seasonal circularity was the reason for the existence of Karabağlar, the perpetuation of this tradition has a direct relation with the production relations. In Table F.3 Appendix F, a cross tabulation of inhabitancy status and agricultural profit is calculated in order to find out if the seasonal migration has any effect on the agricultural profit. According to the table, while self-sufficient landowners stay seasonally in Karabağlar, most of the profit-making landowners stay there permanently.

These profit making landowners cultivate small or large quantities of agricultural commodities such as tobacco, grain, fruits or vegetables with monoculture production in order to sell in the local market. According to agricultural product table (Table F.6 Appendix F), vegetable is produced in 191 parcels; fruit is produced in 171 parcels; tobacco is produced in 24 parcels; wheat is produced in 27 parcels; grape is produced in 10 parcels; other products are produced in 9 parcels, and 6 parcels are out of use. The first two products, vegetable and fruit, are certain agricultural products in Karabağlar; however, the variety in products shows that Karabağlar is a combination of orchards, vineyards and tobacco fields.

Tobacco has been the most cultivated and the most yielding agricultural product in Muğla since the beginning of the 20th century as explained in the third chapter. Cultivation of tobacco that has never been in the origins of Karabağlar until 20th century was displaced with viticulture that initially structured the farmland pattern of Karabağlar. After 1994, with the quota limit of tobacco, the producers were in search of an alternative product. In the last decade, in order to regenerate viticulture, Special Provincial Directorate of Administration put into practice the development project of viticulture and grafting project of wilding by offering financial and technical support to the residents (Güner, 2001).

In Karabağlar, farming has not been the only economic source for families. In addition to vineyards and orchards, the contribution of livestock farming to house economy since 16th century is noteworthy. While horse and donkey are utilized for transportation, cows, sheep, goats, chickens, rabbits, turkeys and gooses are raised for their products. Livestock production, which is an extension of nomadic tradition, is low but at a considerable level in three categories: Poultry farming, stock farming of cow, and stock farming of small cattle. 28 percent of the landowners are breeding cow for its milk and meat. Traditionally, every landowner buys a cow or a goat at the beginning of spring when he or she migrates to Karabağlar and breeds cow and goat for its milk in addition to make yoghurt, cheese, butter and other requirements. In autumn, before he migrates back to Muğla, he cuts the cow and stocks its meat to consume in winter until the next spring.

In general, there is a strong relationship between the size of agricultural enterprise and the agricultural profit. The main objective of preserving the size of an agricultural enterprise is to preserve the economic integrity, to provide the sustainability of agricultural lands by preventing the subdivisions and to ascertain whether the economic existence of the agricultural enterprise is enough or not. In order to compare the parcel sizes that are in use in Karabağlar, a cross tabulation of parcel size and agricultural profit of 2006 is calculated in Table F.2 Appendix F. According to the table, 65,7 percent of the landowners stated that they earned at the self-sufficient level from the lands with a size of 1000-5000m^2. As aforementioned, self-sufficient indicates the ones who did not have any earning from marketing their agricultural products. The other landowners who earned a profit of 5000-10000TL and more than 10000TL in a year, had an agricultural enterprise with a size of 5000-10000m^2. These rates show that economic contribution of Karabağlar is at the self-sufficient level and it is hard to talk about preservation of farm size for economic integrity. However, the size of farm is significant in terms of the farmland pattern that characterizes the area and its unique existence. Therefore, while subdividing agricultural lands because of heritage or else, a special consideration for the preservation of farmland size should be taken for the perpetuation of uniqueness.

In 2007, Ministry of Agriculture amended the regulation of soil preservation and land use with the item 5403. Within the new amendment (the item 5578), the minimum agricultural parcel size is determined according to social, economic, ecological, and technical

characteristics of the regions in Turkey. The agricultural plot that attains the determined minimum size gains the attribute of undivided commodities in accordance with the law of inheritance. According to the regulation about determination of agricultural existence of the enterprises, the indivisible minimum parcel size is determined as 20000m^2 on certain agriculture and special product lands, 5000m^2 on planted agricultural lands, 3000m^2 on modern greenhouse lands and 20000m^2 on marginal agricultural lands. With this amendment, the minimum parcel size on certain agriculture is increased from 10000m^2 to 20000m^2 in order to prevent the loss of agricultural production quality. In Karabağlar, the majority of the lands are accepted as agricultural lands that must be preserved. This new amendment has been implemented on the farmland of Karabağlar by Provincial Directorate of Agriculture since 2007.

According to zoning conditions of Karabağlar Conservation Plan, The First Zone is the largest of all the zones and the minimum subdivision allowed for this zone is 3000m^2. When we consider the origins of Karabağlar, the governor of Muğla had distributed the lands with sizes of 1000-2000m^2 to the town residents. Therefore, the size of 3000m^2 seems applicable. However, the implementation of new amendment that proposes minimum agricultural parcel size as 20000m^2 for certain agricultural production in Karabağlar has no basis for the preservation of farmland pattern. In addition, if the maximum parcel size in Karabağlar is at a level of approximately 75000 m^2, the proposed minimum parcel size is nonsense. At this point, if the conservation plan does not take measures directed to preserve the original farmland pattern, which was a result of 'irim' and 'kesik' configuration, the problem of defining the maximum parcel size will emerge. The parcels in Karabağlar are not just a farmland; they are 'yurt' as explained in Chapter 3. While small farmlands (yurtlar) can be a handicap for the preservation of farming activities, large farmlands could be a destroying factor for 'irim' and 'kesik'. For the sake of agricultural production, the main landscape components may be lost. To provide the continuity of farming activities and the preservation of settlement character and its uniqueness, there must be more certain and applicable adjustments. Therefore, the parcel size should be examined operatively and specific conditions just dedicated to Karabağlar should be prepared. While determining parcel size, conservation plans should also consider the ecosystem, landscape elements, its composition and distribution in the area and their relations with the other natural resources of the ecosystem in addition to existing land use, land capability and farmland pattern.

5.3.2 Findings Related to Building

Karabağlar house buildings are organized in 'yurtlar' as extroverted plan type. Their main composition and characteristics are given in Chapter 3. The house buildings belonging to respondents are categorized according to their room number, storey number and total area. According to the frequencies table (Table F.7 in Appendix F), buildings are categorized in 8 groups according to their number of rooms. Buildings with two rooms are 31,5 percent of total and they constitute the characteristic of the initial traditional building type. 57,5 percent of total buildings are single-storey buildings, while 47 percent of total are double-storey buildings and they have nearly the same ratios. 56 percent of the buildings have a total area of 50-100m2. 46 percent of the parcels do not have any outbuilding and 25,5 percent of the parcels with outbuildings cover an area of 20-40m^2. 72,5 percent of the parcels do not have any stall and 13,5 percent of the parcels with stall cover an area of 40-60m^2. Housing typology in Karabağlar is explained in Chapter 3.When we consider the fact that the house types in Karabağlar evolved from wooden hut, the house buildings have increased in size in time.

According to building type, 41,5 percent of houses are traditional and 21,5 percent are poor in quality. Among the traditional buildings, 17,5percent have partly been conserved by maintenance, while 14,5 percent have had only the necessary maintenance and restoration, and for 9,5 percent, necessary maintenance and restoration have not been done. There are five different construction techniques: briquette, concrete, stone, stone briquette pile and wood stone. The construction technique of the buildings is mostly wood stone with a percent of 79. The ownership of the buildings is mostly answered as 'self' with 87%.

Initial Karabağlar houses were built according to functional needs of the residents. The size of building is an indicator of this functional utility. While the minimum conditions were appropriate in the past, today maximum values are utilized due to consumptive needs of today's modern society. In Karabağlar, this consumptive utilization affected the size of buildings, and as a result, small modest houses were replaced with grandeur and luxury contemporary houses in the last decade. In Table F.8 Appendix F, a cross tabulation of construction year and m^2 of buildings is calculated in order to find out what size of buildings are constructed in years. A great majority of all the buildings with a size of 50-100m^2 are

constructed between 1950 and 2000; however, after 2000 in a 6 years period, the rate that displays construction of buildings with a size of 100-150m^2 is noteworthy to point out the increasing size of house buildings.

In the last decade, many new modern houses were built. The modern houses that are ratified by Council of Monuments mainly match with Ula type of houses. Their porch is like half-octagonal. There are also traditional '*yayla'* houses. Figure 5.2 displays new modern house examples in Karabağlar.

Figure 5.2 New modern houses in Karabağlar (Source: Achieve of Feray Koca)

According to the frequencies table (Table F.9 in Appendix F), 92 percent of parcels have only one family inside. Among the residents, 68,5 percent of them indicated that they did not migrate from different provinces. The residents who migrated have generally migrated in 1990-2000 and after 2000, which indicates that Karabağlar became a more widely known place and the concept of second housing; countryside character and the closeness to the city have been the attractive factors in the migration process.

5.3.3 Findings Related to Household

With modernization and increasing residential mobility, changing household status of the residents has altered the social structure of Karabağlar throughout years. Changes in life cycle of residents had spatial reflections on the localities of Karabağlar. In Table F.9 Appendix F, some statistics related to household instability in Karabağlar is given. Before 1950s, while household composition was more stable, after 1950s, with technological developments, the residential mobility increased. At the early stages of technological developments, the localities in Karabağlar were inhabited by large families of Muğla residents who were tied to land due to the economic needs of family. However, after 1950s, while the mobility rate was increasing, the household of large families dissolved as they aged. Old couples, parents, or occupiers coming from surrounding villages became the permanent residents of Karabağlar. This socio-demographic change adjusted the neighborhood and housing needs of Muğla residents in Karabağlar.

Respondents were asked about the number of family members, structure, occupation and vehicle ownership in order to reveal the changing household structure according to residential mobility. In terms of household number, families with two households that are composed of just old couples and parents make up 42,5 percent in Karabağlar. Because of lifecycle, large families dissolved in time with the dead of grandparents and marriage of children. While old generation preferred to maintain traditional activities and being stable, young generation preferred to be unstable by leaving the area. Abandonment of traditions changed the social composition of the large families by triggering the formation of nucleated families.

With increasing vehicle ownership, household mobility increased after 1970s. The research shows that 75 percent of the respondents have at least one vehicle that provides their mobility between Muğla town and Karabağlar. Today, town residents have opportunity to reach Karabağlar whenever they want. This mobility ended the seasonal movement of the residents.

In addition, while seasonal migration was the only cyclical movement of the residents until 1950s, migration from surrounding villages or towns altered the movement type by increasing the rate of residential mobility. New residents moved in Karabağlar after 1970s. In terms of resident composition, 50,6 percent of the residents are from Muğla, while 33,7 percent of them are from other towns of Muğla, and 15,7 percent of them are from different provinces and even countries. In Karabağlar, there are two German families who preferred to stay there. One of these respondent families indicated that they found their 'yurt' from an international web advertisement of real estate agent. This situation is the indicator of global network communication that attracts international tourists to help them reach any remote geography in the world. With the opportunity of the law of getting ownership from abroad, Karabağlar took its place in the global world. With the sale of properties to foreign citizens and to other newcomers as summerhouses, the commodification of local natural resources and local cultural assets started to become a new economy for Karabağlar.

In terms of educational background, 55,4 percent of respondents graduated from only elementary school, and 18,3 percent from high school. According to Table F.10 Appendix F, farmers, self-employed people, workers, retired people and housewives in general have an educational background of elementary school. When we regard occupational information, retired people and housewives have a high percent (20,1% and 27,1%) among all respondents. The rate of farmers is not significant, which shows that Karabağlar does not present a farm profit for farmers. The age groups of 50-59 and 60-69 constitute the majority of the Karabağlar residents. In Table F.11 Appendix F, a cross tabulation of age and occupation is calculated in order to find out the age of different occupation groups. According to the table, the retired groups are mostly at the age of 50-59; the housewives are at the age of 60-69; the students are at the age of 10-19; and the farmers are at the age of 40-59. People who are carrying on with farming activities are older than 40.According to these

results, the identity of Karabağlar households is two person families composed of retired couples with an age range of 50-70.

Figure 5.3 displays examples from different households in Karabağlar. As seen in the figure, the households in Karabağlar display heterogeneity ranging from children to the elder, farmer to doctor, writer or even mayor, villager to town people, foreigner to native. In this diversity, they are in a social interaction that structures and shapes the spatial organization in return.

Figure 5.3 Examples from different households in Karabağlar
(Source: Achieve of Feray Koca)

5.3.4 Findings Related to General Questions

In addition to its traditional role in farming, Karabağlar, with its environmental values, has presented recreational opportunities to town residents for centuries. However, changing socio-economic conditions, improved living standards, increased mobility and leisure time directed town populations who want to appreciate landscape amenities to Karabağlar. In the questionnaire, the recreational choices of residents were asked. According to the frequencies table (Table F.12 in Appendix F), the recreational choice of the residents are principally plateaus with 82,5 percent. Many of respondents explained their reason for choosing Karabağlar as a recreational area as the proximity to their permanent house and the variety and abundance of natural amenities.

The majority of the residents cannot use the coffee houses because they are out of use. Today only 3 coffee houses remained among 20: Keyfoturağı, Süpüroğlu, Sece coffee houses are used as restaurants. Some of the residents living in the localities of Süpüroğlu and Polis Kahvesi are using adjacent coffee houses in Ortaköy. 47, 5 percent of the residents use masjids once in a week. When the questionnaire was employed in 2006, only some of the masjids were active in Karabağlar such as Hacıahmet masjid, Keyfoturağı masjid, and the respondents indicated that they were going to these localities once in a week. Today, masjids in many localities are restored, while coffee houses are vacated to be wrecked.

When the respondents are asked if they know that the region is a natural site under conservation, 20 percent said they did not. According to questionnaire analysis, the awareness about conservation is not related with being native or foreign, therefore that cross tabulation is not given.

In the general part of the questionnaire, there are five open-ended questions. These questions were asked in order to reveal the general tendency of the residents in terms of recreational preferences and their attitude toward the natural setting of Karabağlar. These open-ended questions are given below:

- **Question 2:** Why do you choose Karabağlar?

- **Question 6:** Do you think Karabağlar has changed from past to present? What kind of changes happened?
- **Question 7:** Dou you know ‘irim’ and ‘kesik’?
- **Question 8:** Are you doing the maintenance of your ‘irim’ and ‘kesik’?
- **Question 9:** What does the perpetuation of Karabağlar depend on?

The answers of the respondents to Question 2 are categorized in eight groups (Table F.13 in Appendix F). The majority of them emphasized the cool climate of Karabağlar as the reason of their choice of accommodation. As it is explained in Chapter 3, the climate in Karabağlar differs from Muğla. Dense vegetation and geomorphological formation in Karabağlar help the occurrence of cool climate. Therefore, in terms of climate, Karabağlar displays a highland character. In summer days, many Muğla residents prefer to migrate to Karabağlar to escape from the hot and sultry weather of Muğla. Second, the respondents said that they prefer Karabağlar to do hobby farming and to rest. It is clear in the table that the preferences with economic reasons are lower than the recreational reasons. This result indicates that today Karabağlar is the backyard of Muğla rather than only being its farmland. Its contribution to family economy is no more the major reason for migration to Karabağlar as it was in the past. Some of the respondents indicated that they maintained the traditions. Some residents got used to moving in Karabağlar and staying there starting from March to the end of October. They farm the land and do their winter storage as their ancestors did. A small percentage of the respondents indicated that they preferred to buy a ‘yurt’ in Karabağlar in order to make investment. The reason for considering the land as an investment asset depends on the increasing speculative land income in some parts of Karabağlar in the last decade.

Perceived changes from past to present are asked to the respondents in Question 6, and it is seen that answers match up with the changing socio-economic conditions (Table F.14 in Appendix F). A majority of the respondents stated that technological developments (electricity, transportation, vehicles, communication, and hydrophore system for wells) were the main transformations in the area. After 1950s, progress in transportation system and residential mobility concluded the seasonal migration. Today, Muğla residents can move in Karabağlar in any time in a day with their private vehicles. Second, many respondents perceive the new modern houses as one of the main changes in Karabağlar. In the last

decade, many new modern houses were built or some old existing ‘yayla’ houses were restored and contemporary structures were annexed. These alterations changed the perceived silhouette of Karabağlar. Third, some respondents mentioned the destroyed natural environment and degraded vegetation. For example, elm trees that once gave their name to Karabağlar are almost extinct and forty kinds of grapevines mentioned by Evliya Çelebi no more exist. In addition, the natural vegetation on ‘kesikler’ is destroyed while cutting up ‘kesikler’. Some respondents stated that there were many new residents coming from villages and other towns. With newcomers, the composition of residents changed. While some of the newcomers adapted to the social life of Karabağlar, some of them changed the land use practices in Karabağlar. The social interaction between these different users has restructured the private and common spaces (houses, coffee houses, masjids) and neighborhoods in Karabağlar. Some respondents stated that coffee houses and masjids are out of service and there is no cultural activity on coffee house localities. Many coffee houses are out of service, while three of them became restaurants. Another significant change perceived by the respondents is the end of tobacco production and viticulture. Although tobacco is not an original agricultural product in Karabağlar, many residents regret the disappearance of tobacco from the farmlands of Karabağlar. Practically, during a century, tobacco was a dominant product in Karabağlar and had an economic contribution to influential families while transforming the space. This contribution created a misleading perception for residents about tobacco production in that they indicated the disappearance of tobacco production as disadvantage for the area.

Two main landscape components, namely, ‘irim’ and ‘kesik’, constitute the landscape pattern of Karabağlar. A great majority of the respondents know these two components and their significance (Table F.15 in Appendix F). While 69 percent of the respondents do the maintenance of ‘irim’ and ‘kesik’ by themselves, 13,5 percent indicated that municipality is doing the maintenance (Table F.16 in Appendix F). Some respondents stated that they did not have any ‘kesik’ surrounding their ‘yurt’. These rates indicate that the residents have enough awareness of the maintenance of these two landscape components. However, the destruction of ‘kesikler’ and ‘irimler’ is increasing or they started to be converted into walls. If this conversion continues, in the future there may be no need for maintenance of ‘irim’ and ‘kesik’, but there will be no Karabağlar, either.

Respondents are asked how the perpetuation of Karabağlar is possible (Table F.17 in Appendix F). A majority of them stated that infrastructure should be enhanced such as building canalization to solve ponding area problems, providing water supply, renovating roads and 'irimler' and solving garbage problems. The ponding and overflowing areas are main problematic areas in Karabağlar for the residents, because they could not reach their houses and 'yurt' in winter. In addition, with changing ground materials of roads and heightened 'irimler', the boundaries of ponding areas changed and started to become a problem for increasing number of houses in 'yurtlar'. Second, respondents stated that agricultural production should be fostered (tobacco production and viticulture). Many respondents think that farming activities were significant land use in Karabağlar and today it begins to die out because of alternative recreational land uses. It is confusing that while some respondents are against consumptive land uses, some respondents stated that tourism activities should be fostered. Some respondents are not content with conservation plan decisions in that they find site conservation as an unnecessary condition for the perpetuation of the area. All these various proposals of respondents are conflicting with each other; however, it is clear that respondents are influenced by changing socio-economic conditions of time. Nevertheless, conceptions of the respondents reflect on the spatial pattern of Karabağlar and transform the particular character of the settlement unexpectedly.

5.4 Conclusion

Before concluding this chapter, it is a requisite to explain the limitations of this research. The primary limitations of this spatial analysis are the lack of visual data (map) about the distribution of parcels among locations related to whole Karabağlar and Düğerek districts, and the difficulty to catch up with the physical transformation of the area with subdivisions and land amalgamations. As aforementioned, conservation plan has the information on numbered parcels and blocks just inside the boundaries of Karabağlar Natural Site, therefore the visual ecologic boundary of the original Karabağlar district could not be estimated exactly.

In terms of questionnaire, the main limitation has been the changing population in Karabağlar. Because of seasonal migration and the wideness of the area, the land occupiers are not constant and they are distributed to the whole area. The questionnaire was

implemented during one summer in order to reach many of the residents. Therefore, this research may require more surveys on the residents in different years and seasons to capture the overall identity of the community in detail. This study can be regarded as an exploratory research.

In brief, this investigation searches the main transformations in Karabağlar by the spatial analysis of land records, the general composition of the local residents and the land use practices in terms of conservation of settlement character and its unique existence of being.

5.4.1 Main Socio-Spatial Transformations

According to the results of the analysis, Karabağlar has a distinct farmland pattern with small and self-sufficient farmlands. The most important finding is the transforming and fragmenting landscape of Karabağlar because of modernization and changing socio-economic conditions. In terms of qualification of the lands records, there may be no difference; however, in terms of practices, the land use practices are changing and this situation is transforming the social, economic and environmental relations in the settlement.

- **Changing social relations:** Increasing population and the replacement of traditional community with the newcomers transformed the communication language between the residents. Some of the small farmers gave up seasonal migration; some of them sold their lands to second house demanders; and some of them died and their inheritors rented lands to the migrants coming from villages. The mixture of different residents with different backgrounds and cultures created conflicts and clashes in the community in terms of their standpoint and approach to their environment. The particular farmland pattern and character in Karabağlar is not just based on the preservation of physical elements, but also the social composition of the community and their social interaction with each other that holds Karabağlar viable.

- **Changing economic relations:** Karabağlar has been the fresh and organic food source for the residents of Muğla and the local market throughout centuries, so it has remarkably contributed to the house economy. At the beginning of the 20th century, a

dominant monoculture of tobacco started to take the place of polycultural farming practices and viticulture. Many types of grapevines that were the subject of the travel notes of Evliya Çelebi disappeared. After 1950, with modernization, some farmlands and traditional '*yayla'* houses of local Muğla residents started to be replaced with hobby gardens and modern second houses of high income groups from different towns. The self-sufficient economy is replaced with alternative high income generating amenity-based economy.

- **Changing environmental relations:** Degradation of scenic values with increasing density of second housing, road network and land use changes, soil degradation, changing hydrologic structure, ground water depletion, consumption of natural resources are the main environmental transformations. While the localities are losing their characteristics with the destruction of the main structures such as coffee houses and masjids, the landscape quality is degrading with the increasing density of housing, road network and the loss of 'irimler' and 'kesikler'. Consequently, environmental coherence, which was the result of integration of the inhabitants with nature, started to be corrupted.

5.4.2 The Composition of the Residents

In Karabağlar, in terms of the composition of the residents, three kinds of landowners are seen:

- **Traditional landowners:** This group consists generally of retired couples and farmers with an age group of 40-70 who stay seasonally in Karabağlar and carry on conventional type of agricultural activities on their 3000-5000m^2 'yurt'. In general, they have the private property of the lands that they operate. They are closely tied to land to maintain their traditions. They practice farming management as they learned from their ancestors. They choose public transport (bus) or their private vehicles for transportation. They are accustomed to using coffee houses, masjids and sharing leisure time with their neighbors. In terms of social interaction, the acquaintanceship is considerably high in this group, so they call each other by nicknames. According to this group, there is no difference between their permanent home in the city and the

seasonal home in Karabağlar in terms of appropriation because they just carry out their traditions. In Figure 5.4, there are examples related to traditional users.

Figure 5.4 Examples to traditional landowners in Karabağlar
(Source: Achieve of Feray Koca)

- **Land occupiers coming from neighbor villages or provinces:** This group is composed of poorly educated farmers with low income who came from neighboring mountain villages and other provinces with an age range of 20-50. The underlying reason behind their migration is to benefit from the advantages of city services and to live in an accessible distance from city because of their children's education. Due to their financial impossibilities, they do not take the ownership of the land, so they choose to rent. They stay permanently in Karabağlar. They rent the fields with a house in very low prices from the inheritors of traditional landowners who leave these lands to the new occupiers. They use public transport (bus) or walking as the main method of transport. This group has to produce high-value products and do intensive or monoculture agriculture (tobacco, grain and so on) because the only income they are able to earn is from farming operations. For effective farming, they usually operate the agricultural plots larger than 5000m^2. In Figure 5.5, there are two families coming from neighboring mountain villages to cultivate tobacco.

Figure 5.5 Examples to land occupiers coming from neighbor villages or provinces in Karabağlar (Source: Achieve of Feray Koca)

- **Hobby farmers and recreational occupiers:** This group is composed of well-educated new residents or new generation of traditional landowners who have an advanced economic prosperity and who are in search of leisure activities to relax and recreate. Most of them are retired or have at least middle-income occupation. They are not in a trouble to earn income from farming; therefore, they utilize the lands for recreational facilities such as hobby gardens, tennis, kinder gardens, pavilions etc. Households with children more frequently prefer a second home in comparison to couples without children. Many of them escape from the busy life of the city to appreciate the quietness and to do their hobbies. They prefer to restore traditional houses by converting them into showy summerhouses to use occasionally on weekends or in summers. This affluent group has at least one private car. Some of them see the lands as an investment commodity because of speculative land prices. Figure 5.6 displays two hobby gardens with pavilions and an outdoor chessboard.

Figure 5.6 Examples to hobby farmers and recreational occupiers in Karabağlar (Source: Achieve of Feray Koca)

The social fabric of the community living in Karabağlar is changing with newcomers. This change may have adverse effects on the collective cultural values and the quality of life by creating conflicts among residents. When these conflicts reflect on the space, land use changes and the loss of unique character may be inevitable. Therefore, the social interaction between these three groups is significant in terms of community identity.

5.4.3 Land Use Practices

After 1950s, many alterations started to occur in Karabağlar. However, the 1990s were a transition from production economies to consumption economies. The technological booms and increasing economic prosperity fueled the consumptive uses of recreational activities and second home ownership. Consumptive uses mainly depend on rising income and residential mobility.

The main effects of changing communities' structure and traditional lifestyles have been traced on the the disappearance of traditional local land uses and conflicting land uses. In Karabağlar, the abundant ground water resources of the plain have presented the opportunity of crop farming to the residents for years; therefore, farming has been the traditional land use. After 1990s, modern second homes have replaced the traditional '*yayla'* houses, and

paved road network connecting to highways has replaced the dirt narrow roads of Karabağlar. Infrastructure projects, increasing traffic, recreational facilities, second homes, and intensive monoculture agricultural production are the new land use practices. All these alterations and the competition between these changing land uses cause the conservation problematic of the existence of Karabağlar and its uniqueness.

Despite the regulatory efforts of conservation plan, infringement of urban developments on the unique amenities and historic settlement pattern of Karabağlar continues. In the next chapter, the existing situation in Karabağlar is evaluated and conservation-planning framework for Karabağlar is discussed.

CHAPTER 6

GENERAL EVALUATION AND CONCLUSION

This thesis investigated the existence of 'bağ' settlements and their changing role in seasonal circularity and reciprocal interaction with Anatolian towns in time. It further explored the breaking of the link between the economic and recreational aspects that have been kept in environmental coherence throughout centuries. By constructing a conceptual framework, the thesis defined the essential values highlighting the uniqueness of each 'bağ' settlements. The study focused on the transformation of Anatolian 'bağ' settlements in terms of main changing values and meanings in a dynamic spatio-temporal system. In this study, the case of Karabağlar is significant as it is a transforming 'bağ' settlement with changing socio-economic conditions of time.

As a physical and social entity, the case of Karabağlar has presented a particular 'bağ' settlement character with its wide range of architectural and landscape qualities, richness of vegetation, range of farm products, spatial organization, farmland pattern, natural and cultural amenities, environmental coherence and 'bağ' lifestyle depending on seasonal circularity and reciprocal interaction with Muğla town throughout centuries. These values tell us the historical story of initial inhabitants and their collective practices on the formation of spatial organization that makes Karabağlar unique in a unity. Nevertheless, Karabağlar has witnessed many transformations since the period of Evliya Çelebi. With changing socio-economic conditions, spontaneous and unplanned interventions that ended with transformations harmed the consistency and unity relations in Karabağlar and impinged on the whole structure of the settlement.

This thesis determined the origins and the spatio-temporal evolution of the farmland pattern of Karabağlar from the outset with an analysis of technological, socio-economic and physical dynamics in a historical context. The thesis measured changing socio-economic and environmental conditions and their consequences on transforming landscapes of Karabağlar in time and space. Especially after 1950s, with modernization, increasing technological

progress, speculative developments, changing ownership pattern and cultural habits, land use changes, and increasing recreational demands of urban residents with increasing leisure time resulted in a consumptive encroachment in Karabağlar. Therefore, land tenure systems, development plans and decisions, conservation plans and practices and also the composition of the society and their mutual interaction with the settlement were examined and evaluated to figure out their overall influence on 'bağ' pattern of Karabağlar and its unique character. In the thesis, while the period between the 12th century and 1950s was told in a historical narrative in Chapter 3, the period after 1950s was evaluated with empirical analysis in Chapter 5. The period after the establishment of Republic was discussed in terms of development plan and decisions in Chapter 4.

In Turkey, the research subject of this thesis is rarely investigated and the theories only dealt with the morphology of distinct countryside settlements in Anatolia with a typological approach and generalization. Conventional typological approaches usually ignore the spatio-temporal formation of unique 'bağ' settlements related to changing socio-economic conditions and the perpetuation of their existence of being. Therefore, there are very few investigations on 'bağ' settlements in Turkey, many of which have been conducted at a superficial level regarding just the categorization of the settlements according to their physical compositions. Therefore, this thesis with the case study has significance for the subsequent studies on 'bağ' settlements and their spatio-temporal formation among countryside settlements. In terms of theoretical contribution, this thesis explored the uniqueness of the unity and harmony between the natural environment, geomorphological formations and human activities between Muğla town and Karabağlar 'bağ' settlement,which has been sustained for centuries. While doing this, the thesis emphasized the interdependency between these two settlements and the *reason d'etré* (reasons for their being).

On several counts, 'bağ' settlements have been cultural responses of the towns to their environment. The seasonal circularity as the particularity of life cycle in Muğla was the way of being dependent on the soil and environment. Climatic and geomorphological reasons, economic circumstances in addition to recreational needs were underlying factors for annual cyclic movement between the dwellings in the town and the dwellings in 'bağ'. The reciprocal interaction and seasonal dependency made Karabağlar an inseparable component of Muğla town. Therefore, their natural and cultural existence of being depended on each

other. In time, the continuity of this dependency was broken with changing socio-economic conditions of the modern world. Moreover, the significance and role of Karabağlar 'bağ' settlement have changed with many socio-spatial transformations.

Karabağlar is a relevant unique case for ecologically sensitive 'bağ' settlement that is based on geomorphologic structure, abundant ground water and particular landscape components. Climatic and geomorphological variables have been the first compulsory conditions for the human use of the land and his adaptation to the environment. However, the uniqueness of Karabağlar does not just depend on the ecologic and geomorphological formation, but also the values of spatial organization, farmland pattern, settlement character, natural and cultural structure and social life, which altogether constitute the essence of the settlement in a seasonal life cycle. The viability of Karabağlar depends on the continuity of these values.

In terms of dependency and mutual interaction with town, Karabağlar reflects the characteristics of other 'bağ' settlements in Anatolia. In a historical perspective, the socio-spatial transformations and undermining economic and social viability in Karabağlar are the consequences of major changing socio-economic conditions and development plan decisions experienced in Turkey. Thus, in concluding remarks, three assertions for Karabağlar are evaluated to contribute to the conservation practice in Turkey.

6.1 Changing Significance and Role of 'Bağ' Settlements

'Bağ' settlements have been the backyards of Anatolian towns for centuries. While they were acquiring the source of food production to foster house economy, they also met the recreational needs of town people. The relation in between town-'bağ' continuum was a requisite for survival in the life cycle of Anatolian people. Spatial displacement was in circularity as in seasons. 'Bağ' settlements were integration of human settlements with climatic conditions. Literature review on the role of 'bağ' settlements in Anatolian town and countryside integrity and its existence of being is given in Chapter 2. However, literature lacks the definition of reasons and the responses of changing historical pattern of 'bağ' settlements to changing conditions. This study makes the intended contribution to the changing significance and role of 'bağ' settlements and its influence on the historical and cultural existence of 'bağ' settlements in a spatio-temporal framework.

As a result, in the last century, with changing social and economic conditions, the co-existence relations and the hierarchy between Anatolian town and 'bağ' settlement broke down. In this modern age, with technological progress, economic restructuring and urban development, new occupations entered to our life. The social needs and demands of people changed. While the economic dependency of town people on soil was dwindling, the recreational demands with increasing land values took on a new meaning. Farming practices that structures the spatial pattern of 'bağlar' have all been replaced with urban practices with increasing demand of second home ownership and recreational facilities in the last decades. Abandonment of less favored traditional practices of farming and functional changes became potential threats for the continuity of 'bağ' pattern. Ultimately, the role of 'bağ' settlements as a complementary part of Anatolian town lost its significance.

In this thesis, Karabağlar case study demonstrates the changing role of 'bağ' settlement in a historical perspective. The farmland pattern in Karabağlar is the outcome of long-term collective response of local society to the land. It has made testimony to many practices of changing society throughout the history. The property relations and land tenure system were the determining factors of the spatial organization and farmland pattern as explained in detail in Chapter 3. Karabağlar is significant because it still has many traces of initial land regulations belonging to 16th century. Thus, Karabağlar gives us an opportunity to explore changing society-land relations with respect to its changing role in Muğla-Karabağlar continuum.

6.2 Land Use Conversions on 'Bağ' Pattern

In terms of land use, farming has been the dominant land use on 'bağ' landscapes for centuries. The arable lands and gardens surrounding the Anatolian towns were in use of 'bağ' (vineyard, orchard or pastures) to contribute to family economy. The respectful interaction of initial landowners with 'bağ' settlements was in an environmental coherence. Land uses were relevant and nondestructive, and space organization was structured according to the environment and seasonal requirements. With modernization process and the changing demands and necessities of populations, space use altered. With the invasion of more intensive land utilizations, which were not in conformity with the existing land uses, initial 'bağ' pattern could not preserve its being in Anatolia. Increasing land values with speculations and changing property relations initiated land use conversions in many 'bağ'

settlements of Anatolia. Today, a great majority of 'bağ' settlements are transforming into urban residential areas with land use conversions.

Karabağlar is a unique pattern that is still able to save its historical and cultural being; however, it is in a transformation process and in a risk of losing its being. After 1950s, advances in the transportation and communication opportunities started alternative land uses on Karabağlar such as recreational facilities and hobby gardens instead of farmlands (road network, uses of coffee houses as restaurants, hobby gardens on farmlands). Transformation was not only physical because social life of the inhabitants started to change from generation to generation gradually.

Similar to other 'bağ' settlements, with changing economic conditions in Karabağlar, the main source of income started to evolve depending on the profit generating land uses. Self-sufficient farm production as the initial function of Karabağlar started to be replaced with multi-functions of urbanization such as recreation, second housing, tourism, camping and so on. This replacement brought with it a conversion in the social composition of the society. The demanders of the new land uses, that is, newcomers, led to an alienation from the land by altering the original 'bağ' pattern, space organization and its main components ('irim', 'kesik', 'yurt', coffee houses, and traditional house buildings). Unfortunately, this dilemma continued with the subdivisions of Karabağlar plain with the conversion of farmlands.

With the influence of Muğla Development Plans and the decisions of Karabağlar Conservation Plan as explained in Chapter 4, the proposed land uses have promoted the transformation of space, which has generated conflicts on the landscape since 1950s. The new land uses such as recreational tourism, second housing and the infrastructure demanded non-compatible consumptive uses of local natural resources in Karabağlar. Consumptive land uses started to create irreversible damages on the natural hydrologic and geomorphologic formation of Karabağlar. While the road network fragmented the settlement pattern, the change in surface water flows altered the boundary of ponding area and ground water table. The increasing density of second housing with escalating land prices, subdivision process and the new infrastructure shifted the low-density structure of the landscape pattern into high-density pattern. The changing community structure with increasing urban population led to a dramatic change in traditional practices such as abandonment of farming, changes in the utilization of common squares and loss of

architectural uniformity in Karabağlar. From now on, the future effects of the incompatible land uses necessitate further decisions on land use and density regulations. Therefore, this thesis emphasizes the negative influences of plan decisions on Karabağlar land use pattern to learn from former practices.

6.3 Loss of Particular 'Bağ' Character

The main determinants that make 'bağ' settlements social entities are the experiences and practices of the residents. Therefore, the physical and ecological landscape of every 'bağ' settlement acquires a character with land-society relations, which make it distinguishing. Collective human perceptions define the character of the settlements from historical, cultural, social or ecological aspects. The visible character and form of the landscape is a kind of representation of the community's evolution in historical process. However, character is something more than physical appearance that is unique in its own formation.

The uniqueness and the unity of the 'bağ' character is the result of collective contribution of many practices of the community and their sense of belongingness. In different terms, human actions shaped, structured and modified the landscape surrounding Anatolian towns with their social norms in such a great harmony that today people appreciate the remnants of these inherited *'bağ'* pattern. This common spatial structure is the perceptible evidence of being a part of cultural identity of community and altogether constitutes the particular character of the 'bağ' settlements.

Karabağlar landscape witnessed the past and present interaction of the community with the environment, which shaped the spaces that are product of a common sense. In this respect, Karabağlar keeps the cultural history of initial inhabitants and presents cultural richness. The practices of the local inhabitants created and valued the natural and cultural beings (heritage) considering the geomorphologic and historical formation of the area. These natural and cultural features constitute the sense of place by defining the particular character of Karabağlar, and reveal its essence. Therefore, the emphasis of the thesis has been on the loss of particular unique character of Karabağlar depending on the changing circumstances and loss of cultural values in time. In Chapter 5, the interaction of community with environment in Karabağlar was explored with questionnaire analysis.

It is hard to define the character of Karabağlar according to one aspect. The uniqueness of the character depends on the variety and distinctiveness of perceived components. The question of '*What constitutes particular character of Karabağlar*?' gains importance in terms of preventing disappearance of the physical, historical and cultural assets (beings) that structures the existence of being of Karabağlar. To sumup, the main values that constitute the particular character of Karabağlar can be given in Table 6.1, which presents the indicators according to perceived components in Karabağlar.

Table 6.1 Indicators of the particular character in Karabağlar

INDICATORS OF THE PARTICULAR CHARACTER IN KARABAĞLAR		
Subjects	**Assets**	**Indicators**
NATURAL VALUES	Geomorphological structure	Soil fertility, land use assets, availability of groundwater, natural drainage of the soil
	Düden	ponding areas, flow off in catchment areas and the activities of düdenler
	Ground water	arable lands because of high water table
	Climate	attractiveness of the climatic factors
	Vegetation	richness of the vegetation
HISTORIC AND CULTURAL VALUES	'İrim'	Space organization, public-private land use, road network, water drainage, landscape component
	'Kesik'	Space organization, public-private land use, vegetation, landscape component
	'Yurt'	Space organization, public-private land use, the smallest unit
	Coffee houses	Space organization, public-private land use, common use, common meeting areas, clusters, land allocation, neighbourhoods
	Masjids	Space organization, public-private land use, common use, common meeting areas, clusters, land allocation, neighbourhoods
	Traditional houses	Space organization, private use, traditional structure, typology of yayla houses
SOCIO-ECONOMIC VALUES	Seasonal migration	Seasonal circularity between town and 'bağ', interdependency
	Mutual interaction	Mutual interaction between town and 'bağ',
	Common space	Emergence of the common lifestyle and common use, collective practices
	Farming	Potentials of soils, crop production, variety of farm products that structure the pattern
	'Bağ' lifestyle	Livability, seasonal dependency
	Traditions	Traditional practices

6.4 Conservation Planning Framework for Karabağlar

The requirement to prevent transforming settlements arose with the appreciation of perceived natural, historical and cultural beings. The preservation of existing landscape and architectural qualities, land use pattern and socio-cultural structures is a kind of awareness of the values of other beings and our interaction with them in a settlement. In this framework, this appreciation and awareness opens the way of approaching settlements as social entities. In reference to Heidegger and Norberg-Schulz, preservation is not just saving the physical attributes but also particular way of life and the common sense of belongingness that structures the social entity of the settlements.

In Anatolian peninsula, the distinctive character of 'bağ' settlements, their evolvement process, historical role in Anatolian towns and their natural and cultural existence of being necessitate a special care and concern for conservation. There may be different approaches to conservation of 'bağ' settlement; however, the point of origin of all approaches should be providing the perpetuation of very essence of 'bağ' settlement.

Identically, with its distinctive natural, historical and cultural beings, Karabağlar 'bağ' settlement deserves a conservation planning approach. The link and interaction between the components of Karabağlar have provided the viability and perpetuation of its being throughout history. Therefore, prevention of the potential breaks of the link between components will guarantee the perpetuation of natural, historical and cultural being of Karabağlar.

Karabağlar is a special geography, which has its own changing dynamics. Human intervention also affects these dynamics. In this respect, Karabağlar is a kind of integration of generational human activities with environment. The spatial configuration in Karabağlar is the coherent environmental and cultural implication of town residents according to changing climatic conditions. The way of demonstrating this implication differentiates Karabağlar from other settlements and makes it unique. It is this uniqueness that needs to be cared and concerned; therefore, the continuity of the uniqueness and unity can only be accomplished with unique conservation and management planning.

In order to provide a conceptual framework for the preservation of overall settlement character and its uniqueness, the cyclic relation (interdependency and interaction) between Muğla town and Karabağlar 'bağ' settlement, the main assets and the threats on this relation are conceptualized and conservation objectives are attempted to be defined in Figure 6.1. This conceptual framework can be accepted as an investigation of an answer to the following question: '*Where does conservation planning stand?'*

Karabağlar and its conceptual conservation-planning framework will be a contribution to other similar cases in Turkey. Evolving or transforming landscapes of countryside, the invasion of urban encroachments and changing socio-economic conditions has become a gradually increasing problem for the nations. Unfortunately, in Turkey, conservation plans, policies and practices lack the notion of preserving the particular character of unique countryside settlements. The main problem is the imported general processes and methods of urban planning on the special countryside settlements. The inconsistencies between different planning authorities and plans create regulation and implementation problems. Atrophy of landscape assessment and preliminary inventory related to distinct settlements and the absence of the understanding of their essence are the deficiencies of conservation plans.

It may be challenging to conserve the evolving settlements and landscapes against changing social and economic circumstances. Nevertheless, if conservation practices cannot adapt to and accommodate for changing conditions and cannot take the very essence of places into account, and further cannot preserve the particular character and sustain the viability of settlements, they fail. Unfortunately, Karabağlar Conservation Plan lacks flexibility as an outcome of rational thinking. It cannot combat with the change and conflicting interests of modernization. Therefore, former conservation and management practices implemented in Karabağlar cannot be accepted as successful.

Karabağlar was the place of production and recreation for town residents in the history. These two functions have been the key factors for the economic and social viability that have been sustained in a stable coherence for years. In terms of economic viability, Karabağlar has provided self-sufficient production to house economy of Muğla residents. Today many states are supporting urban agriculture to produce their own food and to stabilize ecological structure. Karabağlar is one of the unique settlements that have sustained its self-sufficient economic return, and this is one of the main assets that should be fostered for the future.

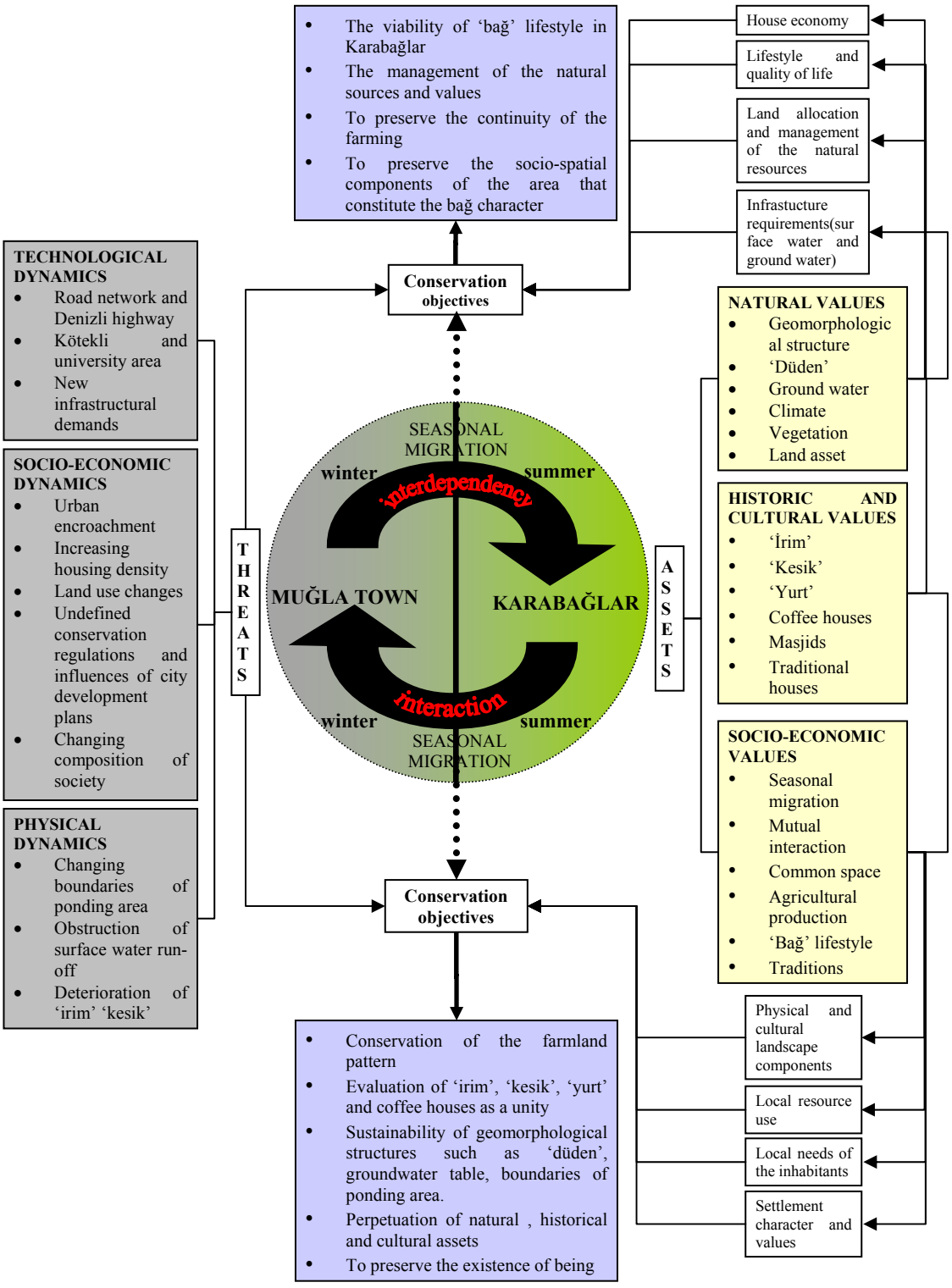


Figure 6.1 Conceptual Conservation Planning Framework for Karabağlar

The long-term economic and social viability of Karabağlar necessitate much more than conventional conservation approaches because social life has been the essential component in the origins of Karabağlar and at some point conservation necessitates the regeneration of the particular 'bağ' lifestyle. Adversely, conservation remains as the preservation of the physical space as it was in the past like a museum. Conservation should also take into account the whole settlement with its social structure and the values ascribed to cultural richness. In this respect, as well as its physical dimension, understanding its social and cultural dimension is gaining significance to ensure the viability of 'bağ' settlements.

In the territorial context of Karabağlar, to accomplish the preservation of farmland pattern, spatial layout, ownership pattern, natural and cultural beings of Karabağlar and its unique character depends on the perpetuation of its essence. For the present and future existence of 'bağ' settlements, conservation planning should be far away from rationalizing the settlement pattern and its assets. In addition, conservation depends on the ethical relationship between human being and the natural and cultural beings. The awareness and concern of human being on this relation is the basis of conservation act. In this respect, planning authorities have to answer to this question with a conservation consciousness: '*What will be our conservation approach to perpetuate the unique* ***reason d'etré*** *of Karabağlar?'*.

In conclusion, the following general components of conservation strategies are the way of seeking an approach that intend to ensure the permanence of particular settlement character of Karabağlar (Table 6.2). This part of the thesis may be guiding research that promotes conservation practices for future studies.

Table 6.2 The Components of the Conservation Strategies for the Permanence of Karabağlar's Being

THE COMPONENTS OF THE CONSERVATION STRATEGIES FOR THE PERPETUATION OF KARABAĞLAR'S BEING		
Principle:	**Key Concepts:**	**Description of Strategies:**
Vision and goals	• Sustainability • Uniqueness	• Every unique landscape is specific and necessitates different conservation planning strategies; therefore, a sustainable strategy for Karabağlar and its distinctive geographical structure should be defined.

Table 6.2 The Components of the Conservation Strategies for the Permanence of Karabağlar's Being (Continued)

Vision and goals	• Conservation of particular character • 'sense of place', 'sense of belonging'	• Conservation efforts should prioritize on the overall settlement character. The 'sense of place' and 'sense of belonging' should be the main statements for conservation practices.
Main Components	• Assets • Natural and cultural heritages • outstanding characteristics	• A reliable inventory and scientific identification of the assets should be done and natural and cultural heritages (beings) of Karabağlar should be listed in detail for their outstanding characteristics. Their contribution to the unique character of the settlement should be presented properly. • These assets are parts of a unity and cannot be transferred or removed or purchased elsewhere.
	• Ecosystem • Biodiversity	• Native flora and fauna should be identified and registered. • Ecosystem diversity, native plants and wildlife protection should be ensured. • Biodiversity map should be prepared.
	• Historic and cultural values	• The scenic resources, which are the result of viable farming activities, natural and cultural values and a healthy ecosystem, should be protected. • The legacy of history should be taken into consideration.
	• Property pattern	• Property pattern that has evolved throughout centuries with the practices of initial owners should be perpetuated.
	• Natural Resources	• The prevention of preemption of unique natural components should be provided.
	• Landscape components	• Overall settlement character relies very much on landscape components in Karabağlar; therefore, the landscape components (*irim, kesik*) should be determined, registered and preserved as it is.
	• Social, economic and ecologic systems	• The interaction between social, economic and ecologic systems should be provided to combat with the incompatibilities.
	• Hydrologic resources	• A research on hydrologic resources and water system should be done. • The quality and supply of surface water and groundwater resources (düden) should be protected. • The hydrologic ecosystem is in great connection with other ecosystems. This connection necessitates a special care and concern.
	• Soil quality	• The soil quality should be preserved and managed.

Table 6.2 The Components of the Conservation Strategies for the Permanence of Karabağlar's Being (Continued)

Practices and land uses	• Costs and benefits	• Beneficial and adverse effects of human activities should be determined. • The costs and benefits of proposed land uses should be considered.
	• Viability • Farmland pattern • Traditional practices	• Farm practices, which foster the conservation of surface and ground water resources, habitat, and other natural features, should be supported. • The viability of working farmlands should be provided to preserve the farmland pattern in Karabağlar. • Social viability depends on the regeneration of 'bağ' lifestyle. • Traditional practices of the local inhabitants should be evaluated to learn the original pattern of Karabağlar.
	• Collective social practices	• Collective social practices should be considered while conserving the structure
	• Conflicting land uses	• The potential for conflicting land uses between residential uses and farming uses should be minimized.
Capacity	• Carrying capacity	• The carrying capacity of the area should be assessed before any land use proposed.
Conservation Planning and Management	• Landscape assessment • Plan Boundary	• An initial landscape assessment should be done. • The inseparable components of Karabağlar should be determined and the boundary of the conservation plan should be chosen according to ecological boundary
	• Socio-economic conditions	• Plans and policies should consider the socio-economic conditions of Karabağlar.

Table 6.2 The Components of the Conservation Strategies for the Permanence of Karabağlar's Being (Continued)

Conservation Planning and Management	• Framework • Development standards • Management methods • Design statement	• A framework that defines management priorities, management objectives, implementation process and control of the impact should be drawn. • Development standards that are consistent with landscape characteristics of Karabağlar should be established. • Planning and management methods that promote coexistence of the different land uses should be developed. • Existing tools and techniques that are not enough to regulate the quality and quantity of the second housing and to combat and minimize the potential negative effects of urban encroachment should be improved. • Design statements (as it has been in England) should be prepared for every specific 'bağ' settlement. • Management quality assessment is needed. • Conservation plan should be in a consistency with other plan decisions. • Plan should ensure permanent prevention of the farmlands against residential growth. • Mitigating measures against degrading impacts should be taken.
	• Mobility	• Mobility management should be done for the design of road network.
	• Flexibility	• The plan should have a structure of evolving over the time to adapt the changing circumstances.
Staff and control	• Responsibility and commitment	• The shared responsibilities and commitment have to be defined properly (the inhabitants, the administrative units)
	• Competent authority	• Problems should be matched with an administrative unit who has the qualified knowledge to solve it; each scale problem should have its own competent authority.
	• Control	• Management and control should be depending on legal arrangements more than being spontaneous.
Community	• Awareness	• The most crucial issue is the awareness of the society from the interaction of human beings with natural and cultural beings.

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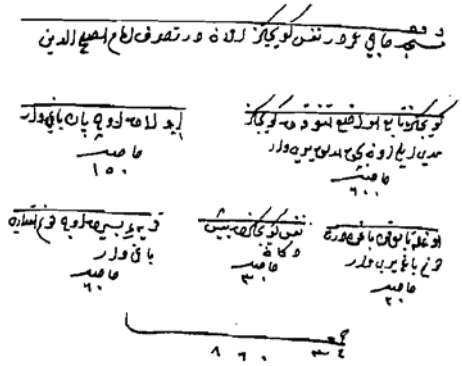
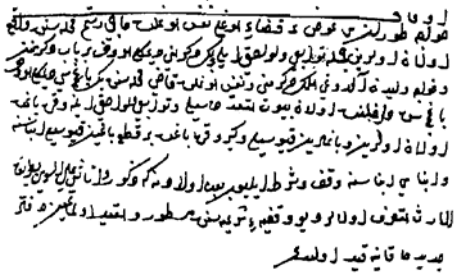
APPENDIX A:

WAQF DOCUMENTS RELATED TO LANDS IN KARABAĞLAR

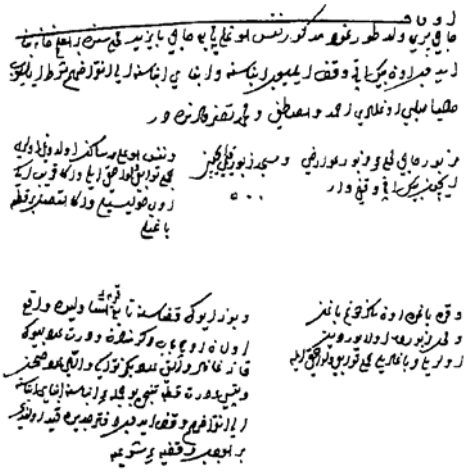
Source: Yiğit, A. (2009) *XVI. Yüzyıl Menteşe Livası Vakıfları*, Barış Platin Kitabevi, Ankara.



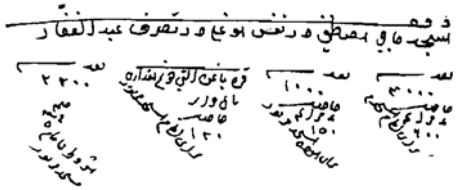
Vakf-I Mescid-i Hacı Ömer



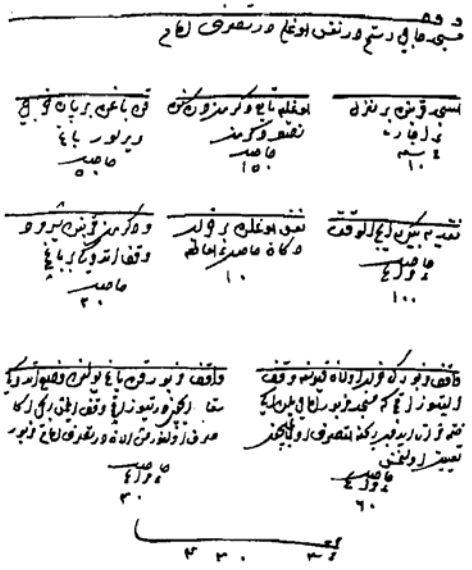
Vakf-ı Hace Turan bin İvaz



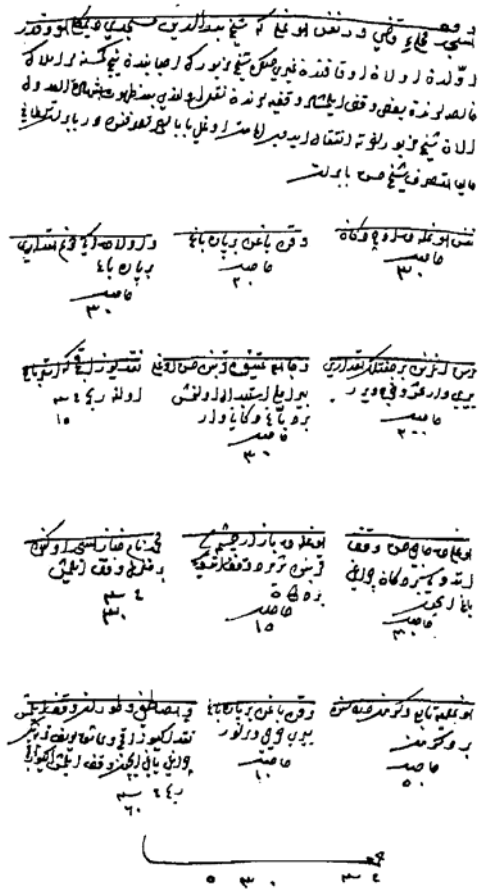
Evkaf-ı Hacı Piri Veled-i Turgud



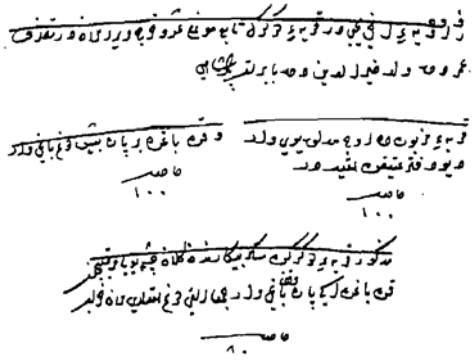
Vakf-ı Mescid-i Hacı Mustafa



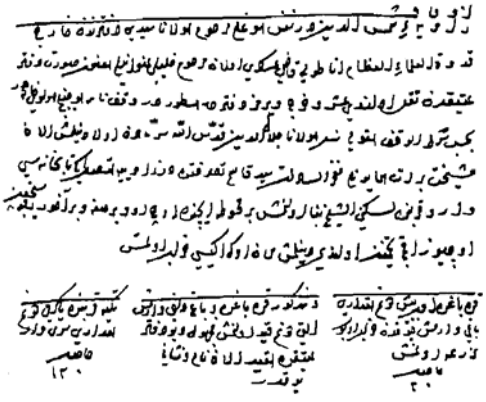
Vakf-ı Mescid-i Hacı Rüstem



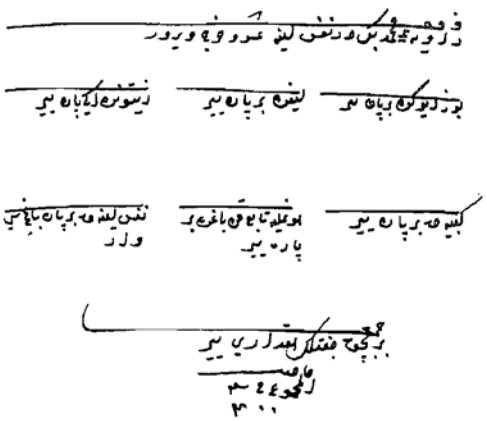
Vakf-ı Mescid-i Mahalle-i Kadı



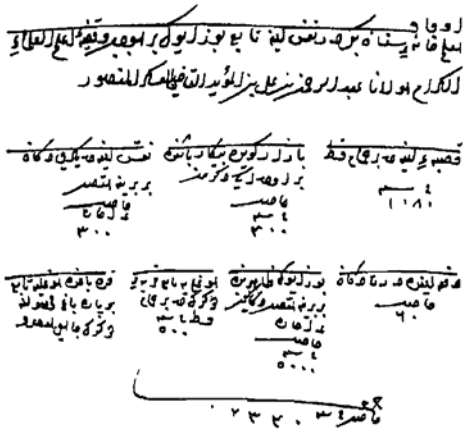
Vakf-ı Zaviye-i Ahi Yahya



Evkaf-ı Zaviye-i Şemseddin



Vakf-ı Zaviye-i Mehmed Bey



Evkaf-ı Mu'allimhane-i Sinan Bey

APPENDIX B:

SAMPLE QUESTIONNAIRE

1) PARSEL

FOTO

Mevkii : Parsel No:

1- Oturduğunuz parselin mülkiyeti kime ait?.....

2- Parsel ne zaman ve nasıl size ait oldu?.....

3- Eğer biliyorsunuz sizden önceki sahibi nereliydi?.....

4- Kaç dönümden oluşuyor?.....

5- Şimdiye kadar parseldeki bilinen değişmeler nelerdir?

	YIL
1) Bölündü	.....
2) Bütünleşti	.....
3) El değiştirme	.....
4) Kira	.....
5) Müşterek	.....

6- İkamet durumunuz nedir?

1) Sürekli 2) Süreksiz

7- Tarımsal nitelikli arazi kullanımı nedir?

1) Sebze 2) Meyve 3) Tütün 4) Buğdaygiller 5) Üzüm Bağı

6) Diğer 7) Kullanılmıyor

8- Tarımsal işletmeciliği yapan kimdir ?.....

9- Tarımsal işletmecilikten bir kazancınız varsa ne kadar?.....

2) BİNA

Yapı Durumu:

Kat Sayısı:.....

Oda Sayısı:.....

Yapılış Yılı:.....

İnşaat Tekniği:.....

m^2 kapladığı alan:.....

Mülkiyet Durumu:.....

Müştemilat Sayısı ve m^2 si :.....

Yapının niteliği:

1) Geleneksel 2)Yeni Uyumlu 3)Yeni Uyumsuz 4)Niteliksiz

5) Harabe

Geleneksel bina ise koruma durumu:

1) Gerekli onarım bakım yapılarak korunmuş

2) Bakım Yapılarak Kısmen Korunmuş

3) Gerekli Bakım ve Onarım Yapılmamış

Konut Kullanım:

Özgün Kullanım:.....

Bugünkü Kullanım:.....

3) HANE HALKI

Kişi Sayısı:.....

Aile Sayısı:.....

Göçle Gelinmişse Gelinen Yer ve Yılı:.....

Sahip olunan araçlar:.....

1. Aile) Aile Bireylerinin:

Cinsiyeti	Yaşı	Uyruğu	Doğum Yeri	Eğitim Durumu	Mesleği	Aylık Kazanç

2. Aile) Aile Bireylerinin:

Cinsiyeti	Yaşı	Uyruğu	Doğum Yeri	Eğitim Durumu	Mesleği	Aylık Kazanç

3. Aile) Aile Bireylerinin:

Cinsiyeti	Yaşı	Uyruğu	Doğum Yeri	Eğitim Durumu	Mesleği	Aylık Kazanç

4) GENEL

1- Dinlence amaçlı nereleri tercih edersiniz?

1) Dağlık alan 2) Deniz kenarı 3) Yayla

2-Dinlence amaçlı niçin Karabağlar'ı tercih ediyorsunuz?

.....

.....

3- Kahveleri kullanım sıklığınız nedir?

1) Günde bir 2) Haftada bir 3)Ayda bir 4) Yılda bir 5) Hiçbir zaman

4- Mescidleri kullanım sıklığınız nedir?

1) Günde bir 2) Haftada bir 3)Ayda bir 4) Yılda bir 5) Hiçbir zaman

5- Karabağlar'ın koruma altındaki III. Derece Kentsel ve Doğal Sit Alanı olduğunu biliyor musunuz?

1)Evet 2)Hayır

6- Sizce Karabağlar geçmişten bugüne değişti mi ve değiştiyse nedenleri sizce nelerdir?

.....

.....

7- İrim ve kesik nedir biliyor musunuz?

.....

.....

8- Parselinize yakın kesik ve irim varsa yıllık bakımını siz mi yapıyorsunuz?

.....

.....

9- Sizce yörenin gelişmesi neye bağlıdır?

.....

.....

APPENDIX C:

THE EVALUATION METHODS OF FIELD ANALYSIS

Three kinds of empirical data set are evaluated in this field analysis:

- Spatial data
- Land records
- Questionnaire

C.1 Spatial Analysis

Spatial analysis depends on the maps of Karabağlar Natural Site, conservation plan, land use plans (Muğla Municipality), aerial photos (General Command of Mapping), soil maps (General Directorate for Rural Services), photographs, and other visual documents. In order to reveal the overall settlement character of the area, conservation plan and land use plan including the information on locations, parcels and block numbers are overlapped with the data of land records gotten from the Register of Deeds Office of Muğla via Map Info Program. Among 2890 parcels, queries are done, and thematic maps are created.

C.2 Analysis of the Land Records

This analysis is done via the registered title deeds of Karabağlar and Düğerek districts. 4499 parcel details belonging to Karabağlar and Düğerek Districts are evaluated. According to the outcomes, the registered Karabağlar District boundary is found to be larger than the conservation site boundary due to the deficiency in the Conservation Plan of Karabağlar. Therefore, data analysis on title deeds is done additionally to observe the transformation of the lands entirely.

The variables of this analysis are parcel number, block number, locality, qualification record of the land estate, the size of the parcels, land allocations and years, expropriation amounts

and years, and the list of cultural and natural assets that should be preserved. All these time constant and time varying covariates are used to find answers to the questions below:

- What are the sizes of the parcels (m^2) in different localities and in different zones of the conservation plan? What is the average mean of the parcels according to localities?
- What is the qualification of the parcel in different localities?
- What is the qualification of the parcel according to parcel size (m^2)?
- What kind of land allocation is made in different localities?
- In which locality are the houses and parcels under preservation and accepted as natural and cultural heritage that must be preserved?
- How many areas were condemned for road constructions, in which localities, and in which years?

For the analysis of the title deeds, statistical program of SPSS 15.0 (Statistic Program for Social Sciences) is used. The relationship between the categorical variables is investigated in order to find answers to the research questions. To this end, Chi-Square tests are used for non-parametric and categorical analysis. In addition, the means of some continuous data are explored in order to find their distribution in the categorical data.

The cross tabulation shows the relationship between two or more categorical variables. Therefore, some of the variables are categorized to perform cross tabulation. The purpose of a chi-square test of independence is to determine whether the observed value for any cell deviates significantly from the expected value for the cell (Table C.1). The chi-square statistic is computed by summing the squared deviations (observed value minus expected value) divided by the expected value for each cell:

$$X^2 = \sum [(fo - fe) / fe] \qquad (C.1)$$

If there is a large discrepancy between the observed values and the expected values, the X^2 statistics will be high, suggesting a significant difference between observed and expected values. Along with this statistics, a probability value is computed. With $p < 0{,}05$, it is commonly accepted that the observed values differ significantly from the expected values and the two variables are independent of each other. For Pearson and Maximum Likelihood

method, as the values get higher, the two variables are dependent (George and Mallery, 1995). Chi-square method ensures the relationship between two different variables.

The mean value (Table C.2) allows us to explore certain characteristics of continuous variables within each category through comparison. We can see mean scores of every section of categorical variable, and minimum and maximum scores of every section.

$$\text{MEAN} = \frac{\text{SUM OF THE VALUES OF ALL CASES}}{\text{TOTAL NUMBER OF CASES}} \qquad \text{(C.2)}$$

This method is helpful to find mean values of numerical data such as surface area of parcels and total area of the buildings in different localities.

C.3 Analysis of the Questionnaire

In this research, 200 landowners who live in Karabağlar were the participants of the study, which involved a questionnaire. Some of these landowners possess more than one parcel spatially; therefore, the survey is conducted on 253 parcels whose ownership belongs to 200 landowners. A thematic map displaying the distribution of respondent parcels in the questionnaire is given in Figure D.1 of Appendix D. In the questionnaire form, there are four sections of survey instrument related with each other: Parcel, Building, Household, and General. A sample of the questionnaire is given in Appendix B.

The scope of the questionnaire: The questionnaire was completed by the people from different parcel and parcel groups living in Karabağlar Natural Site. The study was implemented between July and August of 2006. Landowners and parcels were chosen randomly from different localities. Some of the landowners own more than one parcel (yurt); therefore, the resultant count of parcel is greater than 200.

The goal: Within the questionnaire, the aim is to get information about the composition and historical formation of the parcels, the characteristics of the buildings, the identity of the landowners and their awareness of the conservation of the settlement character of Karabağlar. To this end, the research questions are developed as an inquiry form. Only the

open-ended questions are designed to search the personal opinions of the inhabitants. Figure C.1 shows the context of the questionnaire and the examined relationship between sections.

Secondary goals:

1- Parcel: This section gives information about the sizes and location of parcels, possessions, land allocations, inhabitancy status of the residents, agricultural land use, livestock production and the manager of the agricultural lands, and tries to find answers to the questions below:

- How many newcomers and migrants live in Karabağlar? Where is the former landowner from?
- In which years did the last land allocation activity happen and what is the type of land allocation?(subdivisions, amalgamations, sold, rented or joint property)
- What type of agricultural production is managed? What is the financial contribution of agricultural production to the livelihood of landowners? What is the land use character?
- What is the inhabitancy status? What is residency status according to locality?
- What is the agricultural profit that is obtained from different parcels?
- What is agricultural profit according to inhabitancy status? Does the seasonal migration have any effect on the agricultural profit?
- What is the livestock production according to parcel size? Does the size of the parcel have any effect on the livestock production?
- Who is the agricultural manager of land?
- What is the agricultural profit of agricultural managers?

2- Building: This section gives information about the architectural buildings and their original use. Data on the number of floors, number of rooms, construction date, technique of the construction, total area (m^2), additional building (outbuilding m^2, stall m^2), building type, quality of the construction and its conservation status, and the original and present utilization of the dwelling will help to understand the character of the architectural building and its compatibility with the environment. This section tries to find answers to the following question:

- What is the total area of buildings (m^2) according to the construction year of the buildings?

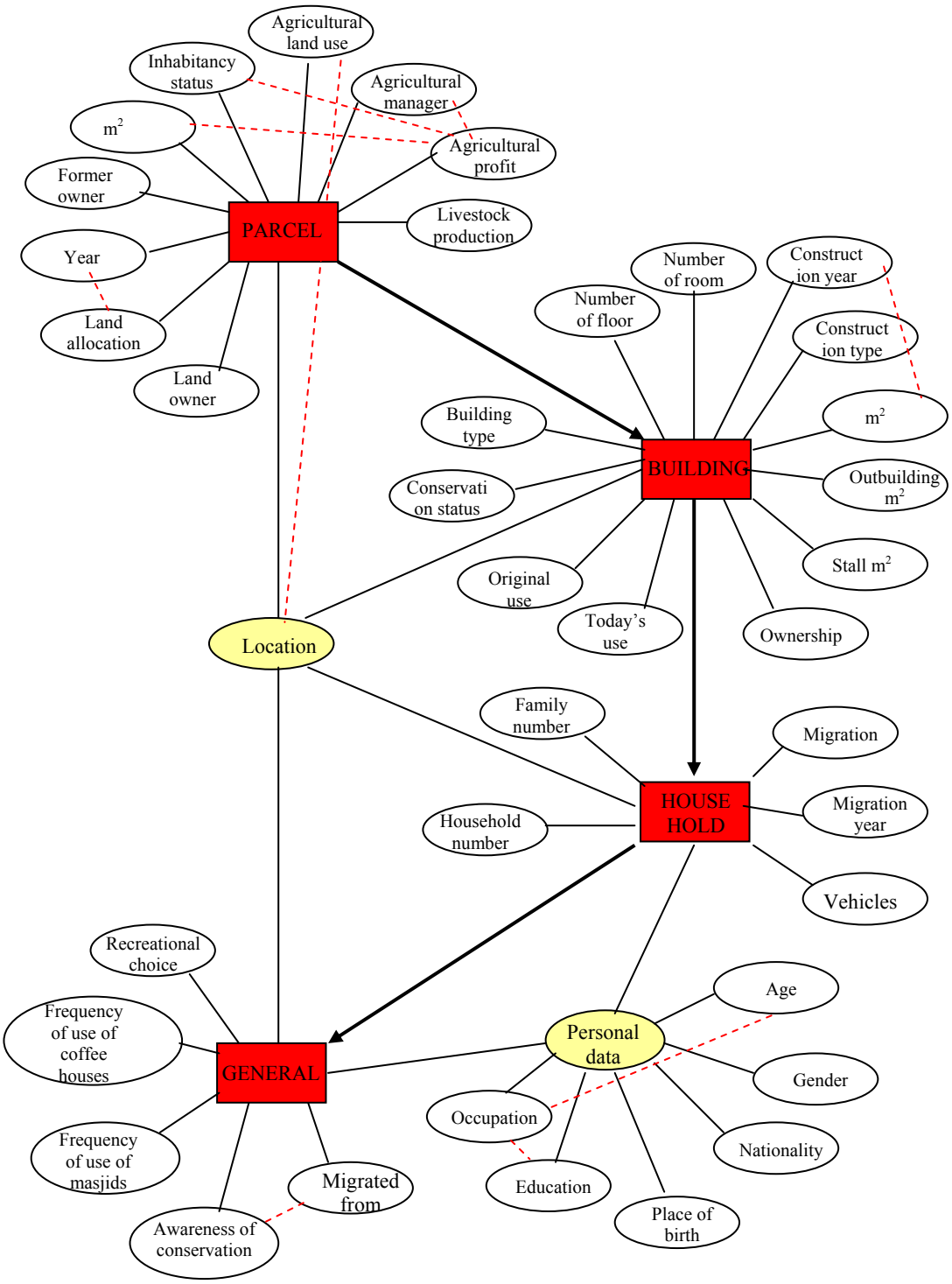


Figure C.1 The relationship graphic of the questionnaire sections

3- Household: This section gives demographic information and investigates the identity of the residents in Karabağlar. The number of families, migration year, the number of family members living in the related parcel, gender of every family member, their ages, their citizenship situation, their place of birth, their educational background, and their professions are questioned to identify the population density, its distribution in Karabağlar and the identity of this population. This section tries to find answers to the following questions:

- What is the educational background of different occupational groups in Karabağlar?
- What is the occupation of different age groups?

4- General: This section includes questions related to the frequencies of use of coffee houses and masjids, the recreational choice of the residents, and their awareness of conservation. In this section, the point of views of the inhabitants about the conservation of Karabağlar and its development are expected to be found, therefore there are open-ended questions, which aim to answer the following:

- Do the inhabitants adapt to or change the conditions in Karabağlar?
- Do the inhabitants know the assets of Karabağlar (landscape components, the original 'bağ' pattern, space organization, historical values of the architectural buildings)?
- Are the inhabitants aware enough to conserve their environment?
- How many people are native who have the awareness of conservation? Is there any relationship between being native and awareness of conservation?

For the analysis of the questionnaire, statistical program of SPSS 15.0 (Statistic Program for Social Sciences) is used. Firstly, frequency analysis is done in order to find the central tendency. After this descriptive analysis, the relationship between the categorical variables is searched in order to find answers to the research questions. Chi-Square tests are used for non-parametric and categorical analysis. In addition, the means of some continuous data are explored in order to find their distribution in the categorical data.

APPENDIX D:

THEMATIC MAPS

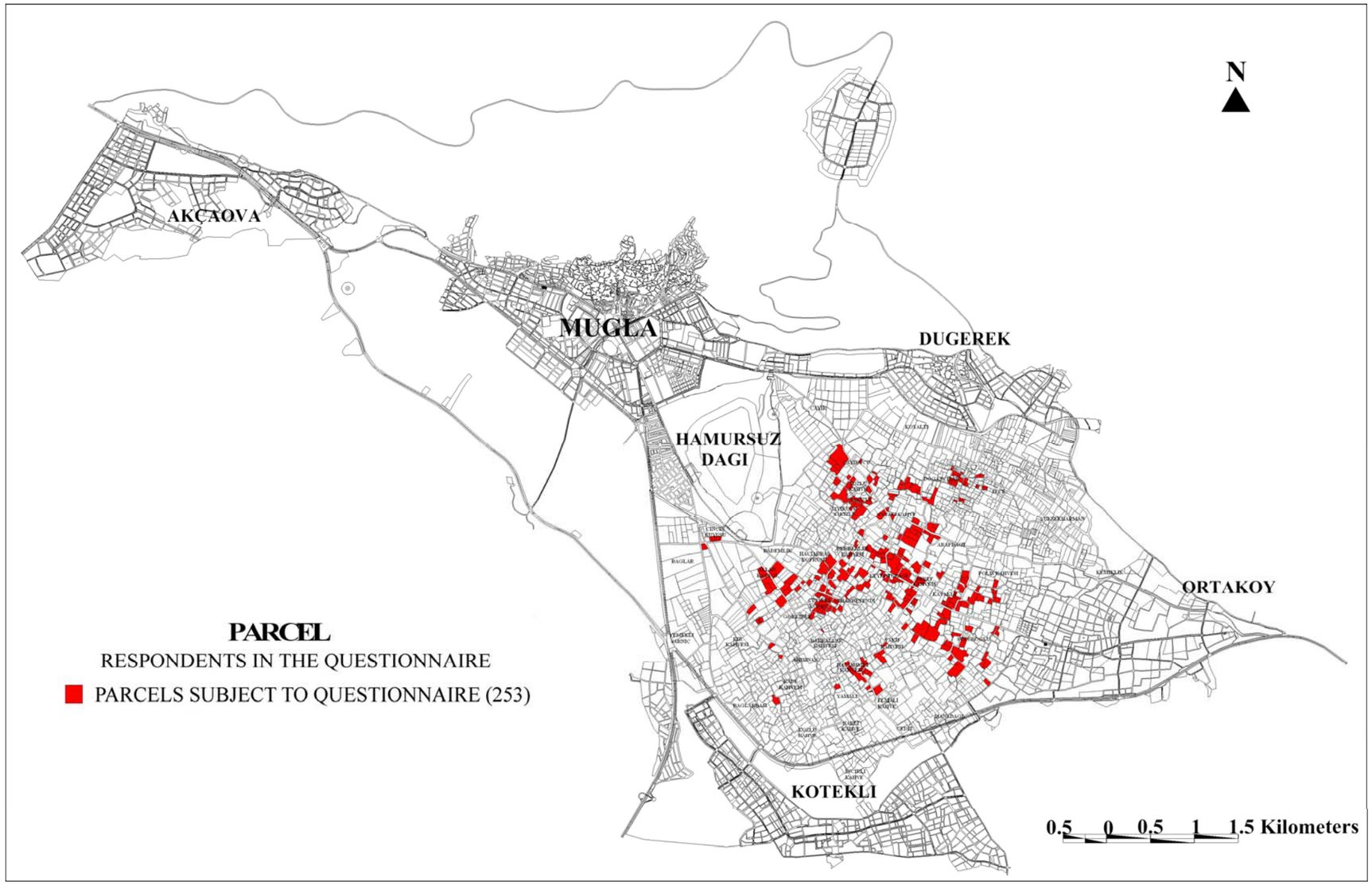


Figure D.1 The map of respondent parcels

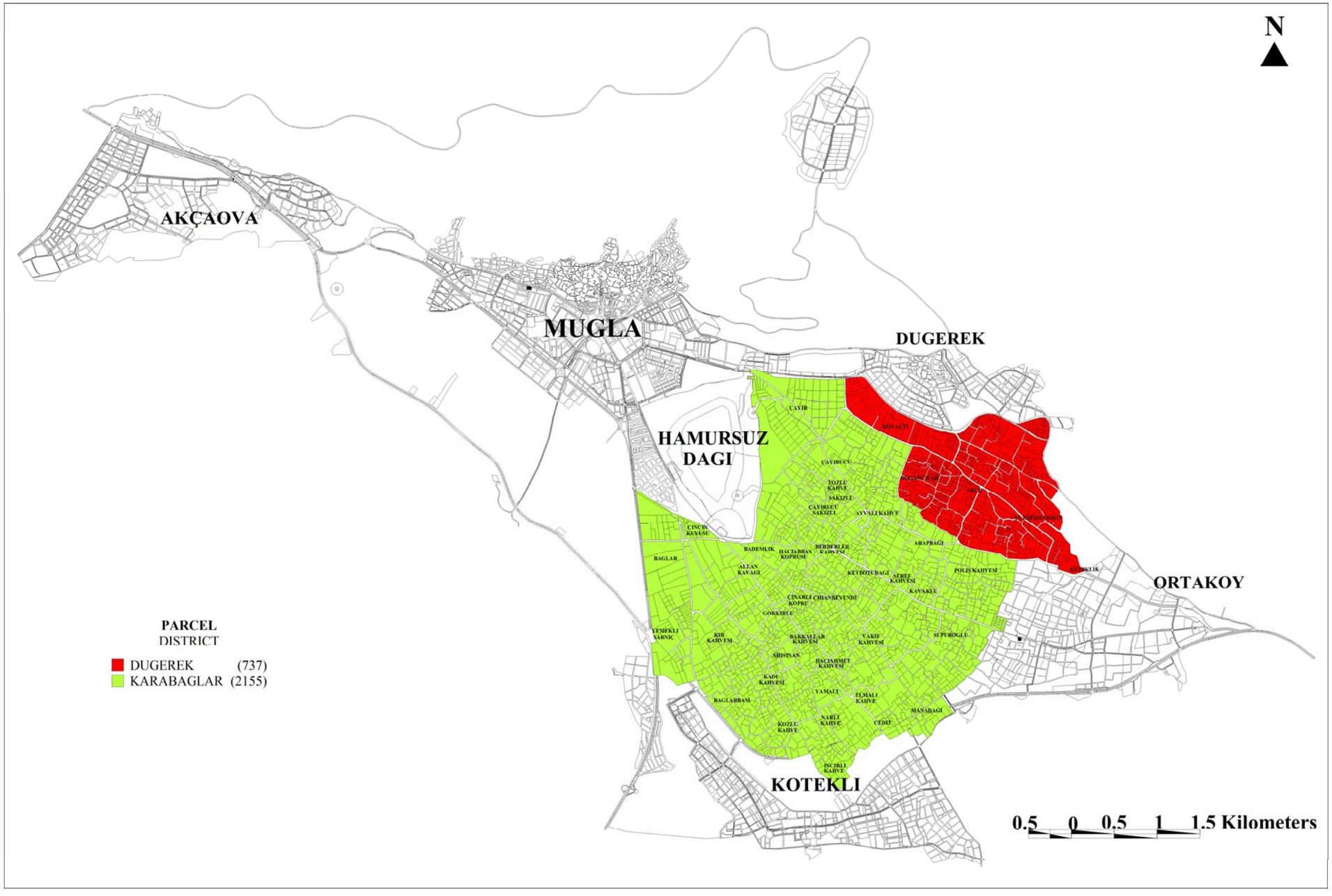


Figure D.2 The map of districts in Karabağlar Natural Site

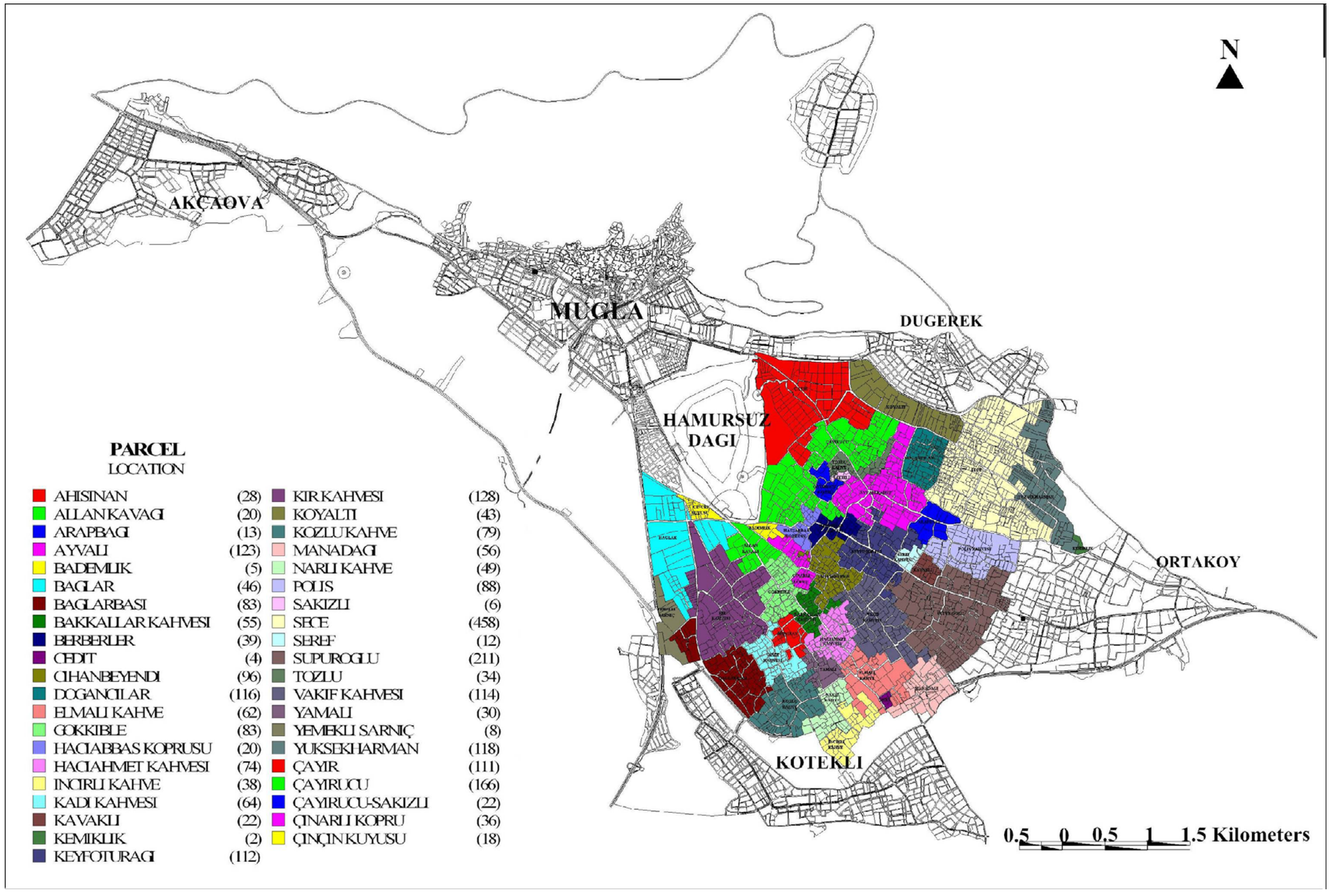


Figure D.3 The map displaying distribution of localities and 'yurt' numbers

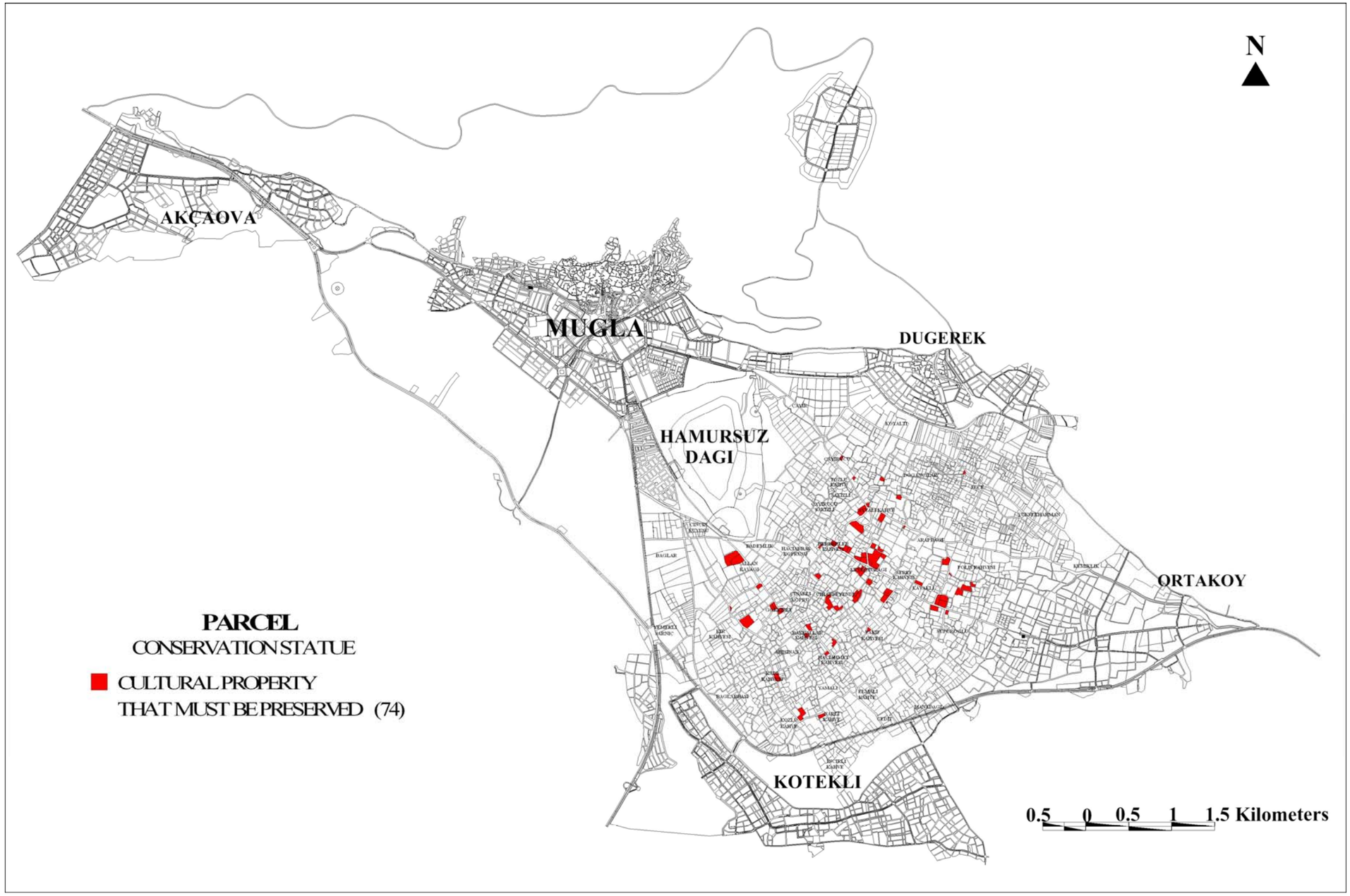


Figure D.4 The map of cultural and natural heritage

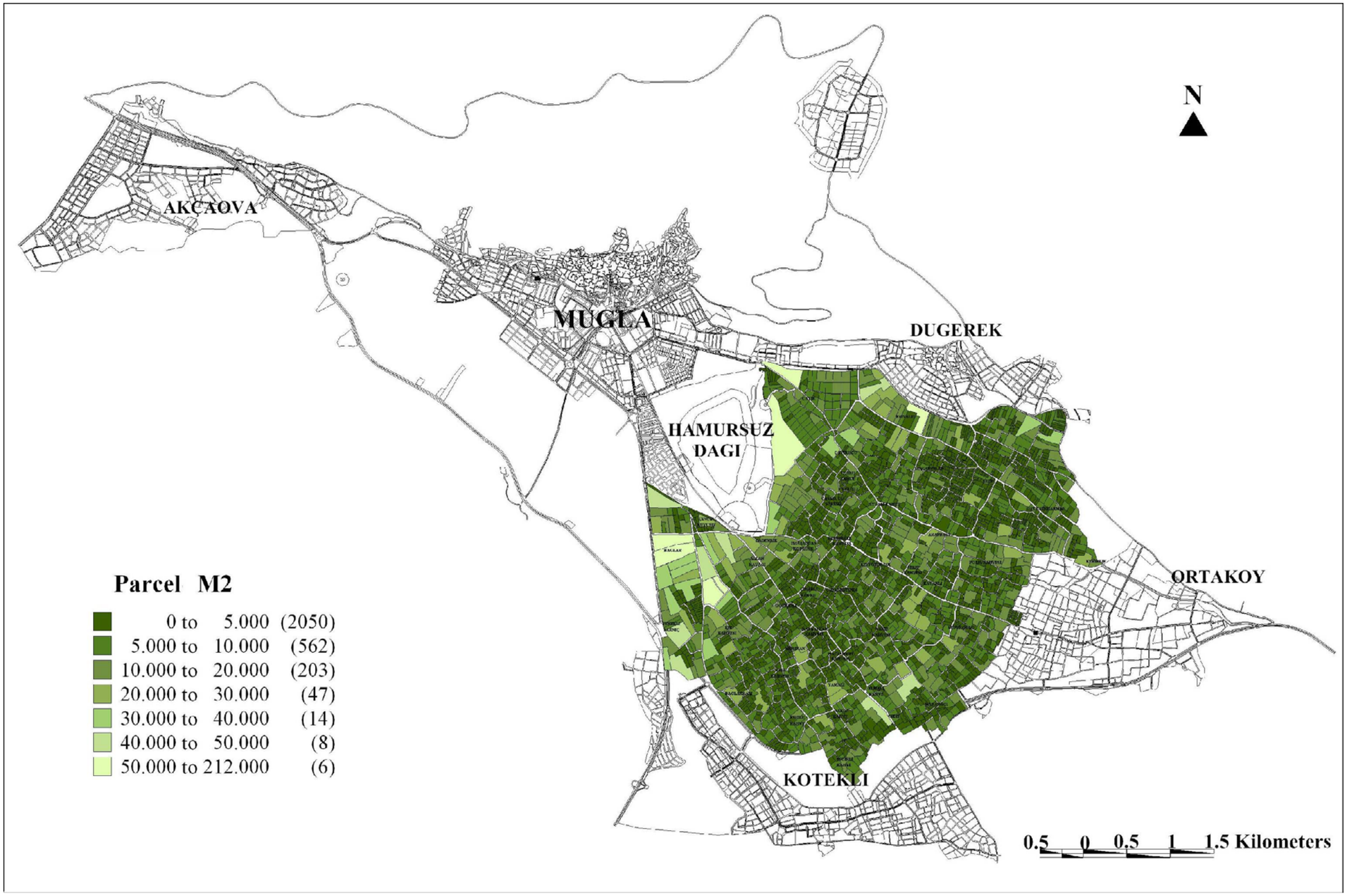


Figure D.5 The map of parcel sizes

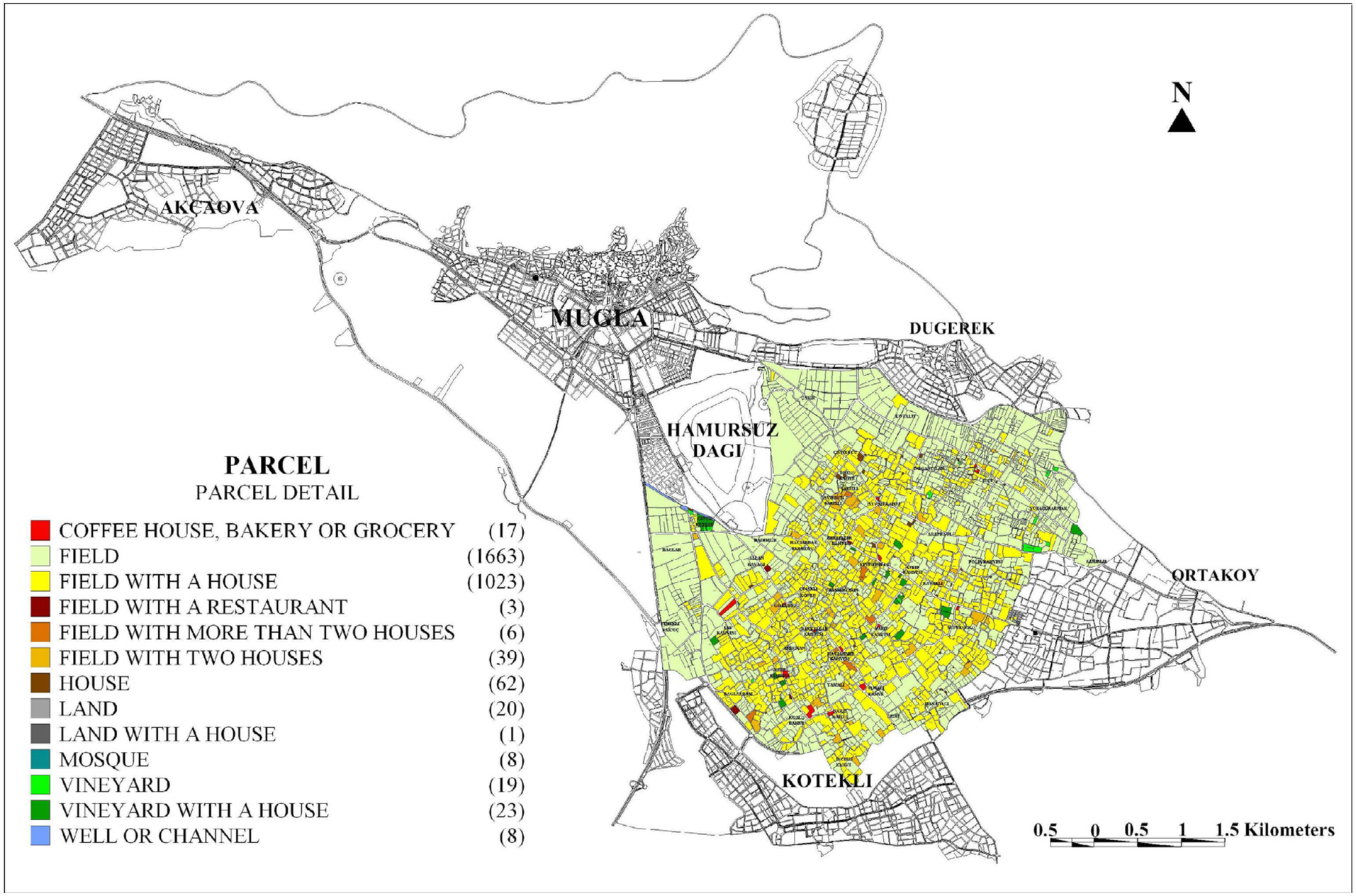


Figure D.6 The map of parcel qualifications

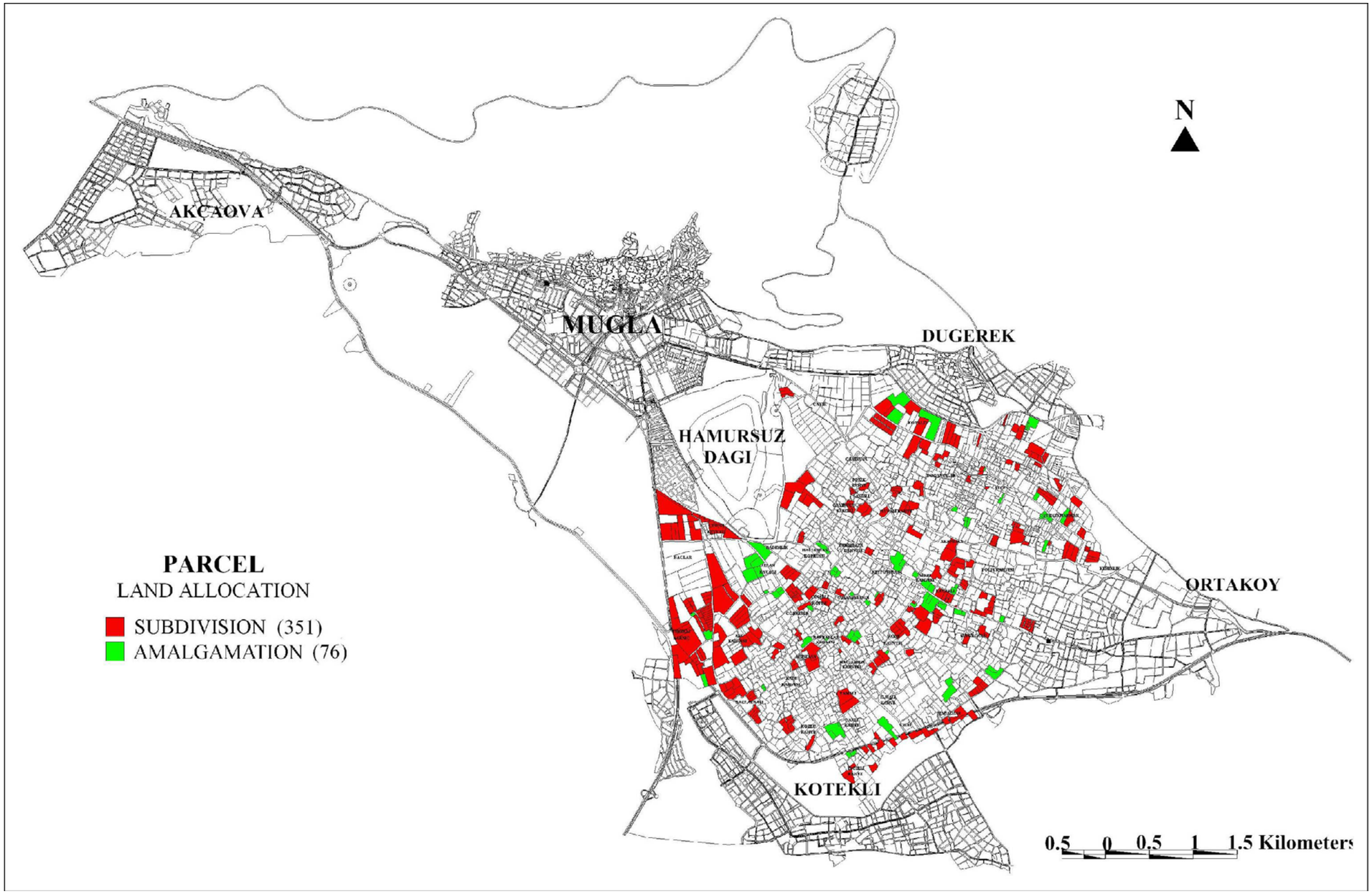


Figure D.7 The map of land allocations

APPENDIX E:

ANALYSIS OF THE LAND RECORDS

Table E.1 The List of Cultural and Natural Heritage That Must Be Preserved

LOCALITY	IMMOVABLE CULTURAL AND NATURAL HERITAGE THAT MUST BE PRESERVED (1989)	CULTURAL PROPERTY THAT MUST BE PRESERVED(1994)
Alan Kavağı		1
Ayvalı	5	2
Bakkallar	2	
Berberler	3	1
Cihanbeyendi	5	1
Çayırucu	1	1
Gökkıble	4	
Hacıahmet	4	1
Kadı kahvesi	1	
Kavaklı		1
Keyfoturağı	12	3
Kır kahvesi	2	1
Kozlu kahvesi	2	
Narlı kahve	1	
Polis kahvesi	2	2
Süpüroğlu	6	1
Vakıf kahvesi	1	
TOTAL	51	15

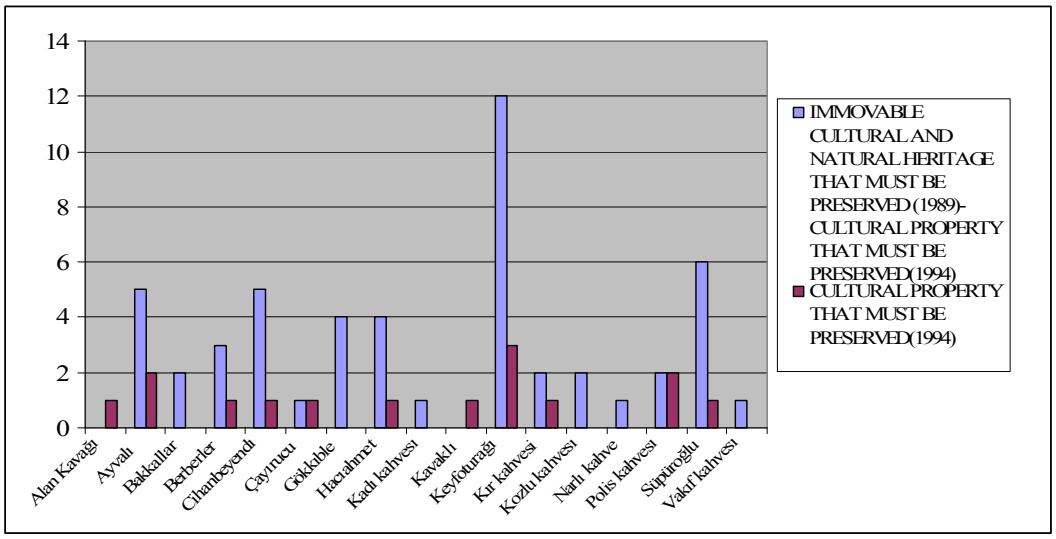


Table E.2 Means Table of Parcel Sizes (m^2) According to Localities

LOCALITY	Mean	Median	N	Minimum m^2	Maximum m^2	Sum	% of Total Sum
Unknown	2451,00	2451,00	1	2451	2451	2451	,0%
Ahisinan	3618,22	3082,00	32	844	18202	115783	,8%
Alan kavağı	4975,17	3293,00	30	16	19457	149255	1,0%
Arap bağı	10019,36	7803,00	14	1038	24072	140271	,9%
Ayvalı	4327,01	3228,00	139	3	19785	601455	3,9%
Bademlik	10215,40	8577,00	5	3287	18478	51077	,3%
Bağlar	**22186,63**	18670,00	19	623	**75971**	421546	2,7%
Bağlarbaşı	5332,89	3344,50	94	117	64310	501292	3,3%
Bakkallar	2466,08	2144,00	61	1	12326	150431	1,0%
Berberler kahvesi	3425,15	3000,00	39	161	14206	133581	,9%
Cedit	5028,00	5328,00	4	3254	6202	20112	,1%
Cevizli kahve	4803,47	4346,50	30	295	10020	144104	,9%
Cihanbeyendi	3112,23	2839,00	101	1	13478	314335	2,0%
Çayır	7834,41	7593,50	108	2000	53407	846116	5,5%
Çayırucu	4902,93	2880,50	174	6	36160	853110	5,5%
Çayırucu-Sakızlı	4164,61	3602,00	23	1150	19207	95786	,6%
Çınarlı köprü	3045,30	2570,00	33	293	12549	100495	,7%
Çinçin kuyusu	1015,03	151,50	144	1	21032	146164	1,0%
Doğancılar	2045,98	1440,00	125	63	12720	255747	1,7%
Elmalı	5750,03	3299,00	74	1	45380	425502	2,8%
Gökkıble	3004,10	2210,50	84	190	11175	252344	1,6%
Hacıabbas köprüsü	4854,16	4040,00	19	191	18879	92229	,6%
Hacıahmet	3067,06	2763,00	77	3	11505	236164	1,5%
Incirli kahve	4584,36	3907,00	44	1	18953	201712	1,3%
Kadı kahvesi	3416,86	3133,00	70	3	21905	239180	1,6%
Karabağlar yolu	1499,00	234,50	4	104	5423	5996	,0%
Kavaklı	3670,91	3708,00	22	26	8782	80760	,5%
Kemiklik	6906,68	5760,00	37	393	28220	255547	1,7%
Keyfoturağı	3691,11	2944,00	119	1	23474	439242	2,9%
Kır kahvesi	6118,18	4192,50	150	16	49417	917727	6,0%
Kozlu kahve	4410,64	3172,00	28	100	11354	123498	,8%
Köyaltı	1234,67	411,00	599	21	40640	739566	4,8%
Manadağı	3984,74	3084,00	65	3	17032	259008	1,7%
Marmaris bulvarı	**363,33**	100,00	191	1	19662	69396	,5%
Narlı kahve	3546,17	2646,00	47	47	14312	166670	1,1%
Ova	772,54	140,00	384	11	39992	296657	1,9%
Ova-Bağlar	6015,05	3010,50	38	2500	46315	228572	1,5%
Polis kahvesi	4699,47	4019,00	97	14	24803	455849	3,0%

Table E.2 Means Table of Parcel Sizes (m^2) According to Localities (Continued)

Sakızlı	3750,40	3990,00	5	1436	6342	18752	,1%
Sece	2857,96	1720,00	513	50	38980	1466133	9,5%
Süpüroğlu	4487,38	3379,50	228	3	22156	1023123	6,7%
Şeref kahvesi	3794,56	3443,00	16	1295	7948	60713	,4%
Topraklık	7493,80	4520,00	61	960	40760	457122	3,0%
Tozlu kahve	3371,82	2696,50	28	459	12594	94411	,6%
Vakıf kahvesi	4421,14	3329,00	117	1	27850	517273	3,4%
Yamalı	3709,59	2390,00	34	83	22002	126126	,8%
Yemekli sarnıç	8217,44	8395,00	9	68	18146	73957	,5%
Yüksekharman	6176,11	4120,00	163	104	30480	1006706	6,5%
Total	**3416,99**	2045,00	4499	1	75971	15373046	100,0%

Table E.3 Cross tabulation of Parcel Qualification and Parcel Size (m^2)

		m^2							Total
		<5000	5000-10000	10000-20000	20000-30000	30000-40000	40000-50000	50000<	
PARCEL Qualification	No explanation	22	7	5	1	0	0	0	35
	field	**1347**	352	155	34	9	5	3	1905
	building land	1045	11	2	0	0	0	1	1059
	field with a house	709	218	71	9	2	2	0	1011
	wooden or wood stone house	132	1	0	0	0	0	0	133
	building land with workshop, store or office	152	0	1	0	0	0	0	153
	building land with a house	23	0	0	0	0	0	0	23
	field with two houses	21	13	8	0	0	0	0	42
	vineyard	15	3	0	0	0	0	0	18
	vineyard with a house	17	6	0	1	0	0	0	24
	well or channel	45	1	1	0	0	0	0	47
	mosque	16	0	0	0	0	0	0	16
	coffee house, bakery or grocery	15	3	0	0	0	0	0	18
	field with more than two houses	2	2	1	0	0	0	0	5
	Transformer ,road, park etc.	8	2	0	0	0	0	0	10
Total		3569	619	244	45	11	7	4	4499

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	537,523(a)	84	,000
Likelihood Ratio	717,834	84	,000
Linear-by-Linear Association	31,531	1	,000
N of Valid Cases	4499		

a 76 cells (72,4%) have expected count less than 5. The minimum expected count is ,00.

Table E.4 Cross tabulation of Land Allocation and Year

		YEAR					Total
		1958-1970	1970-1980	1980-1990	1990-2000	2000-2006	
LAND ALLOCATION	purchase, sale	458	716	865	**1248**	**972**	4259
	donation	**246**	126	40	25	7	444
	forced sale	18	3	2	3	8	34
	forced transfer	0	0	1	1	0	2
	correction with certificate	40	24	21	40	13	138
	jointly owned amalgamation	0	1	1	10	20	32
	devolution of the legacy	180	344	370	449	402	1745
	cancellation of land registry	7	0	0	0	0	7
	cancel participation	10	10	6	4	4	34
	land subdivision	69	65	**667**	455	238	1494
	redevelopment	0	0	0	155	47	202
	preserving	1	23	22	24	8	78
	expropriation	0	4	18	0	0	22
	cadastre	1832	3	5	3	0	1843
	condominium ownership	0	0	3	17	17	37
	caretaking	**33**	14	19	7	4	77
	lot transfer	0	1	0	6	5	12
	recourse	1	13	6	2	2	24
	correction	190	123	106	103	122	644
	replacement	12	1	0	0	0	13
	reduction	0	0	2	0	0	2
	land registration	740	0	0	2	0	742
	barter	3	3	4	0	2	12
	partition	77	129	515	237	258	1216
	land amalgamation	3	7	24	**68**	21	123
	devise	3	7	8	1	5	24
Total		3059	3923	2705	2860	2155	13260

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9943,896(a)	100	,000
Likelihood Ratio	10347,875	100	,000
N of Valid Cases	13260		

a 44 cells (33,8%) have expected count less than 5. The minimum expected count is ,24.

Table E.5 Cross tabulation of Land Allocation and Location (Zones)

		LOCATION				Total
		1. ZONE	2. ZONE	3. ZONE	4.ZONE	
LAND ALLOCATION	purchase, sale	**2870**	781	105	430	4186
	donation	421	8	14	1	444
	forced sale	28	3	0	3	34
	forced transfer	2	0	0	0	2
	correction with certificate	123	13	2	0	138
	jointly owned amalgamation	24	4	3	1	32
	devolution of the legacy	1512	107	59	53	1731
	cancellation of land registry	6	1	0	0	7
	cancel participation	32	2	0	0	34
	land subdivision	440	**696**	12	346	1494
	redevelopment	5	0	0	197	202
	preserving	51	18	0	9	78
	expropriation	8	14	0	0	22
	cadastre	1677	74	92	0	1843
	condominium ownership	0	22	0	15	37
	caretaking	74	2	1	0	77
	lot transfer	12	0	0	0	12
	recourse	23	1	0	0	24
	correction	536	44	18	16	614
	replacement	12	0	1	0	13
	reduction	0	0	2	0	2
	land registiration	742	0	0	0	742
	barter	11	1	0	0	12
	partition	580	347	28	247	1202
	land amalgamation	29	**81**	0	12	122
	devise	21	2	1	0	24
	No explanation	11	33	0	0	44
Total		9250	2254	338	1330	13172

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5395,111(a)	78	,000
Likelihood Ratio	4821,573	78	,000
N of Valid Cases	13172		

a 44 cells (40,7%) have expected count less than 5. The minimum expected count is ,05.

Table E.6 Cross tabulation of Explanation of Expropriation and Year

		YEAR					Total
		1958-1970	1970-1980	1980-1990	1990-2000	2000-2006	
EXPLANATION	redevelopment application	0	0	1	4	11	16
		,0%	,0%	,9%	4,8%	10,8%	4,3%
	annexation	0	0	1	0	0	1
		,0%	,0%	,9%	,0%	,0%	,3%
	expropriation for public use	0	0	0	0	2	2
		,0%	,0%	,0%	,0%	2,0%	,5%
	amount correction	24	29	21	50	55	179
		100,0%	56,9%	18,9%	59,5%	53,9%	48,1%
	subtraction	0	4	4	1	0	9
		,0%	7,8%	3,6%	1,2%	,0%	2,4%
	expropriation for road and green area	0	0	**15**	5	0	20
		,0%	,0%	13,5%	6,0%	,0%	5,4%
	expropriation for road	0	18	**69**	24	34	145
		,0%	35,3%	62,2%	28,6%	33,3%	39,0%
Total		24	51	111	84	102	372
		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	122,415(a)	24	,000
Likelihood Ratio	140,026	24	,000
N of Valid Cases	372		

a 23 cells (65,7%) have expected count less than 5. The minimum expected count is ,06.

Table E.7 Means Table of Land Sizes Condemned to Road or Green Area (m^2)

LOCALITY	Mean	N	% of Total N	Sum
Ahisinan	-601,00	1	,3%	-601
Alan Kavağı	-9647,00	3	,8%	-28941
Ayvalı	-138,80	5	1,3%	-694
Bağlar	-976,33	6	1,6%	-5858
Bağlarbaşı	-870,13	16	4,3%	-13922
Bağlar-Ova	-2947,50	2	,5%	-5895
Bakkallar	,00	2	,5%	0
Berberler Kahvesi	-105,00	4	1,1%	-420
Cedit	-562,00	1	,3%	-562
Cevizli kahve	-17,00	3	,8%	-51
Cihanbeyendi	-11,80	5	1,3%	-59
Çayır	-340,00	8	2,2%	-2720
Çayır ucu	-11,50	4	1,1%	-46
Çayırucu-Sakızlı	-59,00	1	,3%	-59
Çınarlıköprü	-41,33	3	,8%	-124
Çinçin kuyusu	-1348,28	18	4,8%	-24269
Doğancılar	-2,75	8	2,2%	-22
Elmalı kahve	-342,22	9	2,4%	-3080
Gökkıble	509,17	6	1,6%	3055
Hacıabbas köprüsü	-108,00	1	,3%	-108
Hacıahmet kahvesi	-21,89	9	2,4%	-197
İncirli kahve	-882,86	14	3,8%	-12360
Kadı kahvesi	-8,13	8	2,2%	-65
Karabağlar yolu	-56,50	2	,5%	-113
Kavaklı	-118,00	7	1,9%	-826
Kemiklik	145,00	3	,8%	435
Keyfoturağı	-57,08	12	3,2%	-685
Kır kahvesi	-283,95	20	5,4%	-5679
Köyaltı	-2399,28	39	10,5%	-93572
Manadağı	-2123,86	14	3,8%	-29734
Marmaris Bulvarı	-3734,86	7	1,9%	-26144
Marmaris yolu	-1462,56	18	4,8%	-26326
Narlı kahve	-702,93	14	3,8%	-9841
Ova	-16878,00	6	1,6%	-101268
Ova-Bağlar	-1256,75	4	1,1%	-5027
Ova-Kır kahvesi	-365,00	3	,8%	-1095
Polis kahvesi	-14,50	4	1,1%	-58
Sece	-807,82	22	5,9%	-17772
Süpüroğlu	-118,06	18	4,8%	-2125
Şeref kahvesi	9,20	5	1,3%	46
Topraklık	4246,80	5	1,3%	21234
Tozlu kahve	-135,00	3	,8%	-405
Ula yolu-Ova	-14085,60	5	1,3%	-70428
Vakıf kahvesi	-112,25	4	1,1%	-449
Yemekli sarnıç	-1182,94	16	4,3%	-18927
Yüksekharman	1434,50	4	1,1%	5738
Total	-1290,37	372	100,0%	-480019

APPENDIX F:

ANALYSIS OF THE QUESTIONNAIRE

Table F.1 Frequencies related to parcel

PARCEL		**Frequency(N)**	**Percent (%)**
LAND ALLOCATION	Barter	1	0,5
	Caretaking	3	1,5
	Donation	1	0,5
	Heritage	61	30,5
	Purchase	118	59
	Rent	16	8
INHABITANCY STATUS	always	44	22
	seasonal	156	78
M2 CATEGORIES	462-1000	5	2,5
	1000-5000	122	61
	5000-10000	49	24,5
	10000-15000	15	7,5
	15000-20000	3	1,5
	20000-25000	3	1,5
AGRICULTURAL MANAGER	fellow partner	2	1
	gardener	4	2
	kinsfolk	2	1
	neighbor	1	0,5
	self	176	88
	tenant	7	3,5
	uncultivated	4	2
	worker	4	2
AGRICULTURAL PROFIT of 2006	0	10	5
	0-5000 TL	13	6,5
	5000-10000 TL	5	2,5
	10000< TL	1	0,5
	Self-sufficient	171	85,5
LIVESTOCK PRODUCTION	No livestock production	164	82
	Poultry farming	2	1
	Stock farming of cow	28	14
	Stock farming of small cattle	6	3

Table F.1 Frequencies related to parcel (Continued)

FORMER OWNER	Bozdoğan village	1	0,5
	Dalyan	1	0,5
	Denizli/Kale	1	0,5
	Düğerek	10	5
	Gevenez village	1	0,5
	Göktepe	2	1
	İzmir	1	0,5
	Kavaklıdere	1	0,5
	Kıralan village	1	0,5
	Leyne village	1	0,5
	Muğla	169	84,5
	Ortaköy	2	1
	Ula	1	0,5
	Yaraş village	3	1,5
	Yerkesik	3	1,5
	Yeşilyurt	1	0,5
	Zeytinköy	1	0,5
TOTAL		200	100%

Table F.2 Cross tabulation of Parcel Size (m^2) and Agricultural Profit (TL in 2006)

		AGRICULTURAL PROFIT					**Total**
		0	self-	0-	5000-	10000<	
m^2	462-1000	0	10	0	0	0	10
		,0%	3,2%	,0%	,0%	,0%	2,8%
	1000-5000	8	205	7	0	0	220
		40,0%	**65,7%**	**41,2%**	,0%	,0%	61,8%
	5000-10000	2	74	5	6	1	88
		10,0%	23,7%	29,4%	**100,0%**	**100,0%**	24,7%
	10000-	4	19	1	0	0	24
		20,0%	6,1%	5,9%	,0%	,0%	6,7%
	15000-	2	3	0	0	0	5
		10,0%	1,0%	,0%	,0%	,0%	1,4%
	20000-	4	1	0	0	0	5
		20,0%	,3%	,0%	,0%	,0%	1,4%
	25000-	0	0	4	0	0	4
		,0%	,0%	23,5%	,0%	,0%	1,1%
Total		20	312	17	6	1	356
		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	176,443(a)	24	,000
Likelihood Ratio	79,466	24	,000
Linear-by-Linear Association	,237	1	,626
N of Valid Cases	356		

a 29 cells (82,9%) have expected count less than 5. The minimum expected count is ,01.

Table F.3 Cross tabulation of Inhabitancy Status and Agricultural Profit (TL in 2006)

		AGRICULTURAL PROFIT					Total
		0	self-sufficient	0-5000	5000-10000	10000<	
INHABITANCY STATUS	always	0	30	9	4	1	44
		,0%	9,6%	52,9%	**66,7%**	100,0%	12,4%
	seasonal	20	282	8	2	0	312
		100,0%	**90,4%**	47,1%	33,3%	,0%	87,6%
Total		20	312	17	6	1	356
		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54,263(a)	4	,000
Likelihood Ratio	37,635	4	,000
Linear-by-Linear Association	45,355	1	,000
N of Valid Cases	356		

a 5 cells (50,0%) have expected count less than 5. The minimum expected count is ,12.

Table F.4 Cross tabulation of Parcel size (m^2) and Agricultural Manager

		AGRICULTURAL MANAGER								Total
		fellow partner	gardener	kinsfolk	neighbor	self	tenant	uncultivated	worker	
m^2	462-1000	0	0	0	0	10	0	0	0	10
		,0%	,0%	,0%	,0%	3,2%	,0%	,0%	,0%	2,8%
	1000-5000	2	8	2	2	196	0	8	2	220
		50,0%	100,0%	50,0%	100,0%	**63,6%**	,0%	100,0%	25,0%	61,8%
	5000-10000	2	0	2	0	76	4	0	4	88
		50,0%	,0%	50,0%	,0%	24,7%	**28,6%**	,0%	50,0%	24,7%
	10000-15000	0	0	0	0	20	4	0	0	24
		,0%	,0%	,0%	,0%	6,5%	**28,6%**	,0%	,0%	6,7%
	15000-20000	0	0	0	0	3	2	0	0	5
		,0%	,0%	,0%	,0%	1,0%	14,3%	,0%	,0%	1,4%
	20000-25000	0	0	0	0	1	4	0	0	5
		,0%	,0%	,0%	,0%	,3%	**28,6%**	,0%	,0%	1,4%
	25000-33339	0	0	0	0	2	0	0	2	4
		,0%	,0%	,0%	,0%	,6%	,0%	,0%	25,0%	1,1%
Total		4	8	4	2	308	14	8	8	356
		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	173,131(a)	42	,000
Likelihood Ratio	87,086	42	,000
Linear-by-Linear Association	15,330	1	,000
N of Valid Cases	356		

a 51 cells (91,1%) have expected count less than 5. The minimum expected count is ,02.

Table F.5 Cross tabulation of Land Allocation and Year

		YEAR						Total
		1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2006	
LAND ALLOCATION	barter	0	2	0	0	0	0	2
		,0%	9,5%	,0%	,0%	,0%	,0%	,6%
	caretaking	0	0	0	2	2	2	6
		,0%	,0%	,0%	2,5%	2,0%	2,3%	1,7%
	donation	0	2	0	0	0	0	2
		,0%	**9,5%**	,0%	,0%	,0%	,0%	,6%
	heritage	4	10	23	34	28	18	117
		50,0%	47,6%	41,1%	**42,0%**	27,5%	20,5%	32,9%
	purchase	4	7	33	43	68	51	206
		50,0%	33,3%	58,9%	53,1%	**66,7%**	**58,0%**	57,9%
	rent	0	0	0	2	4	17	23
		,0%	,0%	,0%	2,5%	3,9%	**19,3%**	6,5%
Total		8	21	56	81	102	88	356
		100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	69,208(a)	30	,000
Likelihood Ratio	45,957	30	,031
N of Valid Cases	200		

a 33 cells (78,6%) have expected count less than 5. The minimum expected count is ,02.

Table F.6 Agricultural product

	VEGETABLE		FRUIT		TOBACCO		WHEAT		VINEYARD		OTHER PRODUCTS		OUT OF USE	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total	9	**191**	29	**171**	176	**24**	173	**27**	190	**10**	191	**9**	194	**6**

Table F.7 Frequencies related to building

BUILDING		Frequency(N)	Percent(%)
NUMBER OF ROOM	no building	1	0,5
	1	6	3
	2	63	31,5
	3	61	30,5
	4	45	22,5
	5	14	7
	6	6	3
	7	2	1
	8	2	1
NUMBER OF FLOOR	no building	1	0,5
	1 floor	105	52,5
	2 floor	94	47
M2	no building	2	1
	<50 m2	24	12
	50-100 m2	112	56
	100-150 m2	48	24
	150-200 m2	11	5,5
	200-250 m2	2	1
	250< m2	1	0,5
OUTBUILDING M2	no building	92	46
	<20 m2	21	10,5
	20-40	51	25,5
	40-60	27	13,5
	60-80	7	3,5
	80-100	2	1
STALL M2	no building	145	72,5
	<20 m2	5	2,5
	20-40 m2	14	7
	40-60 m2	27	13,5
	60-80 m2	6	3
	80-100 m2	1	0,5
	100< m2	2	1
BUILDING TYPE	no building	1	0,5
	traditional	83	41,5
	new harmanious	44	22
	new inharmanious	18	9
	poor in quality	51	25,5
	collapsed	3	1,5
CONSERVATION STATUS	non-traditional	117	58,5
	necessary maintenance and restoration is done	29	14,5
	partly conserved by maintenance	35	17,5
	necessary maintenance and restoration is not done	19	9,5

Table F.7 Frequencies related to building (Continued)

CONSTRUCTION TECHNIQUE	briquette	2	1
	concrete	13	6,5
	no building	1	0,5
	stone	7	3,5
	stone briquette pile	19	9,5
	wood stone	158	79
OWNERSHIP	joint	11	5,5
	no building	1	0,5
	rented	14	7
	self	174	87
TOTAL		200	100%

Table F.8 Cross tabulation of Construction Year and Building Total Area (m^2)

	m^2							Total
	NO BUILDING	<50 m2	50-100 m2	100-150 m2	150-200 m2	200-250 m2	250< m2	
NO BUILDING	2	0	0	0	0	0	0	2
	100,0%	,0%	,0%	,0%	,0%	,0%	,0%	1,0%
1800-1850	0	0	0	2	0	0	0	2
	,0%	,0%	,0%	4,2%	,0%	,0%	,0%	1,0%
1850-1900	0	0	8	2	2	0	0	12
	,0%	,0%	7,1%	4,2%	18,2%	,0%	,0%	6,0%
1900-1950	0	8	29	12	4	0	0	53
	,0%	33,3%	25,9%	25,0%	36,4%	,0%	,0%	26,5%
1950-2000	0	13	65	17	4	2	1	102
	,0%	54,2%	**58,0%**	35,4%	36,4%	100,0%	100,0%	51,0%
2000<	0	3	10	15	1	0	0	29
	,0%	12,5%	8,9%	**31,3%**	9,1%	,0%	,0%	14,5%
Total	2	24	112	48	11	2	1	200
	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	132,471(a)	30	,000
Likelihood Ratio	43,402	30	,054
Linear-by-Linear Association	,215	1	,643
N of Valid Cases	200		

a 32 cells (76,2%) have expected count less than 5. The minimum expected count is ,01.

Table F.9 Frequencies related to household

HOUSEHOLD		Frequency(N)	Percent(%)
FAMILY NUMBER	1	184	92
	2	13	6,5
	3	3	1,5
MIGRATION YEAR	no migration	137	68,5
	<1950	1	0,5
	1950-1960	3	1,5
	1960-1970	4	2
	1970-1980	14	7
	1980-1990	11	5,5
	1990-2000	14	7
	2000<	16	8
HOUSE HOLD	1	10	5
	2	85	42,5
	3	36	18
	4	31	15,5
	5	18	9
	6	12	6
	7	1	0,5
	8	6	3
	9	1	0,5
GENDER	man	298	47,3
	woman	332	52,7
PLACE OF BIRTH	Muğla	319	50,6
	towns of Muğla	212	33,7
	different provinces, country	99	15,7
EDUCATION	illiterate	19	3
	before elementary school	19	3
	elementary school	349	55,4
	high school	115	18,3
	college	42	6,7
	bachelor	82	13
	graduate	4	0,6
NATIONALITY	german	8	1,3
	turkish	621	98,6
	jordanian	1	0,2
OCCUPATION	farmer	53	8,4
	teacher	14	2,2
	student	96	15,2
	self-employment	48	7,6
	worker	40	6,3
	officer	21	3,3
	bank employee	3	0,5
	engineer	13	2,1
	architect	1	0,2
	lawyer	1	0,2
	doctor	4	0,6
	accountant-financer	8	1,3
	retired	127	20,2
	housewives	171	27,1
	others	30	4,8

Table F.9 Frequencies related to household (Continued)

AGE	0-9	30	4,8
	10-19	69	11
	20-29	84	13,3
	30-39	46	7,3
	40-49	78	12,4
	50-59	133	21,1
	60-69	126	20
	70-79	48	7,6
	80-90	16	2,5
VEHICLE OWNERSHIP	no vehicle	50	25,0
	one car	82	41,0
	one motor	22	11,0
	one motor, one car	14	7,0
	one tractor	5	2,5
	one tractor, one car	6	3,0
	two cars	15	7,5
	three and more	5	2,5
	bicycle	1	,5
TOTAL		200	100%

Table F.10 Cross tabulation of Education and Occupation

		EDUCATION							Total
		ILLITERATE	BEFORE ELEMENTARY SCHOOL	ELEMENTARY SCHOOL	HIGH SCHOOL	COLLEGE	BACHELOR	GRADUATE	
OCCUPATION	FARMER	4	0	**48**	1	0	0	0	53
	TEACHER	0	0	0	0	5	9	0	14
	STUDENT	0	0	38	37	1	20	0	96
	SELF-EMPLOYMENT	0	0	28	12	1	6	1	48
	WORKER	0	0	27	11	0	2	0	40
	OFFICER	0	0	1	6	3	11	0	21
	BANK EMPLOYEE	0	0	0	2	0	1	0	3
	ENGINEER	0	0	0	0	1	9	3	13
	ARCHITECT	0	0	0	0	0	1	0	1
	LAWYER	0	0	0	0	0	1	0	1
	DOCTOR	0	0	0	0	0	4	0	4
	ACCOUNTANT-FINANCER	0	0	0	1	3	4	0	8
	RETIRED	0	0	**63**	26	27	11	0	127
	HOUSE WIVES	15	0	**140**	15	1	0	0	171
	OTHERS	0	19	4	4	0	3	0	30
Total		19	19	349	115	42	82	4	630

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	921,924(a)	84	,000
Likelihood Ratio	566,227	84	,000
Linear-by-Linear Association	25,198	1	,000
N of Valid Cases	630		

a 77 cells (73,3%) have expected count less than 5. The minimum expected count is ,01.

Table F.11 Cross tabulation of Age and Occupation

		AGE									Total
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-90	
OCCUPATION	FARMER	0	2	7	6	**13**	11	5	9	0	53
	TEACHER	0	0	6	1	3	3	1	0	0	14
	STUDENT	12	64	19	1	0	0	0	0	0	96
	SELF-EMPLOYMENT	0	0	12	5	7	9	10	2	3	48
	WORKER	0	0	11	13	8	3	5	0	0	40
	OFFICER	0	0	6	3	6	3	2	1	0	21
	BANK EMPLOYEE	0	0	0	0	0	3	0	0	0	3
	ENGINEER	0	0	3	1	1	4	4	0	0	13
	ARCHITECT	0	0	0	1	0	0	0	0	0	1
	LAWYER	0	0	0	0	1	0	0	0	0	1
	DOCTOR	0	0	0	1	1	2	0	0	0	4
	ACCOUNTANT-FINANCER	0	0	4	0	0	2	2	0	0	8
	RETIRED	0	0	0	0	11	**52**	44	16	4	127
	HOUSEWIVES	1	1	9	12	27	40	**52**	20	9	171
	OTHERS	17	2	7	2	0	1	1	0	0	30
Total		30	69	84	46	78	133	126	48	16	630

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	864,214(a)	112	,000
Likelihood Ratio	721,161	112	,000
Linear-by-Linear Association	107,640	1	,000
N of Valid Cases	630		

a 97 cells (71,9%) have expected count less than 5. The minimum expected count is ,03.

Table F.12 Frequencies related to general questions

GENERAL		**Frequency(N)**	**Percent(%)**
RECREATIONAL CHOICE	mountainous area	14	7
	seaside	21	10,5
	plateau	165	82,5
FREQUENCY OF USE OF COFFEE HOUSES	one time in a day	26	13
	one time in a week	18	9
	one time in a month	7	3,5
	one time in a year	4	2
	never	145	72,5
FREQUENCY OF USE OF MASJIDS	one time in a day	11	5,5
	one time in a week	95	47,5
	one time in a year	14	7
	never	80	40
CONSCIOUSNESS OF CONSERVATION	yes	160	80
	no	40	20
TOTAL		200	100%

Table F.13 Answers to Question 2

OUESTION 2		**Frequency (N)**	**Percent (%)**
Why do you choose Karabağlar?	Economic contribution	43	12,7
	Cool climate	91	26,8
	Natural setting	45	13,3
	Tradition	37	10,9
	Hobby farming and resting	54	15,9
	Closeness to town (for children' school, other service sectors)	25	7,4
	Calm and remoteness	40	11,8
	Investment	4	1,2

Table F.14 Answers to Question 6

OUESTION 6		**Frequency (N)**	**Percent (%)**
Do you think Karabağlar have changed from past to present? What kind of changes happened?	Natural environment is destroyed, vegetation is degraded (elm trees)	44	11
	Kesikler and irimler are destroyed. Stonewalls and wire fences are constructed.	19	4,8
	New modern house buildings are constructed.	50	12,5
	There are many new comers from villages and other towns	44	11
	Technological developments (electricity, vehicles, communication, hydrophore system for wells)	58	14,5
	Roads are widened and heightened, made asphalt and buses are on service	37	9,3
	lifestyle changed, recreational use	33	8,3
	Seasonal migration ended	18	4,5
	Karabağlar accepted conservation site	10	2,5
	Rant value of Karabağlar lands increased	8	2
	Tobacco production and viticulture ended	30	7,5
	Coffee houses and masjids are out of service now and coffee houses became restaurants, there is no cultural activity on coffee house localities	23	5,8
	There is no change or I do not know	25	6,3

Table F.15 Answers to Question 7

OUESTION 7		**Frequency (N)**	**Percent (%)**
Dou you know 'irim' and 'kesik'?	Yes, he or she knows	164	82
	No, he or she does not know or know just one	24	12
	Wrong definition	12	6

Table F.16 Answers to Question 8

OUESTION 8		**Frequency (N)**	**Percent (%)**
Are you doing the maintenance of your 'irim' and 'kesik'?	Yes, he or she is doing	138	69
	No, he or she is not doing	16	8
	Municipality is doing	27	13,5
	There is no kesik because of walls and wire fences	19	9,5

Table F.17 Answers to Question 9

OUESTION 9		**Frequency (N)**	**Percent (%)**
What does the perpetuation of Karabağlar depend on?	Coffee houses and masjids should be in service again	21	7,6
	Infrastructure should be enhanced (canalization, water supply, ponding area problems, roads, irimler, artesian wells, garbage problems)	83	29,9
	The residents should have consciousness	21	7,6
	Tourism activities should be fostered	26	9,4
	Restoration of traditional houses	5	1,8
	The natural environment should be preserved and no more house	16	5,6
	Traditional lifestyle should be fostered, people should live in Karabağlar	14	5
	No intervention is needed	13	4,7
	Agricultural production should be fostered (tobacco production and viticulture)	37	13,3
	Municipality should take care	25	9
	Site conservation plan decisions should not be applied	17	6,1

CURRICULUM VITAE

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EDUCATION

Degree	Institution	Year of Graduation
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High School	Muğla Anatolian High School	1996

WORK EXPERIENCE

Year	Place	Enrollment
2004 – Present	METU, Department of City and Regional Planning	Research Assisstant
2002(June-December)	Uzun Engineering Company Ankara Natural Gas Transition Line Projects	Technical Project Developer

FOREIGN LANGUAGES

English (advanced)
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PUBLICATIONS

Barlas, A., Koca, F. (July 2006) "Introducing two landscape components from Turkey: Irim and Kesik" Journal of The Landscape Research Group, Volume 31, Number 3, pp. 215-228.

Koca, F. (March 2006) "Changing Rural Character Related to Urban Growth in Muğla, Karabağlar" Proceedings of First International CIB Endorsed METU Postgraduate Conference, pp. 679-690, METU, Ankara, Turkey.

Koca, F. (March 2006) "The Urban Sprawl and Macroform Development in Ankara: The Emergence of New Town and New CBD", Proceedings of First International CIB Endorsed METU Postgraduate Conference, pp.771-772, METU, Ankara, Turkey.

AREAS OF INTEREST

Landscape Architecture, Urban Design, Country Planning, Photography, Painting, Digital Art, Ceramics, Sculpture, Swimming, Tennis.