THE GROWING PROBLEM BETWEEN URBAN EXPANSION AND SUSTAINABILITY OF AGRICULTURAL LANDS, KIRCAMI EXAMPLE IN ANTALYA

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ABSTRACT

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Land controversy between cities and rural areas is a vital problem of the world's natural resources. At the two sides of the problem, there are the land requirement for expanding cities and *loss of arable lands*. Absolutely, arable lands have to be protected for the longer term in Turkey that has reached to its limits. However, due to political, legal and implementation mistakes, consuming of arable lands is continuing rapidly.

Antalya city of Turkey has developed rapidly in last 50 years due to the unforeseen development of tourism sector and migration. Although city had one of the most important agricultural productions of Turkey, it lost serious amount of its arable lands due to *urbanization*. Kırcami Area is a 1600 ha *agricultural settlement* dominantly with greenhouses that are the 7 per cent of all greenhouses of Antalya city. Area was a rural recreation area for Antalya residents and called as *kır* in its past. Today, although the lands of the area are still primary agricultural lands and urban agriculture is continuing, the area is planned for urban purposes for several times since 1996.

Today, the area is locating in the city and supporters of development termed the area as *a void in the macro-form of Antalya city*. This thesis approaches to Kırcami Area as a *'value'* owing to its agricultural and natural richness.

In this thesis, land loss and land conservation problems are initially examined by theoretical background and literature reviews. Then the data that obtained by observations, interviews and survey were analyzed through both *agricultural* and *natural values* of urban agricultural lands for the aim of determining the *value* of Kırcami Area that has to be protected. Finally, legal and political dimension of the problem are discussed and some suggestions are submitted as being the solution way for the problem.

Keywords: Value, Urbanization, Agricultural settlement, Agricultural land loss, Urban Agriculture

ÖZ

KENTSEL BÜYÜME VE TARIM TOPRAKLARININ SÜRDÜRÜLEBİRLİĞİ ARASINDA BÜYÜMEKTE SORUN: ANTALYA, KIRCAMİ ÖRNEĞİ

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Kentler ve kırsal alanlar arasındaki arazi kullanımı problemi dünyanın doğal kaynakları açısından hayati bir problemdir. Problemin bir ucunda büyümekte olan kentlerin arazi ihtiyacı bulunurken, diğer ucunda ise bu durum verimli tarım topraklarının yok oluşuna neden olmaktadır. Verimli tarım toprakları kaynaklarının sınırına gelmiş bulunan Türkiye için tarım arazilerinin korunması kaçınılmazdır. Buna rağmen yasal eksiklikler, siyasal ve uygulamaya dönük hatalar problemin artarak devam etmesine neden olmaktadır.

Türkiye'nin beşinci büyük kenti olan Antalya, büyüyen turizm sektörüne bağlı olarak göç alması nedeniyle son 50 yılda öngülemeyen bir şekilde büyümüştür. Kent, ülkenin en önemli tarımsal üretim merkezlerinden biri olduğu halde, çok önemli miktarda verimli tarım toprağını *kentsel büyüme* nedeniyle kaybetmiştir. Kırcami Bölgesi, 1600 hektar *kentsel tarım* alanına sahip olan ve bugün Antalya kenti içinde kalmış önemli bir *tarımsal yerleşim* bölgesidir. Antalya ilindeki sera alanlarının toplamının %7 si bu bölge kapsamındadır. Geçmişinde, Antalyalılar'ın '*kır*' adını verdikleri ve bir rekreasyon alanı olarak faydalandıkları bu bölge bugün hala birinci derece tarım topraklarına sahiptir ve buna rağmen 1996 yılı Antalya Planı'ndan beri imara açılmak istenmektedir.

İmar kararını destekleyen grupların savundukları 'Bölge, kent makroformu içinde kalmış anlamsız bir boşluktur' görüşünün aksine bu tez çalışmasının yaklaşımı, Kırcami Tarım Bölgesi'nin Antalya kenti için *'tarımsal ve kültürel bir değer'* olduğudur.

Bu amaç doğrultusunda Kırcami alanının değerini ortaya koymak için önceliki olarak teorik araştırma ve literatür incelemesi yapılmış; ardından gözlem, görüşme ve anket yöntemleri yoluyla elde edilen veri kentsel tarım topraklarının tarımsal ve doğal değerleri bakımından analiz edilmiş; sonuç olarak Kırcami Bölgesi'nin korunması gereken bir *değer* olduğu ortaya koyulmuştur. Ardından soruna neden olan legal eksiklikler siyasi hatalarla birlikte irdelenmiş ve sorunun çözümüne yönelik öneriler sunulmuştur.

Anahtar Kelimeler: Değer, Kentsel Büyüme, Tarımsal Yerleşim, Tarımsal Toprak Kaybı, Kentsel Tarım

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My family is the main factor that makes me stronger every day.

My husband Ergin and my dear son Deniz… I am sure we will achieve greater ones together…

To my son Erce Deniz Topcu,

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ABBREVATIONS

A.E.S.R. : ANTALYA ENVIRONMENT STATUS REPORT

A.M.E. : ANTALYA MERCANTILE EXCHANGE

A.M.M. : ANTALYA METROPOLITAN MUNICIPALITY

L.C.A. : LAND CONSERVATION ACT

L.C.A.T. **:** LAND CONSERVATION APPROACHES OF TURKEY

L.C.P. : LAND CONSERVATION PROGRAMME

NGO : NON-GOVERNMENTAL ORGANIZATION

S.P.A. : SPECIAL PLANNING AREA

UNDP : UNITED NATIONS DEVELOPMENT PROGRAMME

CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION

This thesis is prepared as to address the consumption problem of arable agricultural lands in Turkey. This universal problem causes the loss of considerable amount of arable agricultural land resources especially in developing countries each year.

Essentially, emergence of the problem dates back to humanity's initial experience of agricultural production in about B.C. 10000-5000, in the Neolithic Period. Human beings first benefited from agriculture and animal husbandry for their produce and reproductions in this period. After a period of time, depending on production and consumption of plants and animals, products became domestic and thus the predator societies transformed to agriculturist (making agriculture and bringing up animals) societies. In following periods, the societies develop their own agriculture structures albeit the divergent ecosystems of the world. This transformation is the ***Neolithic Agriculture Revolution*** that is the first revolution of humanity and V.G. Childe emphasize it as 'the first revolution that transforms the human economy' (Mazoyer & Roudart 2007, translated to Turkish by Ünsaldı, 2009).

Although of fundamental importance today, agriculture is relatively a recent human innovation that spread rapidly across the globe only 10000 to 12000 years ago (Parikh, 2012). Neolithic Agriculture Revolution was also one of the influential factors on making the human groups settling on the land and establishing the initial cities. Consumption of arable agricultural lands problem occurred in those periods due to the establishmenet of neighborhood of ancient cities and agricultural lands; arable lands started to be used due to the requirements (land and food requirement) of rapid increasing population in this period. These were the first steps of

urbanization and thus initial urban residents became initial agriculture workers of ancient cities.

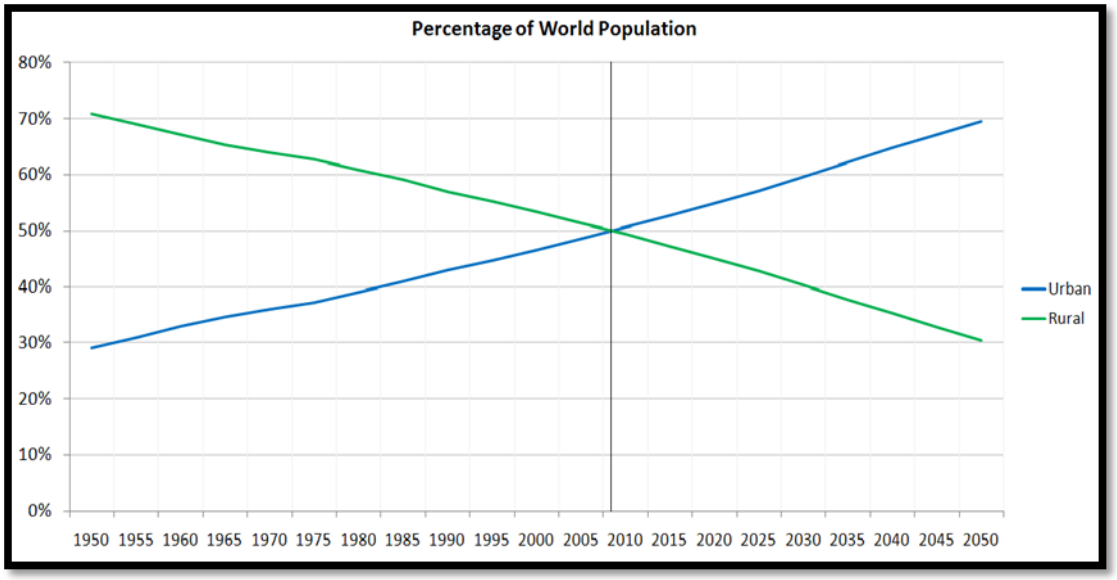
'It is clear that agriculture sustains and defines our modern lives, but it is often disruptive of natural ecosystems' (Parikh, 2012). Urbanization process kept agriculture in and near urban areas until the technological developments that provide new methods on storage and transporting foods. Not only industrial and technological developments but also the increasing population led to rapid urbanization that cause radical divide between agriculture and cities. Rural and agricultural lands started to be occupied by the rapid urbanization. 'Land uses for residential, industrial and commercial, civic and culture tend to dominate agricultural lands in the bid for space in the urban place. This dominance tends to deprive farmers of arable land to cultivate thereby reducing agricultural productivity' (Naab, Dinye, Kasanga, 2013).

Urbanization process has two facets: *rural* with its dominant agricultural qualities and *urban* with its predominantly non-agricultural qualities (Keleş, 2014). 'In 1800, only 3% of the world's population lived in urban centers of 5 000 or more and many of these behaved like large villages in their socio-economic activities. By 1900, 14 per cent of the world's population was living urban centers and this proportion increased rapidly after 1950 to reach close to 50%' (Fazal, 2000).

Today, 60% of world's settlement areas are urban. 54 % of the world's population lives in urban areas, a proportion that is expected to increase to 66% by 2050. Projections show that urbanization combined with the overall growth of the world's population could add another 2.5 billion people to urban population by 2050. The urban population of the world has grown rapidly from 746 million in 1950 to 3.9 billion in 2014 and it is expected to surpass six billion by 2045. The rural population of the world has grown slowly since 1950 and is expected to reach its peak around 2020. The global rural population is now close to 3.4 billion and is expected to decline to 3.1 billion by 2050 (Data source: United Nations Official Web site, http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html).

‘Globally, it has been forecasted that 24 million hectares of crop land will be transformed to urban use by the year 2000. This is only about 2 per cent of the world’s total crop land but it provides the equivalent present-day food supply for some 84 million peole. The loss of agricultural land to urbanization is most severe in low and middle-income nations. One estimate suggested that by 2000, more than 476,000 hectares of land a year will be built up in low and middle-income nations’ (Fazal, 2000).

The world’s surface area is 13 billion hectares and 37% of these are used through agricultural purposes. Food and Agricultural Organization of United Nations indicates in the study of ‘World Agriculture: Towards 2010’, the world has ‘1,8 billion hectares agricultural land potential for the future and a great deal of countries and also Turkey are at the limits of their agricultural land potential’



Graphic 1: Transformation of present and forecasted percentages of urban-rural population between 1950 and 2050

Data Source: United Nations’ Official Web Site, http://esa.un.org/unup/p2k0data.asp

Graphic 1 demonstrates the transformation of present and forecasted percentages of urban-rural population in the 100 years period between the years 1950-2050. One of the most important effects of urbanization on rural areas is probably the urban use of arable agricultural lands and losing arable lands due to urbanization. It is also a vital problem of Turkey's enlarging cities. Especially in the coastal border, it is seen that land use transformation is realized from agricultural to housing and tourism and 29,3 % of agricultural lands were transformed to other uses in the period of 1990-2000 (Bayar, 2004). In her thesis Topcu (2012), according to the results of a survey study that was applied to respondents from universities, non-governmental organizations, public and special organizations, exposed that the most important problem of agricultural lands is non-agricultural uses and the urbanization is the main reason of non-agricultural uses of agricultural lands in Turkey.

According to 2014-2018 10th Development Plan of Turkey, the main sectors that take place on agricultural lands are industry, housing, tourism, mining and transportation sectors in order and in the years between 1989 and 2010, 827.000ha of agricultural area transformed to other uses. In only 2011, for industrial purposes 22400 ha, for housing sector 12400ha, for tourism sector 12000 ha, for mining sector 7900ha and for transportation purpose 6500 ha agricultural land transformed in Turkey.

In 1928, while Turkey has 6, 6 million ha agricultural production area, until the end of 1980s this amount increased to 28 million ha. However, agricultural lands amount started to decrease in the beginning of 1990s.

Contemporarily, the main causes of the land-use problems are non-existence of sustainable and/or effective land management policies and exterminating the land resources because of exterior and wrong agricultural policies (Aksoy & Özsoy, 2013). Four main factors causing to arable land loss problem in Turkey:

1. Inadequacy of laws associated with arable land protection
2. Inadequacy of 'urban ecology' approach in Turkey's planning and application practices
3. Highly fragmented lands and ownership of property

4. National and local policies that lead to urban sprawl because of the practices that are not appropriate with development plans

Table 1: Decrease in agricultural land amounts in Turkey after 1990s

YEARS	TOTAL AGRICULTURAL LAND OF TURKEY (ha)
1990	42.033.000
1995	39.212.000
2000	38.757.000
2005	41.223.000
2011	38.247.000

Data source: 10th Development Plan

Loss of land resources is at the same time means the loss of rural settlements, loss of rural socio-economic and cultural structures and transformation of rural landscapes, decreasing of bio-diversity. Comprehending the urban agricultural lands as being 'value' of urban eco-system, is the main approach of this thesis due to the agricultural land loss problem in Turkey.

Antalya city is one of the most important agricultural production cities of Turkey. According to Antalya Mercantile Exchange (A.M.E.)'s journal of Barsonomi (2014), Antalya city has the 53% of Turkey's exportation. However, in last 10 years, Antalya city lost its 267 000 da agricultural lands as the result of urbanization. Kırcami Area which is expected for development since 1980s is an important agricultural production area of Antalya city with 1600 ha land.

Kırcami Area is an agricultural settlement area and its economic structure is dominantly based on greenhouse production and greenhouse production is being done for nearly 50 years. Not only in greenhouses but also in open fields, agricultural production is still going on in the area. In Kırcami Area 1424 ha of total 1660 ha area is agricultural production area (Report of 1/5000 scaled plan of Kırcami). According

to the information obtained from Antalya Chambers of Agriculture Engineers, 8% of greenhouses of Antalya city are locating in the Kırcami Area.

Kırcami Area is planned for development before about 30 years. Because it is primary agricultural land, development decision is precluded through the judicial decisions through the objections of Chambers of Agricultural Engineers, Chambers of Architectures and non-governmental organizations. However, constructions on the area are continuing associated with partial development plans and arable lands are consuming relatedly.

This thesis is done for emphasizing the agricultural land loss problem and accordingly, exposing an attention on the necessity for conserving the urban agricultural lands as *'being value'* in Turkey through the example of Kırcami Area's development problem. Study is related with the natural and cultural values of agricultural areas that have to be protected for the longer term.

1.1.1. AIM OF THE STUDY

This thesis is prepared for exposing the ***'value'*** of arable urban agricultural lands of Kırcami Area in Antalya city of Turkey. In this study, urban agricultural lands refers to *the agricultural lands locating inside or at the fringe of an urban area* and the concept of **'value of agricultural lands'** refers to *agricultural* and *natural value*. Under this knowledge, the overall aim of this study indicating the value and the requirement of conservation of urban agricultural lands through examining the case of Kırcami Region in Antalya.

With regard to the overall aim, study also targets three aims for exposing that are:

1. Determining the main concepts those are related with the problem area such as: *rural, rurality,urbanization, urban fringe, urban quality of life, urban open green systems, value, value of an agricultural land*

2. Understanding the deficiencies those cause to the problem through reviewing succesful conservation examples from the world
3. Reviewing both planning history of Antalya city and related legal mechanism for exposing the legal and implemental deficiencies

The reasons that are underlying such a research study should be listed as:

1. The deficiency of academic studies researching the *value of agricultural lands for urban areas*
2. Requirement of presenting the agricultural lands as being one of the vital elements of urban open green areas systems urban planning practices in Turkey
3. Exposing the legal deficiencies related with agricultural land conservation in Turkey

1.1.2. PROBLEM DEFINITION, HYPOTHESIS AND RESEARCH QUESTION

Loss of arable agricultural lands locating in and at the edge of the urban areas constitutes the essence of the problem; urban development in Kırcami Area of Antalya city constitutes the problem area of this thesis. The hypothesis of this study says that 'there is no rational reason for development in Kırcami Area'. According to this hypothesis, the research question asks: 'Is Kırcami Area a meaningless void in the urban land-use form of Antalya city or a value in the socio-economic, ecological and agricultural structure of the city?

1.1.3. SCOPE OF THE STUDY

The scope of the study includes four main stages those are reviewing the theoretical framework of the problem, reviewing the planning process of both Antalya city and Kırcami Area, making a case study through the research methods of observation and survey and exposing the legal situation in Turkey.

In the first stage, the issue of conservation of natural resources according to the issue of conservation of agricultural lands, afterwards terms interrelated with *urban* and *rural* concepts and *urbanization* are examined and defined. Then, *urban open green systems* are defined through the explanation of *urban quality of life* and *urban agricultural landscape*. After that, the former and contemporary agricultural land conservation approaches are examined through the aim of determining the theoretical framework of the study. Greenbelt examples, Greenheart of Holland example and examples for urban agriculture projects were examined for obtaining the common points of these examples according to the reviewing the role of agricultural lands. Lastly, the *value of urban agricultural lands* is exposed as the theoretical basis of this thesis.

Through the second stage of the study, it is aimed to research for indicating the Kırcami Area as *'being value'*. Through this aim, a general overlook is done for exposing the socio-spatial structure of Antalya city as the first step. Secondly, Antalya city's planning history is reviewed for understanding the Antalya city's urbanization process. Then, the demographic, natural and agricultural structure of Kırcami Area is reviewed in the third step and lastly the development process of Kırcami Area is reviewed chronologically as the fourth step.

Thirdly a case study is done to obtain the data for Kırcami Areas' value and finally the common properties of '*being value'* of the examined examples in the theoretical background study are interpreted for the Kırcami Area.

Lastly, as the fourth stage of this thesis, legal dimension of the problem is criticized according to the 5403 numbered Land Conservation and Land-Use Law.

1.1.4. METHOD OF THE STUDY

In the first stage of the study, descriptive-textual data collecting method is used to make understand the theoretical framework of the study. Articles, books, institutional

and official reports and electronic media sources are benefited to collect the required data for interpreting the theoretical structure of the thesis' research question.

In the second stage – Kırcami Area case study stage- of the study *ethnographic case study approach* is used to gather multiple sources of evidence for the three-stepped structure of the case study.

In the first step as the preparation step of the case study, *interpretative- textual data collecting method* is used for preparing the second step's observation and interview methods' requirements. Electronic local media resources, development plan reports and aspects of experts for the problem area are benefitted.

In the second and third step of the case study, ***ethnographic case study methodology*** is used. In the second step, *observation method and semi-structured interview method* is used to collect data about the problems of the case study area. Interrelated study of observations and semi-structured interviews' provided the preliminary absolute data for the problem area that directs the research study to a survey study. Then, lastly *semi-structured survey* conducted as the third step of the stage. Survey method provided gathering data those are generally more qualitative that do not have collecting possibility through interview method.

In the third stage of the study, *interpretative-textual data collecting method* is used to make understand the legal and institutional dimension of the problem. Laws, legal documents and articles are benefited for making understand the issue and submitting suggestions for the solution ways of the problem.

Finally, researches provided creating an organizational framework for land conservation studies in Turkey as a suggestion.

1.2. CONCLUSION

Under the written information in the above section, basic matters of this thesis should be summarized as:

CHAPTER 1 is the introduction chapter of the study that presents:

- History of agriculture, urbanization and the arable land loss problem in the world
- A brief introduction to agricultural land loss problem in Antalya city
- Brief information about the research design

CHAPTER 2 is the literature review and the theoretical background chapter of the study. In this chapter, literature review is done through two aims that work parallel each other that they make understand the theoretical and practical dimensions of the problem. Thus, for determining the theoretical framework of the study, terminology of the problem area is examined initially. Then, three examples of land conservation methods (*Green Belt, Green Heart and Urban Agriculture*) are reviewed for examining the land conservation issue for understanding the main approaches for the problem in the world.

In **CHAPTER 3**, Antalya city and Kırcami Area is examined through researching of urbanization process, natural and agricultural conditions of Antalya and the Kırcami Area. Firstly, Antalya city is examined through its historical, socio-spatial, geographical and demographic and agricultural conditions. Then city is examined through the planning history and arable land loss problem for understanding the Kırcami Area's spatial and developmental problem in the whole. Secondly, Kırcami Area is examined through its socio-spatial, geographical, demographic and agricultural conditions. By examining the Antalya Development plans, Kırcami Area's development problem is analyzed as being parallel to the planning history of Antalya.

In **CHAPTER 4,** last development plans of both Antalya city and Kırcami Area are reviewed.

CHAPTER 5 is the case study chapter of the thesis that is prepared through three steps that are introducing the case study area, survey analyses, and findings for

exposing the *value of Kırcami Area* as the evidences of the research question and hypothesis.

In **CHAPTER 6**, initially arable land loss problem of Turkey is examined through the legal dimension. Regulations and laws related with land conservation issue are criticized for designating the legal deficiencies as the major factor of the problem. Secondly, planning and implementation practices were criticized for submitting suggestions for land conservation in Turkey.

CHAPTER 7 is the conclusion chapter of the study that draws an overall evaluation as the results of the research study. Chapter submits an eventual discussion of the problem area in Antalya and also submits an organizational framework as being a suggestion for the solution of agricultural land conservation problem in Turkey.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1. INTRODUCTION

The objects of conservation are known in the western languages by such epistemologies as heritage, historical building, monument site, or beauty. Such a terminology exists in Turkish too, however, either consciously or unconsciously, legislation in Turkey rests on the notion of natural and cultural beings (*tabiat ve kültür varlıkları*). In spite of such a sophisticated definition, and that Turkey has a well-developed legislation concerning conservation; it is hard to say that the society as a whole finds the phenomenon appropriate (Günay, 2009).

Agriculture has both *cultural character* as being outcome of human activities and *natural character* related to its space of existence. Conversation of agriculture has meaning of protecting the elements of agriculture if thoughts of conservation encompass just the 'being' of agriculture. However, understanding agriculture as one of the essential parts of natural and cultural world could mean the *'value' of being*.

This chapter is written for the objects of 'What is/are the element/s that constitute the agricultural lands as 'value of being'.

2.2. CONSERVATION OF NATURAL RESOURCES

Conservation of urban agricultural lands is the issue of both agricultural conservation and urban conservation contexts. Agricultural lands as being one of the elements of human settlements are one of the natural resources that have to be protected.

'Prior to the 1970's, the conservation of natural resources was a collection of practices primarily removed from the urban scene. Conservation as a philosophy or

attitude was essentially envisioned as sustaining or increasing the yield of various resources that lay beyond the jurisdiction or concern of the urban dweller. It was not until the mid-twentieth century that the sheer numbers of people and consumption rate joined together to form environmental crises of worldwide dimensions. As urbanization and suburbanization increased, the burdens of urban wastes, along with the rapidly rising social costs that were imposed upon the metropolitan environment, exceeded the traditional delivery systems' (Havlick, 1974, page no: 7).

According to Havlick (1974), 'the best way for urban ecological considerations to be used for management is to undertake an analyses of the critical elements of a human settlement and then devise management strategies that take into account the vital urban elements and their interdependencies'. Havlick (1974) examines the anatomy of human settlements by citing from the C.A. Doxiadis's study of *Ekistics* through five ekistic elements those are: '*Nature, man, society, shells (buildings) and networks (communications, canals, electrical transmission lines, transportation and sewerage lines)'* as it is seen in **Figure 1.**

The element of nature is referred to all of the primary resources those are 'water resources, mineral resources, soil resources, soil resources, air resources, even the plan life and animal life exclusive of man make up the raw materials those are prerequisites for a human settlement. Other subdivisions of the nature element are the geomorphology, the weather and climate. Included also, there are chemical cycles and the other biological and ecological forces those are operating.

Classification of natural resources may help examining the urban agricultural land as a being resource that has to be conserved for having the sustainability of society. Chiras and Reganold (2005) classify the natural resources as renewable and non-renewable resources in **Table 2.** Fertile soil and products of the land are renewable resources although it costs much money and requires too time. Because agricultural land loss directly means loss of soil, land loss directly affected on the whole ecosystem that is based on soil.

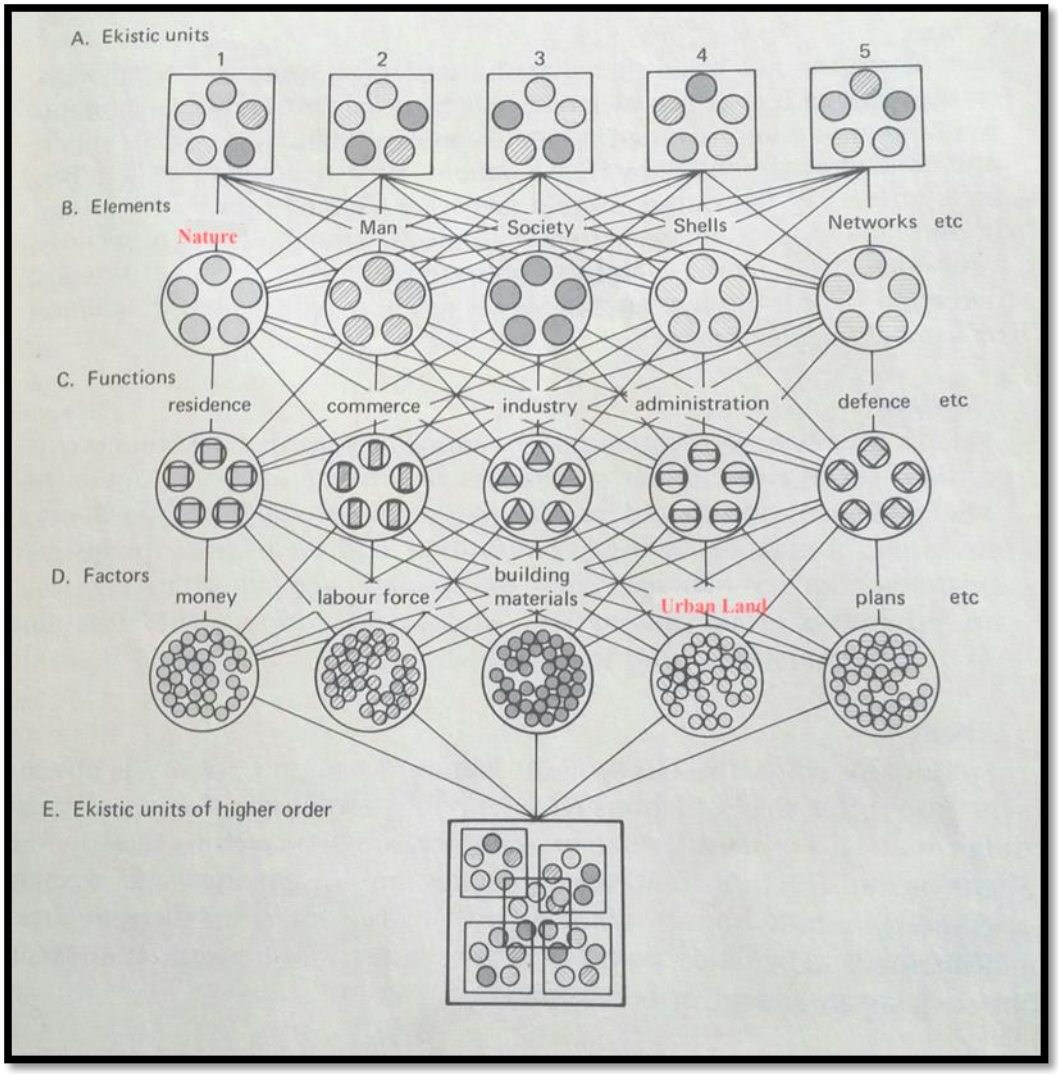


Figure 1: Anatomy of Human Settlements

Data source: C.A. Doxiadis (1968), Havlick (1974). In this analyses approach the place and relation of urban land and nature is seen.

Table 2: Classification of Natural Resources

RENEWABLE RESOURCES	NONRENEWABLE RESOURCES
1. Fertile soil	1.Fossil fuel
2. Products of the land • Agricultural products • Forests • Rangelands • Wild animals	2. Nonmetallic minerals
3.Products of lakes, streams, and oceans	3. Metals
4.Ground water and surface water	
5.Ecosystems	

Data source: Chiras and Reganond, (2005)

2.3. URBAN, RURAL AND URBANIZATION

'Land is one of the resources in any city that need to be effectively managed for better urban management outcomes' (El-Hefnawi, 2005). 'Urbanization is one of the most significant land use phenomena in the world, if not the most significant' (Jacobs, 1999). 'Urbanization process is a dynamic set of processes, responding to changing values and perceptions of the intrinsic characteristics of rural versus urban areas. It is not a single process, although all are interrelated. At the macro scale, urbanization can be defined as the increasing concentration of population in urban areas both relatively and absolutely. At the same time, urbanization has also been regarded as synonymous with urban expansion, particularly the type of urban growth

known as urban sprawl, a set of processes that operate at regional (or-micro) and local levels' (Bryant, 2009).

'The rapid loss of agricultural lands is prevalent throughout the world and clearly shows that crops cannot compete with the sprawl that is characteristics of cities' (Mason, 2011). At this point, the terms of urban and rural must be treated together because they deal with one single geographic concept. 'Urban and rural are labels applied to different parts of space based its uses. Rural is that space which is not urban. We can define an urban area as being one where the land uses from customary and traditional urban activities produce higher returns than from traditional and customary rural activities' (Hite, 1998). Today, 'countries on every continent are grappling with significant rural to urban migration, population growth within their urban areas, and thus the physical spread of their major urban area and most if not all of their' (Jacobs, 1999). So, as a result of urbanization, agricultural lands have been close to cities. Jacobs (1999) says that this result can be evaluated according to three perspectives as *rural perspective, urban perspective and traditional land economic theory*.

According to the rural perspective, land use pattern of closer agricultural lands to the urban areas, 'allows producers easy access to markets, especially where transportation systems may be unreliable and expensive, the products may be perishable, and producers may be small-scale and not have the capital or facilities for storage of agricultural goods'. From the urban perspective 'this land use relationship benefits urban residents by providing them with some or all of the food they need for daily life. Urbanization has, in most cases, caused the spread of the city onto adjoining agricultural lands, often in a pattern of low density residential development. In some parts of the world (mostly developed countries), this spread has been the site of middle and upper class housing; in other parts of the world (mostly developing countries), this spread has been where a country's poorest people have settled, often informal or illegal communities' (Jacobs, 1999).

Thirdly, according to the traditional land economic theory, 'this land use change has not and should not be a problem. Higher demand uses (urbanization) are competing

for a limited resource (land) and displacing a less intensive resource (agriculture). A form of market-based economic efficiency is playing itself out. The result should be that agriculture gets displaced to another location (further out) where its less intensive demands are economically efficient/reasonable and/or the macro-economic structure changes to allow for the provision of food products from other sources (such as imports as a function of regional and/or global trade) (Jacobs, 1999)'.

Reviewing literature about the agricultural land loss problem, it is seen almost all developed and developing countries are face to face with this problem. Enlargement tendency and necessity of cities cause to threats of vanishing the world's arable agricultural lands. Agricultural lands resisting on rural areas cause to negative effects both on urban and rural areas. From the rural point of view, this resistance cause to transforming of arable lands to urban uses and decrease in productivity of lands due to urban effects. From the urban point of view, agricultural pollution and physical and functional problems may be seen due to interference of rural and urban functions. It is apparent that the power of urbanization will go on to win the weaker rural power day by day.

Conservation and management of agricultural lands is crucial not only for sustainability and productivity of agriculture but also sustainability of urban ecosystems. Agricultural production areas are vital natural reserve areas in the ecosystems that also including urban areas with regard to biological diversity. 'Biological diversity – or biodiversity – is the term given to the variety of life on Earth. It is the variety within and between all species of plants, animals and micro-organisms and the ecosystems within which they live and interact' (http://www.wwf.org.au/our_work/saving_the_natural_world/what_is_biodiversity/)

In developed countries, terms those are related with rural, rurality, urbanization and agriculture are being redefined due to interference of rural and urban areas and functions. This recent approaches for the interface of urbanization and rurality, not only reform the agricultural activities in the urban edge but also lead agriculture being an urban economic sector. Through specific laws and policies, governments

aim to provide conservation assurance for the agricultural lands in cities and at the edge of the cities.

Bryant (1989) classified the functions of rural (and particularly agricultural) land as:

1. A production function (Producing agricultural products and services)
2. A resource protection function (e.g., the maintenance of agricultural production of particular types to contribute to the maintenance and protection of, say, water quality and wild life habitat, maintaining agricultural land resources for current and future agriculture production)
3. A landscape protection function (whereby the agricultural landscape contains valued reminders of historic and cultural heritage, as well as contributing to aesthetic values, e.g., through setting off rural, open landscape against urban development zones- in other words, an urban design function)
4. An educational and scientific function
5. Maintaining land reserves for future non-agricultural and rural uses

Bryant (1989) identifies four most important land-use conflicts involving agriculture as:

1. Conflicts associated with the conversion of agricultural-based land to non-farm uses (i.e. actual conversion to urban development, scattered residential development and so forth as well as indirect effects associated with impacts ‘transmitted’ by the urban uses to

the continuing agricultural structure, e.g. land-use incompatibilities, higher property taxes and servicing costs, etc.

2. Changes within agriculture that affect the long-term productivity of the land resource, e.g. technological change and changing cultural practices
3. Changing tenure patterns (e.g. increasing non-farm and non-resident ownership of farmland, and associated land rental issues)

2.4. URBAN GREEN SPACES AND AGRICULTURE

2.4.1. URBAN GREEN SPACE SYSTEMS AND AGRICULTURE

Bilgili and Gökyer (2012) define the urban green spaces as urban areas which were natural or semi-natural ecosystems those were converted to urban spaces by human influence. Urban green spaces provide the connection between urban and nature. In this context, green areas are the reflection of nature in the urban spaces.

'The term of *'open and green areas'* is used instead of the term of *'urban green space'* in the Turkish development legacy. Law categorizes the open and green areas as *active* and *passive open and green areas.* Active open and green areas are the areas that designed for activities such as entertainment, recreation and health, open to the public use. These areas can also be commercial areas. Play gardens for children, exhibition areas, zoos, botanic gardens and picnic areas are the examples for active open and green areas. Passive open and green areas are the areas those are not open directly to public use and having purposes such as environmental health, conservation and urban aesthetics. 'Fruit production areas, plantation areas, graveyards, afforested areas because of the topographic reasons, conservation areas/zones between distinct usages, cultural beings, forest areas are the examples for passive open-green areas' (Öztürk, 2004). According to these definitions, agricultural areas that locate in the cities and at the edge of the cities are passive open-green areas in the whole city.

Urban green areas provide lots of benefits for the cities and urban people. Atiqul Haq (2011) categorizes the benefits of the green spaces in 3 groups such as:

1. Environmental Benefits
    a. Ecological Benefits
    b. Pollution Control
    c. Biodiversity and Nature Conservation
2. Economic and Aesthetic Benefits
    a. Energy Savings
    b. Property value
3. Social and Psychological Benefits
    a. Recreation and Wellbeing
    b. Human Health

Agricultural open green areas in the cities should also serve environmental, economic, social and psychological benefits for the city under the right conditions for both urban space and agricultural space. In Turkey, there is still an approach for the agricultural spaces evaluating these areas as just having rural functions. In other words, in Turkish planning experiences, agricultural areas do not take place in the context of open green areas. Whereas, due to the being both natural and cultural areas, agricultural areas should serve lots of benefits for the urban ecosystem and urban quality of life.

There is a strong collaboration between the living environment and quality of life. Quality of life concept includes the subjects that define the life styles of people such as education, health, culture and economy. By all means, life quality has different meanings. According to Dissart and Deller (2000), 'Quality of life can mean different things to different people, encompassing such notions as 'well-being' centered on the individual to 'good place' centered on the location'. 'The lack of a standard definition has led to the inter-changeable use of the term quality of life with other concepts, such as well-being, level of living, way of life, life satisfaction, happiness and morale, to name a few. Some scholars put quality of life on a continuum; others argue that quality of life is a multidimensional concept. In spite of

the diversity of concepts to measure quality of life, a number of authors have observed that there are high intercorrelations between them. This may be why there has been little effort to impose either empirical or theoretical order on the various constructs' (Evans, 1994; Dissart and Deller, 2000).

The factors that effect on the *urban quality of life* have multi-dimensional structure. Evans reviewed this multi-dimensional structure through a theoretical model framework such as (Türksever, 2001; Sağlık 2014):

1. Satisfaction: It is seen that satisfaction of any areas such as life, job, family is directly effected on the life quality
2. Abilities
3. Social Environment
4. Personal factors that are effected by personal characters and abilities: It is proved that the factors in this group is related with the personal perception
5. Bio/social-physical environment: Biological, social and physical environment effected on personal quality of life.

As it is seen, environmental conditions are one of the factors that directly determine the personal life quality. Nowadays, the terms such as *quality of life, livability, livable spaces* are heard as daily life arguments due to the increasing urban restraints on urban dwellers. Open green areas in and near the close environment of cities gain more importance in planning the livable future of the cities. As being one of the components of open green systems of cities, conservation of agricultural areas also gain more significance in the planning area.

In the Preliminary Report of the 10^{th} Five- Year Development Plan of Ministry of Development, the determined principles and values about ecology in the planning context of livable spaces are listed as (Ayataç, 2014):

1. Protection of ecological values for architecture and urban design

2. Giving attention on local landscape and protection of local environmental values
3. Ecological sustainability and sustainable development
4. Hygienic environments, preventing noise pollution and improving the air and water quality
5. Providing balance between ecology and economy

The principles also expose the values and significance of conservation of agricultural areas as having ecological values, local landscape and environmental values. Additionally, agricultural lands have to be protected and improved economically against land speculation according to a balance between ecology and economy.

2.4.2. URBAN AGRICULTURAL LANDSCAPE

In literature there are many definitions of the term *landscape* according to the looking approach to it. 'The disparity in definitions makes it difficult to communicate clearly, and even more difficult to establish consistent management policies. 'The landscape concept differs from the traditional ecosystem concept in focusing on groups of ecosystem and the interactions among them- the focus is on spatial heterogeneity and its impact on process. There are many variants of the definition depending on the research or management context' (McGarigal's Lecture Notes, http://www.umass.edu/landeco/teaching/landscape_ecology/schedule/chapter3_landscape.pdf).

The term of *landscape* may be defined as 'view of a space' in the simplest way. Landscape may be formed through natural and artificial components and also either natural or artificial components.

Natural landscape areas are the each kind of natural areas having no human intervention on. Landscape design study is the designation work of a space through human usages/requirements by benefiting from both natural and artificial elements of landscape.

Agricultural spaces also have both natural and artificial elements. Natural elements of an agricultural space:

1. Soil
2. Vegetation (Flora)
3. Animals (Fauna)
4. Geographical features
5. Geological features
6. Water resources
7. Climate (Effects on urban climate, natural visual results of the seasons

Artificial elements of an agricultural space:

1. Rural houses
2. Rural equipment (Barns, depots, service constructions and area, production facilities, bazaar)
3. Greenhouses
4. Irrigating channels

Artificial components of an agricultural landscape are the formation of agricultural living culture. In the landscape architecture disciplinary; it is generally evaluated through the *cultural landscape* context. Especially the house architecture that has local characteristics and settlement characteristics constitutes the cultural landscape context of an agricultural settlement area.

Under these information, it is seen that an agricultural landscape have to be evaluate according to both natural and artificial characters of the whole landscape area. As an example, greenhouses are the artificial ways of agricultural production that benefit from climatic advantages through the technological equipment. In some of the agriculturally developed countries, there are increasing 'greenhouse design and planning studies' for improving the visual quality of greenhouse production that contains on huge lands. **Photograph 1** shows the greenhouse production areas in the Westland Region of Holland.

Urban agricultural lands locate in the cities with their specific landscape characters as being one component of the urban open green systems and may present:

1. Visual diversity
2. Biodiversity areas for the city
3. Agricultural-scientific education opportunities
4. Agricultural job opportunities
5. Recreational opportunities
6. Local and fresh food
7. Effects on urban climate

for both city and city dwellers.

Photograph 1: Westland Region, Holland

Data source: http://www.thehagueevents.com/

Urban climate is highly different from rural climate. Especially at nights in rural areas temperature decrease more than urban areas; the temperature difference might be 2,5 ºC to 8 ºC (Baykan, 2005). Open green areas have positive effects on urban

climate due to the presentation of grass and soil ground in contrary to artificial urban grounds. (Baykan, 2005) categorizes the climatic functions of urban open green areas as:

1. Decreasing temperature in the city
2. Formation of local air movement function
3. Providing clean air to the city

2.5. AGRICULTURAL LAND LOSS ON THE FRINGE

Peri-urban agricultural lands have both agricultural and environmental values those are critical to protect against urbanization. Both Jacobs (1997, 1999) and Alterman (1997) reviewed to expose the agricultural land protection experiences of United States, North America and European Union and they submit similar results. According this researches, authors indicates that effective agricultural land protection requires a comprehensive planning by local governments, a system of strict land use regulation and a way to purchase agricultural land threatened with conversion.

According to Jacobs (1999) Netherlands, United Kingdom and Sweden are most successful western European countries at agricultural land protection issue both use planning systems those are (1) *comprehensive planning by local governments*, (2) *public purchase of agricultural land which is threatened with conversion*, (3) *a purchase price for agricultural land that reflects its value as food production land*, (4) *a system of strict land use regulation (zoning)* that were put in place shortly after the World War II. Policies and both have the same emerging point that is avoiding future dependence on food imports and future food shortages.

Land loss dominantly realizes in the peri-urban zones. Jacobs (1999) mentions about three components of peri-urban land loss as:

1. Land directly converted from agricultural use to urban use
2. Land indirectly lost through a decrease in productive capacity
3. Land idled in anticipation of imminent urban development

Audirac (1999), points out the two faces of the urban fringe as being *urban-rural fringe or rural-urban fringe*. She asks for if they are really the same concepts and emphasizes that they are generally used to define same concepts but she asserts that concepts have different meanings according to the urban perspective or farmland perspective.

She cites the urban fringe definition of T.L. Smith that is appeared for the first time in 1937 as 'the built-up area just outside the corporate limits of the city' (Audirac 1999). She emphasizes that 'Fringe has become a formal subject of inquiry' but definitional issues and attitudinal ambiguities toward its socio-spatial characteristics as partly urban and partly rural have plagued this research' (Audirac, 1999).

The fringe concept is 'too urban for rural researchers despite its semi-rural character and too rural for to incite urban scholarly inquiry' (Audirac, 1999). She says, from the urban perspective 'The rural-urban fringe may be the last vestige of farmland needing protection from urban encroachment', however on the other side from the farmland perspective 'urban encroachment may be a welcomed opportunity to capitalize on the accompanying surge of land values, when pressures such as cash-flow problems and financial stress, instability from international trade or macroeconomic and farm policy threaten the farm's economic viability (Audirac 1999). She also emphasizes that since 1970s, urban-rural fringe 'has become the frontier of a new type of post-suburban edge development where industrial and office parks, outlet malls, and conventional and neo-traditional communities represent new coveted new tax-bases. Additionally,

> 'They represent new employment sources, more spacious housing, and new ways of consuming land and sense of place for outward-bound residents. Moreover, green belts or farming districts and large-lot-zoned acreage temporarily preserve open space for urbanities and hobby farmers, while wealthy gated communities, small plat subdivisions, and mobile homes house ex-urbanities leapfrog on to green field sites'.

According to the author, four zones for rural-urban fringe are identified as:

1. Inner fringe

2. Outer fringe
3. Urban shadow
4. Rural hinterland

Saxena (2008) defines urbanization in the fringe as:

> 'The process of urbanization operating in the fringe has given rise to typical land use associations where the contemporary and dynamic land use pattern is developing side by side in the contemporary context, the various land uses. Old villages, new residential extensions, commerce and industry, city service and farming are not neatly sorted out into homogenous areas but are intermingled in a random fashion which gives a distinctive quality to the land use pattern of rural-urban fringe. The haphazard development of slums, unauthorized colonies, piecemeal commercial development, intermixes of conforming and non-conforming uses of land coupled with inadequate services and facilities have become common features in the fringe. The dynamic change from rural to urban land use is so fast that the resultant need and complex uses coupled with shortage of land have led to the speculation and increase in land values'.

In their study Rahman, Alam and Islam (2008) expose the urbanization process of operating in the fringe through the Bangladesh's capital city Daka Case, and ask for a planned urban development for sustainable urbanization. They emphasize one of the results of urban growth in the urban fringes is urban sprawl. They cited the Bosselman's definition of the term urban sprawl as 'Growth of a metropolitan area through the process of scattered development of miscellaneous types of land use in isolated locations on the fringe' and 'Urban sprawl, and the economic and regulatory systems which create it, not only produce an inefficient and unpleasant environment on the urban fringe, but adversely affect the inner city and the rural areas as well (Bosselman, 1968). According to the authors, in the broad sense and long run, sustainable urbanization should take the following indicators:

1. Process of urban planning
2. Components of sustainable urban environment
3. Definition and expected size of the city
4. Survey and assessment of the existing features of the city area

5. Development plan to serve national goals
6. Spatial planning and distribution of urban infrastructure and services

Mason (2011) points out ‘California is the most important agricultural state in America and produces forty-two percent of its fruit and forty-three percent of its vegetables’. According to Mason (2011), ‘California had lost three million acres of its high quality farmlands by 1960 and ‘one third of the prime agricultural land was gone by 1980, and predictions for the year 2020 show that more than fourteen million acres of the southern state’s highest quality farmland will have disappeared’.

Hara, Takeuchi and Okuba (2004) point out that ‘urban sprawl areas as mixtures of urban and rural land uses are being created increasingly rapidly in the suburbs of the mega cities located on Asia’s river deltas’. They research to understand the urban growth control in deltaic suburban Asian mega cities because of the conversion of large deltaic suburban areas as broad rice field to urban uses. They examined the land use changes in the suburbs of Bangkok that is under effect irregular urban land uses that have been expanding since the 1980s along a disorganized road network (Hara, Takeuchi, Okuba, 2004).

Their study reveals that the present urban land uses are linked with the past agricultural land use patterns. According to the results of their research, authors discuss the effects of past agricultural land use on the present urban land use. The emphasizing point of this discussion is the agricultural land-use type; land parcel size and shape all have effect on transformation of rural land use to urban land use. Authors also point out that converting of agricultural infrastructure into urban infrastructure in the urban fringe is easy.

Another discussion is the authors’ suggestion about the presence of interaction between land-use changes and landform transformation. They give the example of land-use transformation related with the increasing urbanization that the local farmers tendency of producing more profitable food products because of change in the market demand. ‘Building a new house on an orchard is more economical than

building on a rice field: an orchard has already been banked up, so building on it is cheaper than building on a paddy. In fact, we found abandoned fruit trees inside one townhouse lot during our field survey' (Hara, Takeuchi and Okuba, 2004).

Authors indicate that Bangkok Metropolitan Administration has created a greenbelt as a floodwater retention area in 1999, but the authors emphasize the insufficiency of a mono-functional zoning on the urban fringe because of the highly variable land use types. And they suggest for planners a mixed-use zoning that is 'effective to set mixed used districts depending on the past agricultural land use patterns. Within the mixed-use district 'a limit on the maximum volume of landform transformation should be set' (Hara, Takeuchi and Okuba, 2004).

2.6. GREENBELT AS A WAY OF LAND CONSERVATION

Green belts are green preventive zones that are encompassing the whole or a part of city. Controlling the urban land-use form, conserving the historical character of the cities, providing transition from urban to rural uses, having recreational and sportive opportunities, conserving the agricultural and forestry areas and rural settlements are the samples for the roles of the green belt in a city.

Green belt approach was developed in England for providing the conservation of London against urban sprawl at the edge. 'Green belt In England, the present London Green Belt Act and the statutory establishment of Green Belts around several major cities and conurbations formulated in the 1950s. This incorporated an encircling Green Belt or green girdle around city as protection against unrestrained urban expansion. It was also to act as a source area for agriculture and recreation, providing rural contact to counterbalance the urban settings of the residents in the newly-created garden cities' (Fazal et. al. 2012).

Greenbelt is a well-known and an effective planning concept of land-use. Ebenezer Howard's Garden City idea around London is known as the origin of the greenbelt concept. However, 'Greenbelts have a long, though intermittent history. Towns and

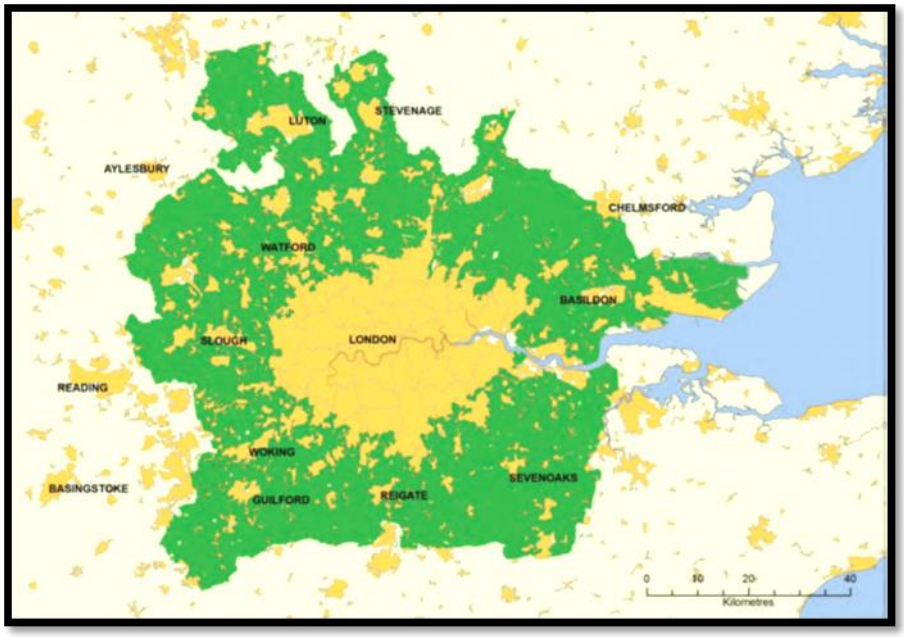
cities with inviolable rural hinterlands were described in the Old Testament and in the works of the classical writers (Thomas, 1963).

According to Thomas (1963), London Greenbelt was established as a ‘cordon sanitary’ 3 miles wide around the city of London in 1580 and developed in years through several roles such as encircling parkway, suburban parks, open spaces, ring-road as improving communications around London.

In 1911, George Pepler proposed a ring-road idea as a strip of land should be bought one-quarter of a mile wide and further from the center of London than the earlier girdles. It contained a system of roads, railways and tramways interspersed with grass and trees, which occupied about a quarter of the total.

In 1935, the green belt scheme that ‘provided a reserve supply of open spaces and of recreational areas and to establish a green belt or girdle of open lands, not necessarily continuous, but as readily accessible from the completely urbanized area of London as practicable’ (Thomas, 1963) was launched.

In 1944, Patrick Abercrombie’s proposal for a green belt up to 10 miles wide was ‘Much more than a ring of parkland (Thomas, 1963). His aim, like those of Howard, restricting urban growth (London’s overspill population was to be channeled into eight new towns and into a number of expanded towns) and, at the same time, actively encouraging agriculture, creating recreational and enhancing the natural beauty of the area, was accepted as the first government’s recognition of the need for a continuous green belt around London.



Map 1: London Green Belt

Data source: Carter and Esakin, (2010)

In 1955, green belt concept was recommended under three circumstances. 'It could be used to check the growth of a large built-up area, it could prevent the merging of two neighboring towns, or it could preserve the special character of a town. If possible, the green belt was to be of sufficient width to ensure that a substantial rural zone would be preserved. Except in very special circumstances no new buildings, or change in the use of existing buildings, were to be allowed other than for agriculture, sport, cemeteries, institutions standing in extensive grounds or other uses appropriate to a rural area (Thomas, 1963).

Green belts have become a widely accepted planning concept also beyond Britain. Not only in European cities as Frankfurt, Barcelona, Vienna, Budapest but also in American cities such as Wash, California, Chicago and Asian cities Tokyo, Bangkok, Seoul, Taipei greenbelts are seen as planning elements; and recognized as the integral parts of the ecological networks of cities. How can greenbelts be benefitted as conservation instruments for the urban-fringe agriculture lands?

Hong Kong example is reviewed in Tang, Wang, Lee's (2007) research paper. They examine the evolution and implementation of the green belt concept in the highly dense and compact city of Hong Kong. Green belt planning concept developed in Hong Kong under the effect of British colonial for over 150 years. Authors reveal the Hong Kong's green belt experience in three historical evolutions as three different roles:

1. Early years: Green belt as *passive recreation space*
2. 1960s- 1970s: Green belt as *residual development space*
3. 1980s onwards: Green belt as *conservation space*

In Hong Kong conservation and environmental protection by the green belt as a land use conservation zone was largely established in 1990s , 'the Green Belt was specifically added, in conjunction with other land-use designations including *country parks, coastal protection areas* and *sites of special specific interests* to the amended Town Planning Ordinance… Specifically, the main planning functions of this zone included: *(a) to conserve existing landscape features, areas of scenic value, (b) to define outer limits of urbanized districts, (c) to provide additional outlets for passive recreational uses'* (Tang et al., 2007).

Tang et al. (2007) points out that 'Hong Kong's green belt is a transition zone rather than a zone for conservation. In the statutory land-use plans, it covers the residual or 'leftover' pieces of land waiting for timely and permanent 'urban' development of some sorts.'

The Greenbelt is a symbol of Canada's rural traditions and shows viable and diverse agriculture in a near-urban setting Capital Ottawa. The Greenbelt farming sector includes 5,400 hectares of good quality farmland. Greenbelt farms are owned by the NCC (National Capital of Canada) and rented to farmers. The model of stable public ownership provides unique opportunities for new farmers to establish farms on quality farmland without needing large capital investments (http://www.canadascapital.gc.ca). Ottawa's, comprehensive plan was done by a French architect Jacques Greber in the late 1940s. Establishing a green zone around

the Ottawa portion of the National Capital Region was one of the most significant elements of the plan. This area, referred to as the ‘green belt’, is 20 000 ha (50 000 acres) in size, has an average width of 4km (2, 5 miles), and is over 40 km (25 miles) in length. Parts of the greenbelt are only 8 km (5 miles) from Parliament Hill, the geographic center of the metropolitan region, and almost 500 000 people at present live within its limits (Taylor et al., 1995).

According to Taylor et al. (1995), Ottawa Green Belt’s specific aims were:

1. Preventing further urban sprawl and to protect adjacent agricultural lands from being developed
2. Providing a reserve of building sites for future government and public institutional use, once the central area of Ottawa was built up
3. Greenbelt was intended to place a ‘practical and economic’ limit on the growth of the Capital by confining development to an area that could be provided with municipal services at a reasonable cost

Ottawa Green Belt was planned to incorporate several land use types within its boundaries such as federal facilities, natural areas, recreation facilities, farmland and land held in reserve to meet future need of the federal capital (Taylor et al., 1995). Ottawa greenbelt example is not only a good example for conserving and enhancing agricultural facilities but also is criticized because of its insufficient properties. According to the Taylor et al. (1995) data, Green Belt landscape is generally in rural character, incorporating farmland (25%)’ reforested and sensitive natural areas (15%), government research centers and the Ottawa airport (30%) and other urban uses such as developed open space, schools, private sector research facilities and hospitals.

The most criticized three points of Ottawa Green Belt,

1. The Green Belt is ineffective in controlling urban growth outside the Green Belt

2. Lack of identity because of incorporation of unrelated functions within the Green Belt area
3. Poor visibility of the Green Belt

2.7. URBAN AGRICULTURE AS A WAY OF LAND CONSERVATION

Recent studies on land use changes have paid more attention to the conversion between agricultural land uses in urban fringe. These changes have been regarded as a type of the sustainability in urban agriculture (Kikuchi, Takatori, 2005).

In 1996, according to the UNDP, around 800 million persons were involved in urban agriculture (UNDP, 1996; Knapp, 2013). Urban agriculture already started during the Industrial Revolution in England and continued to develop during the World Wars in order to combat hunger (Hanna and Oh, 2000; Knapp, 2013) These gardens were referred to as *'Victory Gardens'* in order to combat hunger (Hanna and Oh,2000; Kanpp, 2013). In United States, it started in 1893 with *poverty relief programmes* from the government in which vacant land was given to the unemployed in order to produce for themselves (Hanna and Oh, 2000; Knapp, 2013). Urban agriculture has a significant role in producing sustainable cities. 'Sooner or later, cities that have come to take large-scale food imports for granted may need to consider reviving agricultural production in urban areas or the urban fringe to reduce the demand for land surfaces elsewhere' (Deelstra and Girardet, 2000).

'Although urban agriculture refers, in general, to activities connected to the production of fresh vegetables in the city, it does not mean that it has to be strictly related with production; urban agriculture is also fundamental on including ecological, cultural, recreational and aesthetic concerns, related to the landscape, This means, urban agriculture can integrate, and be, a structuring *continuum* that assures the occurrence of the processes and flows of the various systems that constitute the landscape. This structure should be ecologically justified, as well as it should be developed according to the holistic view that the landscape demands in and for its understanding. In it, there should be present the ecological, aesthetic, social,

economic and cultural components and from it there should result spaces and economic, social, cultural, aesthetic and ecologically balanced structures' (Matos and Batista 2013, Page no: 459).

Despite their inherent density, cities have enormous potential for food growing. As a vital element of livelihoods of urban people, urban food production has a crucial role. Deelstra and Girardet (2000) says that the major constraints of farming cities as the lack of space. However they say that urban farming can help to:

1. Create improving the microclimate
2. Conserve soils
3. Minimize waste in cities
4. Improve nutrient recycling
5. Improve water management, biodiversity, the O2-CO2 balance and the environmental awareness of city inhabitants

Photograph 2: Urban agriculture in Cuba

Data source:

http://reimaginerpe.org/files/images/28.%20cuba%20Power%20Garden.jpg

Urban agriculture concept is also termed as urban farming and city farming in the literature. It is an actual concept in the land protection studies; it was developed against the consequences of rapid and unplanned urbanization in cities for saving the arable lands that are lasted in the cities or at the fringes of the cities. In general urban agriculture is known as agricultural activities that take place in and/ or around cities to provide nutrition requirements and/ or adding income for the inhabitants that live in/or around cities. City farming, or urban agriculture, is the growing of food and non-food plants and the raising of animals such as cattle, fowls and fish both within and on the edge of built-up urban areas (Mouget, 1994).

In the literature related with urban agriculture/ farming generally three types of urban agriculture are distinguished as Foeken and Mwangi (1998) says:

1. Farming activities in backyards, referring to growing food or keeping animals on one's own piece of space in the compound.
2. Farming in open spaces of land not belonging to those who use it. This is the type usually practiced by poor urban households
3. Farming in rural areas which became part of the city due to expansion of the city boundaries- (Peri-urban agriculture, then refers to farming activities in the zone between the city boundaries and the rural areas, although it is often quite difficult and arbitrary to establish where *peri-urban* ends and *rural* starts)

The distinction of urban agriculture from traditional/rural agriculture is its relation with urban ecosystem. 'The lead trait of urban agriculture which distinguishes it from rural agriculture is its integration into the urban economic and ecological system. It is not its urban location which distinguishes urban agriculture from rural agriculture, but the fact that it is embedded in and interacting with the urban ecosystem' (Mougeot, 2000).

According to Nugent (1999), the common characteristics of urban agriculture that has several types such as 'in backyards, rooftop containers, community gardens, green houses and bona-fide commercial farms on the periphery', are limited space,

products that have high value or perishability, or both, and which are often consumed by the growers themselves, or by nearby populations. Each of these characteristics sets urban agriculture apart from rural agriculture.

'At the dawn of the 21st century, the largest-scale advances in city farming and marketing are found in and around major Asian cities. Outside Asia, since the late 1970s, city farming has been growing in many developed and developing countries, in terms of number of people involved, space used benefits to households and city economies, and new challenges. Local authorities have been revising long-held attitudes toward city farming and developing more sustainable urban policies. More governments are creating agencies and programs to promote and manage city farming. Beyond private backyard gardening, a growing number of North American and European city governments are now supporting community and city-level gardening on public land' (Mouget,1994).

Üstoğlu (2012), categorizes the impacts of urban agriculture in three groups as: *economic impacts*, *environmental impacts*, *social impacts* as it is illustrated in **Figure 2.**

Nairobi, the capital of Kenya, case is an interesting example with its urban farming implementations. 'Farming activities are everywhere, not only in outskirts but also in the heart of the city. Along roadsides, in the middle of roundabouts, along railway lines, in parks, along rivers, under power lines, in short in all kinds of open, public spaces, crops are cultivated and animals like cattle, goats and sheep are roaming around' (Foeken and Mwangi, 1998). Foeken and Mwangi (1998) describe urban farming in Nairobi in all its aspects; its magnitude, its characteristics, its importance for those involved, the constraints faced by the farmers, its impact on the environment, the legal and institutional setting, as well as its prospects.

In Nairobi, open space planning in the city is administered by zoning regulations dating from the colonial period. Authors indicate that 1948 master plan for Nairobi is 'ambitious and truly comprehensive urban plan explains a great deal about the way in which informal urban agriculture has arisen in the city of Nairobi'. However,

political basement for urban farming is unclear. Several official administrative units have varying acts representing contradiction for the implementation area. For example, while the Local Government Act says 'urban farming can either be permitted or restricted by local authority by-laws. The Nairobi by-laws only prohibit cultivation on public streets maintainable by the City'. However, Nairobi City Council's Public Health Prosecution Officer do not allow crop farming within the city boundaries because of the mosquito threat, so, 'the farming that takes place within the city boundaries is illegal; hence, sometimes harassments occurred'.

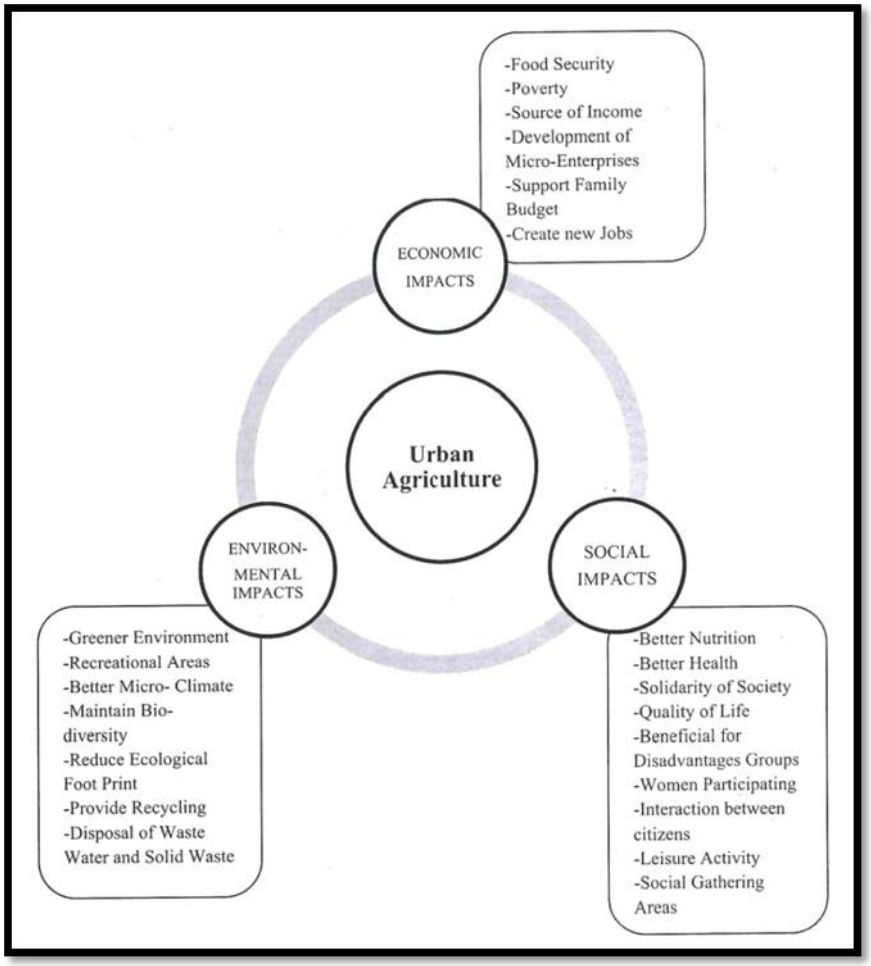


Figure 2: The main impacts of urban agriculture

Data source: Üstoğlu, (2012)

2.8. ‘GREENHEART OF HOLLAND’ AS AN EXAMPLE FOR LAND PROTECTION

Another planning initiative example for restricting the urban expansion is the Green Heart that is a national planning policy concept of Holland. Fazal et.al., (2012) indicates that ‘space is at a premium in the Netherlands’ and ‘ There is not enough space available for all activities. In addition, many uses of the available space exclude other uses to some extent’. Due to this reason, through the national spatial planning policies of Netherlands, ‘most efforts were directed mainly to the Randstad, a distinctive poly-nucleated pattern of urban centers at the western part of the Netherlands (including the major cities of Amsterdam, Rotterdam, The Hague and Utrecht and a substantial number of small cities). These settlements locate as a ring and surround as a horseshoe shape a ‘core of green landscape named as Green Heart is put forward to check the urban sprawl as planning initiatives’ (Fazal et. al. 2012) and it covers approximately 1 600 square kilometers area.

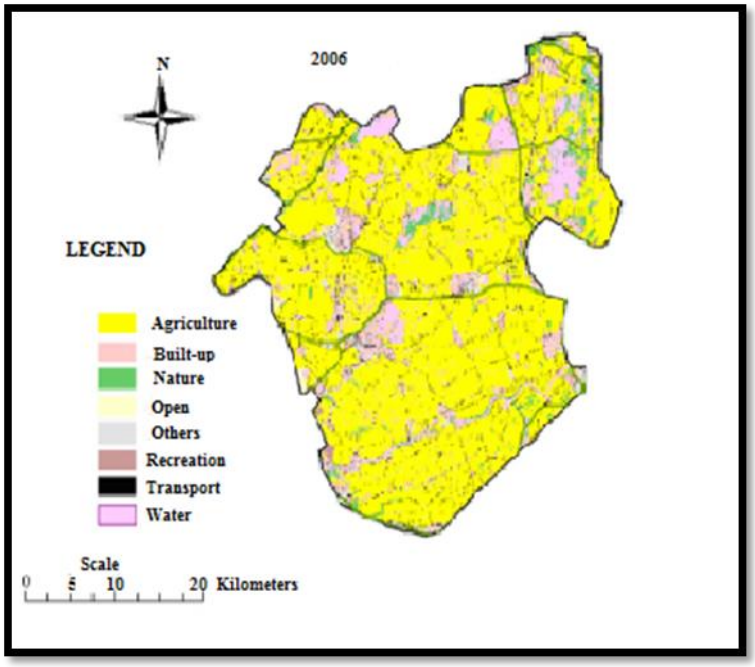
Essentially the area of Green Heart was a peat bog and developed as a man-made landscape initiative’. The term ‘Randstad Holland’ was first used in the 1930s, but only refer to the group of towns and cities located relatively close to each other at the Western Netherlands. In 1950s, the Working Comission for the Western Netherlands developed the basis for an urban strategy for the Randstad Holland. It was started to construct in 1960 by politicians and planners however, its origins dates back to the beginning of 1900’s as the years of start in raising the man-made landscape in Holland. The period of between 1960s and 1990s should be named as the term of constructing and developing the natural values of Green heart. In 1988, it has given the status of ‘National Landscape’. It is seen that, after 1990s, a particular emphasize was paid for developing the cultural values that are existing in the Green Heart additionally to natural values.

The Green Heart is a central open agricultural area in the Randstad that supports soil-based agriculture and dairy farming’ (Carter and Esakin, 2010) and agriculture in the Green Heart is a sector that is strongly influenced by the European Agricultural Policy (Fazal et.al., 2012). In the Randstad Region, 80 % of the land continues to be

used for a diverse range of agriculture, including cultivation under glass at the west, bulb production at the north and large-scale arable farming in the south. In **Map 2,** the lands that are showed in yellow color show the agricultural areas in Green Heart of Holland.

Map 2: Greenheart of Holland

Data source: Carter and Esakin, (2010)



Map 3: Land-Use / Land Cover in 2006

Data source: Fazal et. al. (2012)

In **Table 3,** general features of Green Heart are shown. It is seen the major objevtives of not be given the natural areas to urban uses and protecting lands.

Table 3: General features of Green Heart of Randstad Holland

GREEN HEART OF RANDSTAD HOLLAND	
Area	• 160 000 hectares
Major Objectives/Vision	• There should be recreation areas near great cities • Productive agricultural land should not be surrendered to urban uses • Water catchment areas and recration should not be given over to urban uses

Table 3 (continued)

Agricultural Features	• In the Randstad Region, 80% of land is used for range of agricultural activities including cultivating under glass, bulb growing and large-scale arable farming • Contains peat meadows, low polders, dunes and flood plains
Natural Features	• Highly scenic • Dykes, ditches, ponds • Three major landscapes are river landscapes, peat lands and drained lakes
Governance	• Considered more of a planning concept than a legal entity, The Fourth Report on Spatial Development in the Netherlands gave the Green Heart the status of 'National Landscape' and a policy document was created to protect and promote the area's openness and landscape identity. • The policy involves development of the landscape, development of nature and cultural values, and restriction of urban sprawl. Although strictly a planning policy, it is strongly supported by the Netherlands government • The Green Heart Platform is responsible for implementing policy relating to the Green Heart. It is made up of representatives of the four government ministries, the Ranstad provinces, the four major cities in the Randstad ring, other municipalites, water boards and interest groups.
Greatest Threat	• Housing and development pressures on open spaces • Construction of new roads and railway lines • Recreational space is in short supply • Struggle to protect agricultural land

Table 3 (continued)

Recent Activity	• Although the Green Heart continues to be a national planning policy concept, local governments now have more discretion in deciding where to build and which restrictions to lift • Netherlands government has identified the Green Heart as part of its response to climate change
Bottom Line	• While the Green Heart remains in need of continued protection, better conditions have been created there and it is viewed as a significant and valuable part of the Randstad Region, with its diverse functions of agriculture, recreation, and water and nature management

Data source: Data source: Carter and Esakin, (2010)

In **Table 4**, land-use and land cover amounts are shown.

Table 4: Green Heart Region land-use and land cover amounts in 2006

LAND-USE (2006)	LAND AMOUNT (ha)
Transport	5184 ha
Built-p	9499 ha
Others	3553 ha
Open Spaces	1604 ha
Recreation	4177 ha
Agriculture	122 688 ha
Nature	5048 ha
Waterbodies	15 585 ha
Total	167 338 ha

Data source: Fazal et.al., (2012)

2.9. AGRICULTURAL LAND AS BEING 'VALUE':

Researching the 'value' of agricultural land is required for understanding the concept of '*value*'. The term of *value* generally brings the term of '*price'* to the minds of people; whereas *value* is a term that may be used for many meanings. In his study, Tepe (2008) looks for the answer of question that asks if the values are the meanings. He asks 'What is value? What is it that makes anything valuable? Is it the ascribed meaning that makes something valuable? In colloquial language both *value* and *meaning* are used almost synonymously. Both of them are certainly the facts of the human world. It is the human beings who make the world valuable, or at least the achievements of some human beings. Therefore in a world without man there would not be any value or meaning. Yet the fact that the value or meaning is a fact of the human world and meaning is always seen or attributed by a human agent does not render the value or meaning subjective or relative to that person who sees or attributes values to things' (Tepe, 2008).

In the following argument, Tepe (2008) points out that value of anything is due to its meaning that is given by anybody. He underlines the difference between the *value that depended on meaning* and *meaning that dependent on value*. Nothing has any value if nobody tells about its meaning. So it is obvious that value is subjective because their natures that cannot be free from personal valuations through the personal benefit relations.

He emphasizes that, value and meaning might be the same things if the things/ phenomenon that are criticized through their gaining for humanity and world. Meaning and value coincidence in the approach of the looking sight of being a person and conservation of person's values.

In this study agriculture as a *human phenomenon* and agricultural land as the *being* that is both only and not renewable resources of food production and its all aspects those are both agricultural and natural are accepted as *value* through its *meanin*g that is due to the benefits for living quality of humanity.

Through the literature review and theoretical framework study, it is seen that the agricultural lands locating in the urban and peri-urban areas have both *agricultural* and *natural* values. Agricultural and natural values are interrelated; they operate together in the eco-system. Elements of being ***'agricultural value'*** are (**Figure 3**):

1. ***Agricultural Economics:*** In this study the agricultural economics term refers to the all processes and elements of agricultural production that has bidirectional relations with agricultural policies and general economy. The processes of agricultural production include all the steps from methods of producing to marketing such as source of income, agricultural investments, agricultural proceeds, food security and the role of it in the general economy. Elements of agricultural economy refer to agricultural labor-force, agricultural products, agricultural equipment, agricultural chemicals, irrigating.
2. ***Agricultural Settlement and Agricultural Living Culture:*** Agricultural settlement refers to settlement area that includes the agricultural production field and housing together in. Agricultural living culture refers to 'the culture of a society is the accepted way of doing things in that particular society. It is the way in which people live, their customs, traditions, methods of cultivation and so on. The culture of a society is learned by each individual member of that society. Children are not born with this knowledge; they learn by seeing how older children and adults behave. There are five particular aspects of local culture that the extension agent should be aware of: *the farming system, land tenure, inheritance, ceremonies and festivals, and traditional means of communication* (Oakley and Garforth, 1985).
3. ***Potentials of Agricultural Lands:*** Potentials of agricultural lands refer to all the capacities that the land should be served through combining different elements of being 'value' for improving the social, ecological and economic structure of the agricultural land.

These potentials should be categorized as *adding-value potentials, multi-functionality potentials, recreational potentials, educational potentials.*

Elements of being ***'natural value'*** are:

1. ***Geographic and Geological Elements:*** Geographic and geological elements refer to land forms, *soil, climate and water* as they are the key elements of agriculture.
2. ***Landscape:*** Landscape element refers to agricultural landscape that provides both cultivated spaces and diversified open green areas for the whole of urban open-green systems. Landscape value serves changing views according to changing time and both type of production and products.
3. ***Biodiversity:*** Biodiversity element refers to habitat of the agricultural land that includes diversified types of all living organisms and their interrelated life-cycles.
4. ***Environmental Impacts:*** Environmental impacts element refers to the positive impacts of agricultural land on cities such as clean air, temperature decreasing, providing local air movements
5. ***Conservation Impacts:*** Urban agricultural lands should be benefitted for conservation of soil, preventing of urban sprawl

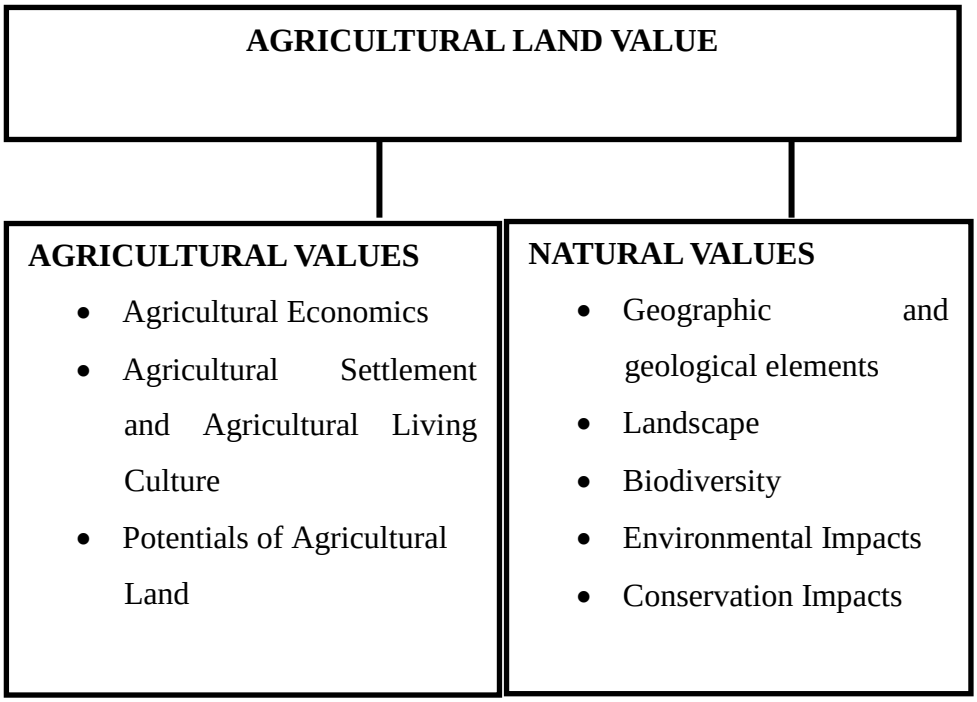


Figure 3: Inter-related structure of *'Agricultural Land Value'*

2.10. CONCLUSION

An increasing number of studies carried out by experts in various scientific fields focus on a new spatial dimension, bridging urban and rural entities. They analyze functions and shapes of the borders between the city and the countryside, to characterize these frontier spaces of contact, connection and separation (Torreggiani et. al. 2011).

This literature review and theoretical framework study is prepared through the aims of exposing the present situation of the land conservation against urbanization through examples and analyzing the elements of values of urban agricultural lands that are under the threat of urban enlargement. Consequential evaluation of the study designated the study's approach to being value of agricultural lands for the cities.

CHAPTER 3

THE SOCIO-SPATIAL STRUCTURE OF ANTALYA CITY AND KIRCAMİ AREA

3.1. INTRODUCTION

Antalya is a city of West- Mediterrenean Region of Turkey with 20.815km^2 surface area and this amount is equal to the 2,6 per cent of Turkey's total surface area. City is surrounded by *Toros Mountains* at the north. At the eastern side of the city there are *Mersin, Konya* and *Karaman* cities, at the northern side there are *Isparta* and *Burdur* cities, at the western side of the city there is *Muğla* city of Turkey. *Mediterranean Sea* constitutes the southern borders of the city.

Map 4: Antalya city in Turkey

3.2. SOCIO-SPATIAL STRUCTURE OF ANTALYA CITY

3.2.1. ANTALYA IN HISTORY

Antalya city was a part of Pamphylia Region and it was the 'ancient maritime district of southern Anatolia, originally a narrow strip of land that curved along the Mediterranean between Cilicia and Lycia but that, under Roman administration, included large parts of Pisidia to the north'. (http://global.britannica.com/EBchecked/topic/440504/Pamphylia).

Antalya was established by the king of Pergamon II. Aktolos in B.C. 159 and city takes its name from the king's name. Before II. Aktalos city was captured by Lydia Kingdom and II. Alexander. Antalya integrated to Galatia and became shire with Lycia in B.C. 36.

In 1207, Seljuk State captured the city by Gıyaseddin Keyhüsrev. The Seljuks captured the city for twice in the history. After seven years of the first capture, Byzantium State captured the city in 1217 for just two years, then Seljuks took back it again by İzzettin Keykavus. After Seljuks' domination, in 1301 Hamidoğulları Beyliği, then Karamans captured the city. Ottoman period started by Yıldırım Beyazıd in 1390. Through the '*Vilayet Nizamnemasi'* in 1865, Antalya was integrated to *Konya Sancağı*. In the last years of Ottoman State, Antalya became one of the *sancaks* of the state.

After I. World War, Antalya was given to Italians through the Armistice of Moudros in 30.10.1918. City owned its independence in 05.07.1922 as being one of the provinces of Turkish Republic State.

Antalya had an important role due to its strong agricultural production throughout the history.Agriculture was dominant due to the large and arable lands of the Pamphylia Region and especially oil, grape and types of cereals as the essential agricultural products.

3.2.2. GEOGRAPHICAL STRUCTURE

Antalya city locates at the 36.06º-37.25º geographical north latitude and the 39.12º-32.35º eastern meridians those are at the south of Turkey and west of Mediterranean Region. The neighbors of Antalya city is Konya city at the north-eastern borderline, Burdur and Isparta cities at the northern borderline, İçel city at the eastern borderline, and the Mediterranean Sea on the southern borderline of the. City is a harbor city and has 640 km coastal line that is the 11 per cent of total coastal line of Turkey (A.M.E. Report, 2012).

Antalya city is the biggest city of West Mediterranean Region that includes Burdur, Isparta and Antalya cities due to its population.It is seen the amounts of the surface areas and population of Antalya and West Mediterrenean Region in **Table 5**.

Map 5: Map of ancient Anatolia

Data source: http:// kahramanmaras.org

Antalya Gulf has a huge cavity at the western side of Mediterranean Sea and city settles on the farthermost point of the gulf. Gulf expands from Yardımcı Burnu

toward Gazipaşa and it is 280 km in length. The eastern and north-eastern borders of the gulf reach to the Anamur Promontory. On this coastal line, the parts those are perpendicular to the sea, there are perpendicular cliffs. Coastal line enlarges near Manavgat River and forms the Side Beaches that is well-known in the tourism sector.

At the western side of Antalya Gulf, geographical structure is plainer with respect to the eastern side of the gulf except the cliffs those are locating between Antalya and Kemer. Depth of the sea can be 200 m in a small distance from the shore in front of the cliffs those are 30-40 m.in height and surrounding the Antalya city center.

Table 5: Surface areas of Antalya, West Mediterranean Region and Turkey

CITY/ REGION/ COUNTRY	SURFACE AREA ($km^{2)}$	% of SURFACE AREA in TURKEY	2000 YEAR POPULATION	% of POPULATION in TURKEY
Antalya	20.788	2.65	1.697.600	2.50
West Mediterranean Region	36.798	4.70	2.497.387	3,68
Mediterranean Region	110.000	13.96	8.723.839	12.85
TURKEY	787.577	100.0	67.845.000	100

Data Source: A.M.M. 2008 Development Plan Report

3.2.3. TOPOGRAPHIC STRUCTURE

Antalya city is located on the Antalya Basin that settles on the Antalya cliffs. Lands of Antalya Basin are constituted of two huge and fragmented plateaus those are Taşeli Plateau at the east and Teke Plateau at the west. These plateaus are fragmented by Toros Mountains and several rivers and streams of Aksu, Köprü, Manavgat, Düden, Kargı, Alara, Karpuz, Korkuteli and Alakır. The slope gradient of the city

center and its eastern and northern areas is generally is 10%. The areas those have slopes more than 10% locate at the western side of the urban area.

Antalya Basin has a large variety of surface formations. In the basin, mountains are the basic formations and settled by two layers. Tahtalı Mountain as being the front layer 616m in height locates at the western side. In the back layer, there are Bey Mountains and they are approximately 1000- 1300m in height around Geyikbayırı Area and 2500m around the Saklıkent Area. These mountains generally encompass the eastern and northern parts of the basin and they are approximately 2000m and more in height. Between these mountains there are partly flovio-karstic and tectonic pits. Especially in Akseki- Korkuteli Region there are karstic melting pits.

In the southern side of the Antalya Basin there are coastal plains with 100m in height and at the west and northern side of the basin there are high plains those are 800-1200m in height. The coastal plains are formed by the alluvial rivers. They are wider at the western side and become narrower at the eastern side. Because of Toros Mountains are parallel to the sea, plains generally lie on the coastal line. High plains are stranded between the high mountains as ‘closed karstic pits’ especially at the west side.

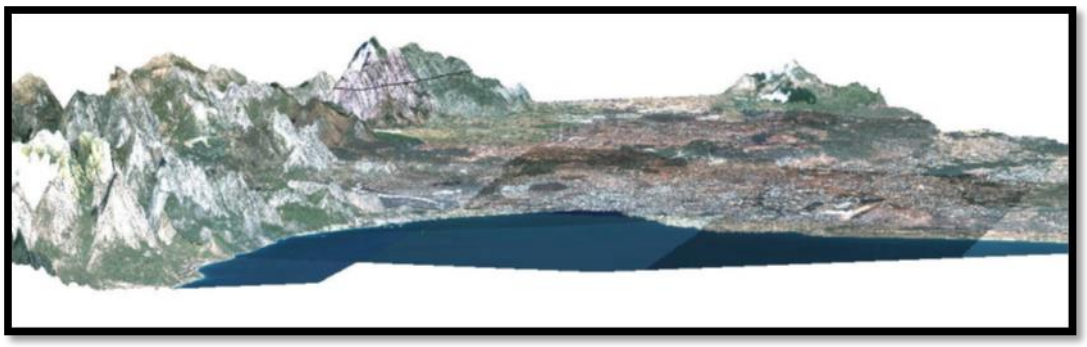
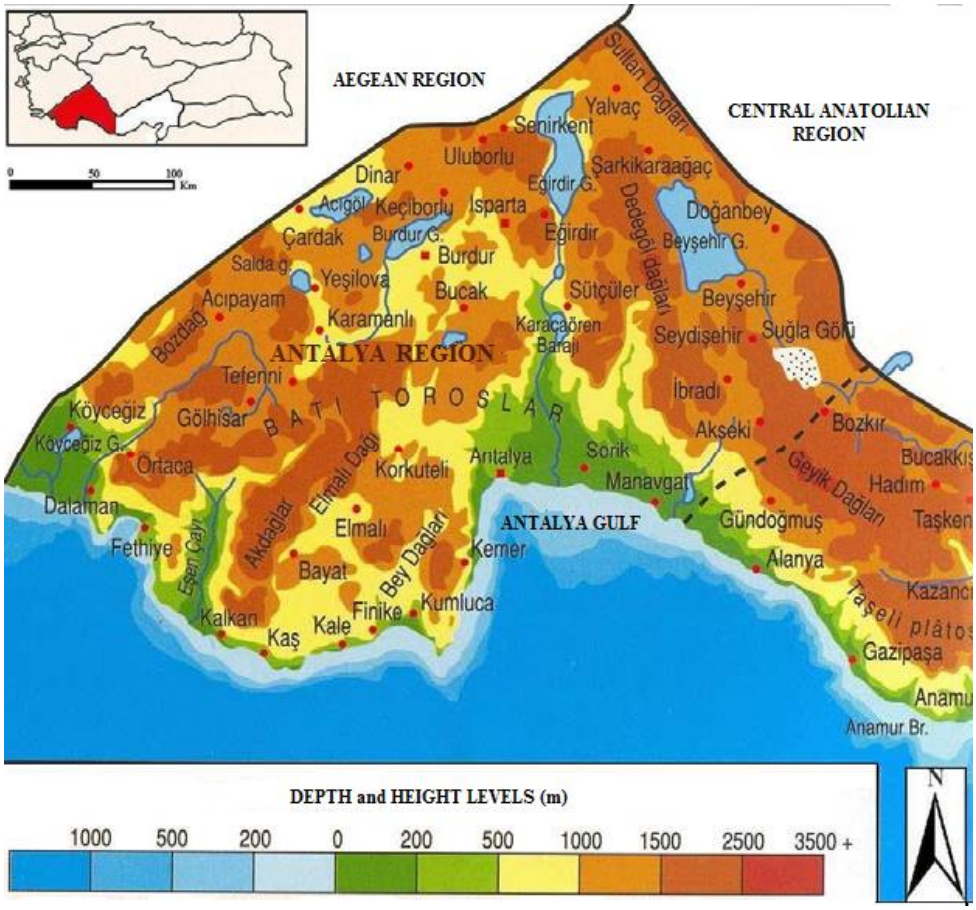


Figure 4: Three- dimensional view of Antalya

Data source: A.M.M. 2008 Development Plan Report

3.2.4. CLIMATE

Annual average temperature is 18.4 ºC in Antalya city. Temperature difference is low between winter and summer months; summers have high temperature and winters are cool and warm generally. Locating at the hillside of the Toros Mountains is one of the determinative facts of the Antalya Region's climate. At the ends of the October month, Antalya Region gets under the effect of warm and moisturized air. Due to the impact of this warm and moisturized air to the Toros Mountains intensive and long-term orographic rainfalls starts. Especially, at the south-western hillside of Geyik Mountains amount of the rainfalls increase (Kafalı Yılmaz, 2008). **Map 6** illustrates the depth and height levels of Antalya Region that has impacts on climatic conditions.



Map 6: Depth and height levels in Antalya Region

Data source: Kafalı Yilmaz, 2008

According to the statistical data of General Directorate of Meteorology, the maximum daily rainfall amount was 331.5 kg/m² in17.01.1969; daily fastest wind was 155.5km/hour in 22.01.1998 and maximum snow height was 5.0cm in 07.01.1993. **Table 6** illustrates the annual temperature amounts, rainfall and sun conditions those submits appropriate conditions for agricultural production for Antalya city.

Table 6: Average meteorological values between the years 1950 and 2014

ANTALYA	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT.	OCT.	NOV.	DEC.
AVERAGE TEMPERATURE (ºC)	9,9	10,4	12,7	16,2	20,5	25,4	28,4	28,2	24,8	20,0	14,9	11,4
AVERAGE MAXIMUM TEMPERATURE (ºC)	14,9	15,5	18,0	21,3	25,5	30,9	34,2	34,2	31,2	26,6	21,1	16,6
AVERAGE MINIMUM TEMPERATURE (ºC)	6,0	6,2	8,0	11,2	15,0	19,6	22,7	22,7	19,3	15,2	10,6	7,5
AVERAGE SUNSHINE TIME (hour)	5,2	5,6	6,6	8,1	10,6	11,4	12,1	11,4	10,0	8,1	6,3	5,0
AVERAGE RAINY DAY NUMBER	12,7	10,4	9,0	7,1	5,6	2,6	0,6	0,6	1,8	5,8	7,8	11,8
AVERAGE MONTHLY RAIN AMOUNT	229,9	150,0	102,7	56,2	31,9	7,7	2,8	3,1	13,5	79,8	136,1	261,7
MAXIMUM TEMPERATURE (ºC)	23,9	25,9	28,6	36,4	38,0	44,8	45,0	44,6	42,1	37,7	33,0	25,4
MINIMUM TEMPERATURE (ºC)	-3,4	-4,6	-1,6	1,4	6,7	11,1	14,8	15,3	10,6	4,9	0,8	-1,9

Data source: http://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=ANTALYA

3.2.5. VEGETATION

As the result of diversification on climatic, topographic and soil structure, natural vegetation has also diversity. The main vegetation/ flora of Antalya city should be examined in two categories as *forests* and *shrubby areas.*

3.2.5.1. Forest areas:

Total forest areas of Antalya city is 1.135.060 ha. These forests are categorized in three groups as 512.000ha *normal small forest areas*, 339.000 ha *damaged small forest areas and 297.000* ha marsh *small forest areas* (Antalya Agricultural Master Plan, 2011). Types of trees have diversity according to the height:

1. Between 0-600m in height: Maquies
2. Between 600m - 1200m in height: Maquies+ Pinus brutia (Turkish pine)
3. Between 1000m - 1400m in heigt: Pinus brutia (Turkish Pine)
4. Between 1400m – 1700m in height: Cedrus libani + Juniperus species (Juniperus excelsa, Juniperus foettidissima, Juniperus oxycedrus, Juniperus phoenica)+Abies cilicicia
5. Between 1700m – 2100m in height: Juniperus species + Cedrus libani
6. Between 2500m in height - : Alpin vegetation

3.2.5.2. Shrubby and Pasture Areas:

5 per cent of total surface area of Antalya city is constituted of shrubs and pasture areas. The shrubby and pasture areas those are closed to coastal line have generally 2nd and 3rd classified agricultural lands. Today the lands those are used through grazing are damaged because of excessive grazing and drought. The significant and valuable vegetation of pasture areas are decreasing and thus less valuable vegetation occurs instead.

3.2.6. DEMOGRAPHIC STRUCTURE

Antalya city is dominantly affected by population increasing do to migration since 1950s. Today, it is the fifth developed city of Turkey. **Table 7** illustrates the order of thhe population numbers of biggest citiest of Turkey. Migration process has two periods as before and after 1980s.While in the years between 1950 and 1980 migration was generally from rural areas to Antalya, especially after 1980s migration from urban areas to Antalya increased due to the development of tourism sector and

urban business conditions. In the last fifty years, population of Antalya increased 22 times. **Graphic 2** shows from which cities Antalya takes migration.

According to data Turkish Statistical Institute, 357.253 numbers of people as being the 73% of total population of Antalya were living in rural areas with in 1965 and 129.657 numbers of people as being the 27% of total population were living in urban areas. It is seen a quite opposite situation in 2012 data. According to 2012 population data, 599.863 numbers of people as being the 29% of total population were living in rural areas and 1.492.674 numbers of people as being the 71% of total population were living in urban areas in Antalya.

Today Antalya Metropolitan Municipality (A.M.M.) has eleven first levels of municipalities. Before 1980, Varsak, Aksu, Çalkaya and Döşemealtı were integrated to Antalya Municipality. After 1980 Beldibi, after 1990 Yeşilbayır and Yurtbayır, after 1997 Pınarlı, Yukarı Karaman, Doyran and Çığlık municipalities were integrated with A.M.M. In the city tourism and agriculture are the dominant sectors of economy. Before 1980s, Antalya's economy was dependent on agriculture. After the development of tourism sector in those years, today agriculture is the second economic sector in the city. In **Table 8**, it is seen the change in women-men population of between the years 2007- 2013 in Antalya.

Table 7 : 2012 population orders of cities in Turkey

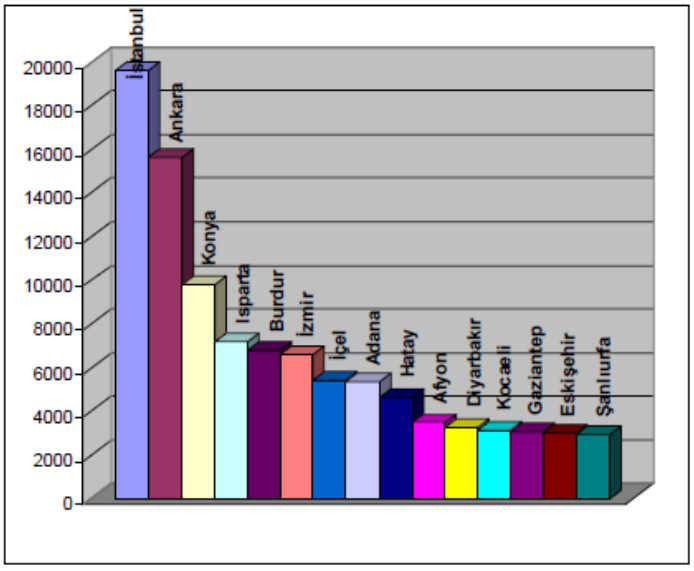
ORDER No:	**CITIES**	**2012 POPULATION**	**2013 POPULATION**
1	İstanbul	13.854.740	14.160.467
2	Ankara	4.965.542	5.045.083
3	İzmir	4.005.459	4.061.074
4	Bursa	2.688.171	2.740.970
5	**ANTALYA**	**2.092.537**	**2.158.265**

Data source: www.tuik.gov.tr

Table 8: Change in the women-men population of Antalya

YEAR	WOMEN POPULATION	MEN POPULATION	TOTAL
2013	1.067.422	1.090.843	2.092.537
2012	1.034.467	1.058.070	2.158.265
2011	1.008.820	1.034.655	2.043.482
2010	976.425	1.001.908	1.948.333
2009	946.175	973.554	1.919.729
2008	917.013	942.262	1.859.275
2007	881.295	908.00	1.789.295

Data source: www.tuik.gov.tr



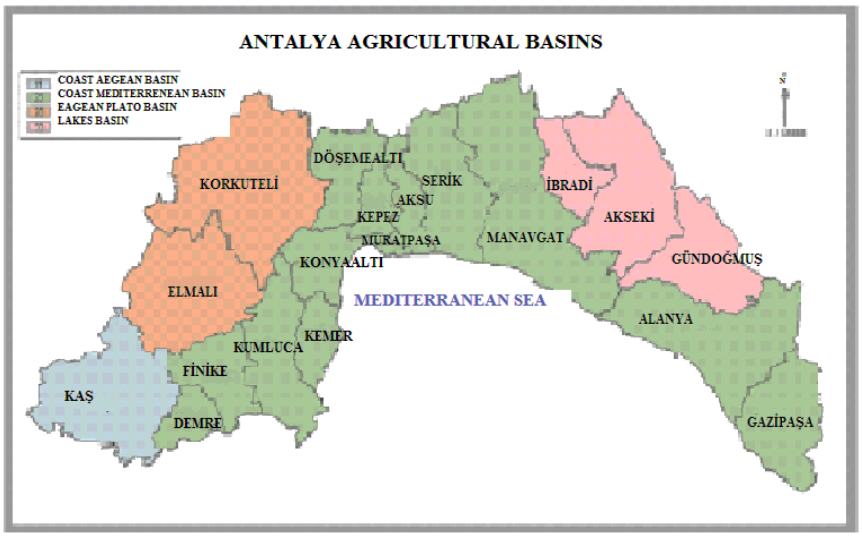
Graphic 2: Graphic shows the cities that Antalya takes migration from

Data source: A.M.M 1/ 25000 scaled Environment Plan Report

3.2.7. AGRICULTURAL STRUCTURE

Agriculture is still crucial sector not only for the Antalya city although it lost serious amount of agricultural lands especially in the last 50 years. Between the years 2005-2012, city lost more than 10% of total arable lands due to urbanization.

There are four agricultural basins as *Coast Aegean Basin, Coast Mediterrenean Basin, Eagean Plato Basin* and *Lakes Basin* in Antalya (**Map 7**). 15% of total agricultural lands is fruit production area, 1% of total agricultural lands is ornamental plants production areas, 5% of total agricultural production areas is arable but empty agricultural fields, 10% of total agricultural lands is greenhouse production areas, 9% of total agricultural areas is fallowed areas and 55% of total agricultural areas is cultivated areas (**Graphic 3** and **Graphic 4)**.



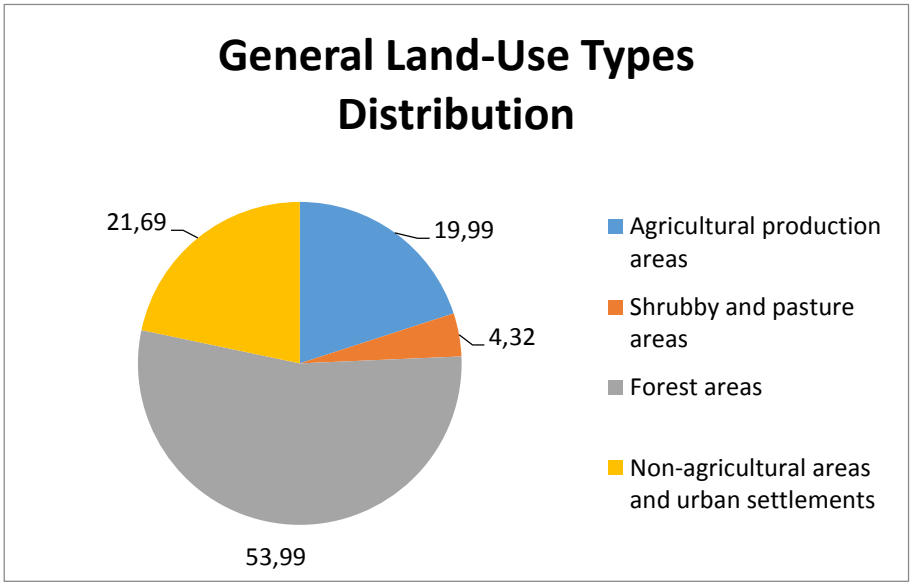
Map 7: Agricultural Basins of Antalya

Data source: A.M.E. Report, 2012

Table 9 demonstrates the changing amounts of the types of products and amounts of the producing area according to the years. Greenhouse production dates back to the 1940s in Turkey. Initial greenhouses are built in İzmir and Antalya through the aim of agricultural researches of some agricultural organizations. Between the years 1940-1960, number of greenhouses did not increase due to the high cost of glass. After 1970, polythene is started to use as the greenhouse covering material which is a cheaper method. Greenhouse production had increased through15% between the years 1980-1990s. **Table 10** demonstrates the increasing amount of greenhouse areas according to the years.

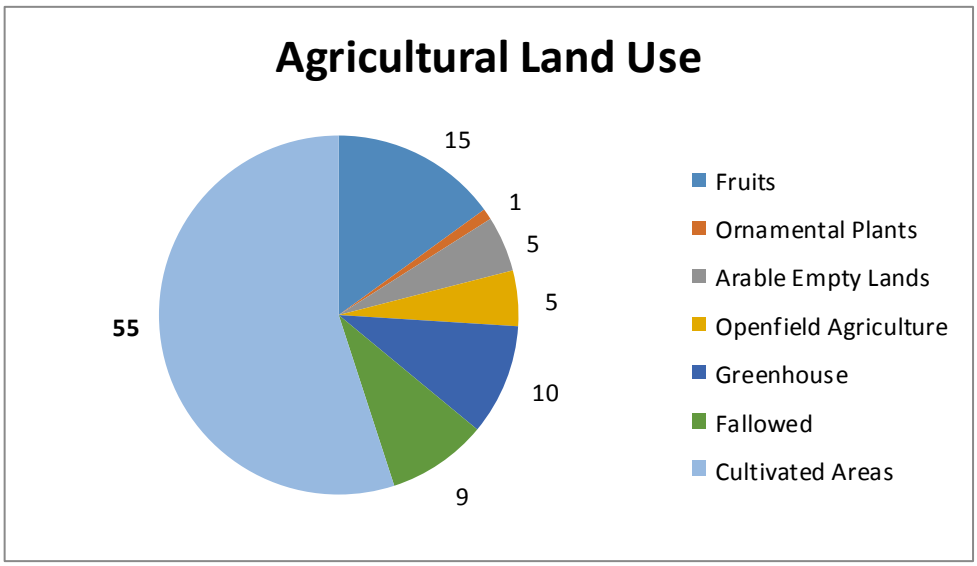
Today, Antalya, İçel and Muğla cities are the leader cities in greenhouse production in Turkey. Antalya city is the leader city in greenhouse production with 57% of total greenhouse production of Turkey. Although today vegetable production is dominant, in the last decade ornamental plants production was also increased, too (Emekli et. al., 2008).

There are greenhouse production areas intensely on the coastal line of the area between Kaş and Gazipaşa towns. This area is the leader one in greenhouse production not only in amount of greenhouses but also the production techniques. According to the data of Turkish Istatistical Institute, in the period of the years 2008-2009, the total greenhouse area is 259.787da and 84% of total glass greenhouses and 44 % of polythene greenhouses of Turkey settle in Antalya (www.tuik.gov.tr). Between the years 2010-2012, total greenhouse area production increased through 11 per cent amount that is more than the increasing average amount in Turkey (A.M.E. Report, 2013).



Graphic 3: General land-use types distribution in Antalya

Data source: A.M.E. Report, 2013



Graphic 4: Agricultural land-use types in Antalya

Data source: A.M.E. Report, 2013

Table 9: Type of producing products and amounts of producing area

YEAR	Cereals and Other Vegetal Products	Fallowing Areas	Vegetable Production Areas	Fruits and Species Product Areas	Ornamental Product Areas	TOTAL AREA
2005	2.423.280	486.250	416.520	541.260	0	3.867.310
2006	2.318.668	485.982	415.485	559.705	0	3.779.840
2007	2.240.160	438.604	438.604	562.220	0	3.726.759
2008	2.245.727	471.796	471.796	593.775	0	3.732.153
2009	2.119.995	452.275	452.275	618.214	0	3.566.431
2010	2.206.217	451.84	451.804	632.53	0	3.672.513
2011	2.076.662	455.264	455.264	654.569	5154	3.603.327
2012	2.080.859	471.602	471.602	701.535	5201	3.681.788

Data source: Antalya Agricultural Master Plan, 2002

Table 10: Change in the amount of the greenhouses areas according to the years

YEARS	GLASS GREENHOUSE AREAS (da)	POLYTHENE GREENHOUSE AREAS(da)	TOTAL
1990-1991	30.601	63.916	94.517
1995-1996	35.972	118.624	154.596
2000-2001	60.876	153.610	214.486
2004-2005	67.227	171.043	238.270

Data source: Emekli et. al., (2008)

3.3. UNDERSTANDING ANTALYA'S URBANIZATION PROCESS THROUGH DEVELOPMENT PLANS

Antalya city is one of the negatively affected cities of Turkey during 1950-1980s due to urbanization.1950s were the years of rapid increase in population number due to migration. The population number of 1950 was about 50.000 and it was increased to about 200.000 in the beginning of 1980s. Population number was increased to 680.000 in the year of 2000 by an excessive average of population increasing (Esengil, 2000). According to Manavoglu (2009), 'spatial formation and transformation in urban character of Antalya city started in1950s and increased rapidly after these years. While in 1950, total urban surface area was 270 ha. and population number was 27.515, total urban surface area is increased to 690 ha. and population number increased to 50.908 through 85% increasing amount in 1960' (**Table 11**).

Antalya city had not a comprehensive plan until 1980 although the presence of this excessive population growth. Before 1980, there were two plans that were prepared by General Directorate of Provincial Bank in 1957 and 1965 but it is seen that the plans did not have effective roles on the spatial development of Antalya. Antalya city's planning history should be examined in 5 periods of:

1. 1957 - 1965 Period
2. 1965 - 1980 Period
3. 1980 - 1994 Period
4. 1994 - 2005 Period
5. 2005 - 2014 Period

3.3.1. 1957- 1965 PERIOD

This period should be evaluated as the beginning term of social, economic and spatial transformation in Antalya. In this term, Antalya was dominantly settled on Kaleiçi and the rapid urbanization started to damage the historical settlement character of Kaleiçi. Due to the urbanization, General Directorate of Provincial Bank

prepared the first development plan of Antalya and it was approved by Ministry of Development and Housing in 1957. Plan was dominantly targeting Kaleiçi Area and its environment that those are Bahçelievler at the west, Şarampol at the north and Yenikapı at the east of Antalya. Plan was insufficient about forecasting the migration and the increasing population of the immediate future.

Table 11: Population growth in Antalya

YEARS	POPULATION	INCREASING AMOUNT (%)
1950	27.515	0.990
1955	35.283	2.823
1960	50.908	4.428
1965	71.833	4.110
1970	95.616	3.310
1975	130.774	3.677
1980	173.501	3.267
1985	261.114	5.049
1990	378.208	4.484
2000	603.190	4.413

Data source: Antalya Agricultural Master Plan, 2002

3.3.2. 1965-1980 PERIOD

1/5 000 Scaled Master Development Plan of Antalya city that was prepared by General Directorate of Provincial Bank was approved by the Ministry of Development and Housing in 1965. However, 1/5 000 scaled implementation plans did not complete and thus never implemented. The most important development issue of this term should be accepted as the Antalya Project of State Planning Organization. In this plan coastal line of South Antalya is suggested as being a tourism development area. In those years, also the construction of Antalya Seaport

has been completed and the capacity of the Antalya Airport has been increased. The results of this project are realized rapidly and all these developments caused to an unforeseen urbanisation of Antalya as the result of housing demand, increasing constructions and squatter houses in the middle of 1970s.

3.3.3. 1980-1996 PERIOD

In this period, Antalya city is developed according to the 1/ 5 000 scaled Master Development Plan of Zühtü Can Planning Office. Plan was approved in 19.02.1980 by the Ministry of Development and Housing. Main decisions of the plan were suggesting enlargement at the western Antalya and protecting of arable agricultural lands at the eastern city. Lara Area is defined as a *conservation area* and limited development susuggested in the area. Plan was Antalya's first comprehensive plan including whole Antalya. However, plan was insufficient especially in population predictions. Antalya was developed according to the revision and adding plans of this insufficient plan until 1996. This plan term should be evaluated as the economic development and spatial-structural transformation term of the city through the development of tourism sector in the city.

3.3.4. 1996-2005 PERIOD

Antalya city has metropolitan status since 1993. In 1994, a new plan was decided to prepare by UTTA Incorparated Company through the common decisions of Chambers of Architects, Chambers of City Planners and A.M.M. 1/5000 scaled Master Development Plan was approved by A.M.M. and a *common decision report* is submitted to UTTA group that includes the requirements of Antalya city for the planning study. According to Esengil (2002), this report lists the basic aims of the new plan that must provide as:

- Antalya must be planned with its close environment
- Historical and natural values must be prevented
- Urban identity must have a new dimension through the city's historical and cultural background
- Agricultural lands have to be protected
- Limitation factors such as cliffs and Düden Waterfall have to be determined in the urban development borders
- Prevention of water resources

UTTA Plan was approved in 1996 but because of the inappropriateness of the plan decisions with the demands of common decision report those were listed above, plan was completely disapproved by Antalya 2. Administrative Court in 14.05.1998. Then, through the report of committee of expertize; only the inappropriate parts of the plan were rejected after two months.

3.3.5. 2005-2014 PERIOD

In this period, through the 5216 numbered Antalya Metropolitan Municipality Law, the borders of A.M.M. is determined over again through participating 11 towns and 17 villages to the city. After the UTTA plan, planning studies continued through revision and additional plans. Kırcami Area's development issue is the unsolved problem of Antalya development process since UTTA Plan. One of the objected parts of UTTA Plan was the decisions about Kırcami Area because of being planned as residential area with E: 0.80.

3.4. KIRCAMİ AREA IN ANTALYA DEVELOPMENT PLANS

Kırcami Area is in the borders of Muratpaşa Municipality of Antalya city and locates in the Düden River Plateau as a part of large and arable lands of Altınova, Koyunlar,

Pınarlı and Aksu Areas those are the continuing agricultural lands at the north of Kırcami Area. Area locates at the east of the Antalya city center. Information about Kırcami's history is too little. In his *Seyahatname*, Evliya Çelebi mentions about a road that connects Antalya to Burdur, Kütahya and Bursa. According to Evliya Çelebi, road lies along Düden River, arrives to Bademağacı, Kestel Lake, Ağlasun and Isparta. This information indicates the connection of Antalya and Kırcami Area region with other cities in the Ottoman period.

The name of '*kır*' is expressing *'being a natural recreational area'* meaning, '*cami*' is expressing the '*being together'* meaning. Kırcami Area was an agricultural recreation area in the past according to information of old Antalya inhabitants. They also mention about the large citrus gardens those they had picnics under the trees along the Düden River about 40-50 years ago.

Today, at the east and north-east of Antalya city, there are huge amounts of arable lands those are under the threat of urban expansion. Kırcami Area locates at the intersection point of urban and rural Antalya and acts as an interface and/or natural edge between the city and the rural areas (**Figure 5** and **Figure 6**). Although area has a dominant rural settlement character, there are increasing urban uses on the borders of the area.

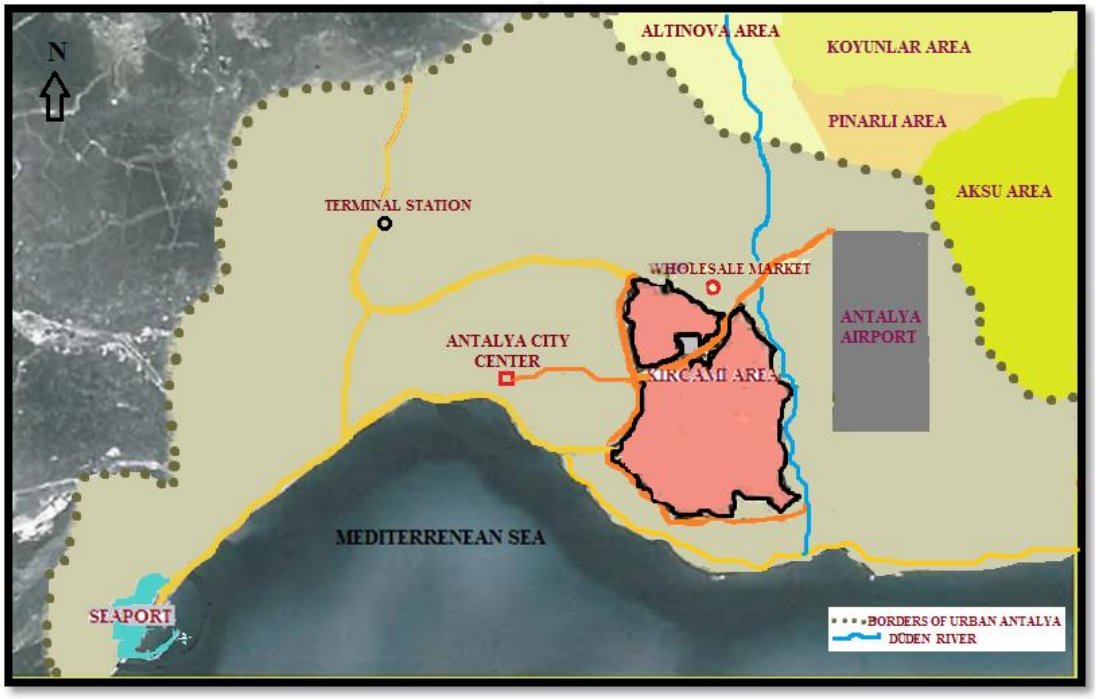


Figure 5: Figure shows the main areas around the Kırcami Area

Data source: Figure is applied from a figure from Kırcami 1/5000 scaled Development Plan Report 2014

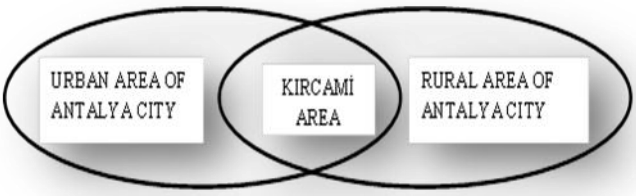


Figure 6: Location of Kırcami as the intersection area of urban and rural Antalya

At the eastern side of the area, Düden River settles as a natural edge. Düden River is the resource of irrigation channels not only for Kırcami Area but also the agricultural lands those are at the northern and eastern neighborhoods of Kırcami Area. At the east of Düden River, there is Antalya Airport that was constructed in 1960. There are

agricultural settlement areas surrounding the Antalya Airport. In these agricultural settlement areas there are 2-3 storeyed housing areas making the airport's close environment as being a semi-rural character. It is observable that the agricultural character is more damaged in these areas than Kırcami Area. Because of the existence of Antalya Airport near Kırcami Area, high constructions carries risks for both air transportation and the hosing areas.

In the southern side of Kırcami Area, there is Bülent Ecevit Avenue and Sinoğlu Street at the south-east side of the area; Bülent Ecevit Avenue is connected to Sinanoğlu Street at the south-west side of the Kırcami Area. Bülent Ecevit Avenue is one of the main roads of Antalya city connecting the city center and the eastern settlement areas of the city. Between the avenue and the coastal line in the southern side, Lara Settlement Area locates. The high prices of the houses in this region are also cause to land speculation on Kırcami Area.

At the western side of the Kırcami Area, Perge Avenue settles as the border element seperating Kırcami Area from urban Antalya. Perge Avenue is a main road that connects the southern side and northern side of Antalya city. Along the avenue, there are 5 to 10 storeyed apartment blocks. Along the roads (Bülent Ecevit Street, Perge Avune, Sinanoğlu Street and Aspendos Avenue) acting as the borders of Kırcami Area, there are commercial and housing constructions as the result of urban development that was allowed by partial development plans.

Kırcami Area is seperated into two parts by Aspendos Avenue. Smaller part of the area locates at the north of Aspendos Avenue and it includes three districts those are Mehmetçik, Doğuyaka and Topçular Districts. In the southern and largest part of the area, there are Kırcami, Güzeloluk, Zümrütova, Tarım and Yeşilova Districts. This part of the area is the case study area of this thesis presented in **Chapter 5**. Kırcami Area is surrounded by urban uses except Düden River settling as the eastern border of the area. Agricultural production is still productive especially in the middle of the area and the parts those are near and close to Düden River. It is observable that the agricultural production is less near the other borders of the area. The largest district of the area is Güzeloluk District with 484.80 ha surface area. Yeşilova District is the

second largest district with 302.02 ha surface area. Surface areas of the districts are shown in **Table 12.**

Until todays, Kırcami Area is lasted as a natural threshold against urbanization. Area is still a rural settlement near the city and relationship between the area and the city is weak. Area is isolated from the city not only as visual but also relational. Arriving to city center from Kırcami Area by public transportation vehicles is not possible. However, because of being settled on the road to airport, the narrow roads of the area are preferable for city dwellers as being shorter alternatives for arriving to airport.

3.4.1. DEMOGRAPHIC STRUCTURE OF KIRCAMİ AREA

Inhabitants of Kırcami Area are dominantly agricultural workers who are living in rural life conditions and generally farmers do not have interaction with urban sides of the area. Zümrütova District is the most urbanized district of the area and agricultural character of the district dominantly damaged due to the results of the partial development plans. **Table 13** shows the population change between the years 1985 and 2007. Data listed in **Table 13** includes the population of the urbanized sides of the districts. It is seen an obvious increase due to the urbanization in the area. Three is a rapid increase in population of 1997 and a rapid decrease in population of 2007 of Zümrütova District. It is also seen an obscure change in population of Topcular and Zümrütova District. In the plan there is no information about this radical change on population.

Table 12: Surface areas of districts and their percentages

DISTRICTS	SURFACE AREA(ha)	PERCENTAGE (%)
DOĞUYAKA	182.29	12.21
MEHMETÇİK	80.08	5.36
TOPÇULAR	84.90	5.69
TARIM	113.14	7.58
YEŞİLOVA	302.02	20.24
KIRCAMİ	141.05	9.45
GÜZELOLUK	434.80	29.14
ZÜMRÜTOVA	153.53	10.29
TOTAL	**1491.81**	**100**

Data source: 1/ 5000 scaled Plan report, 2008

Table 13: Population change in Kırcami Districts

DISTRICTS	1985	1990	1997	2007
DOĞUYAKA	842	1660	1395	1984
GÜZELOLUK	1917	2471	3693	4524
KIRCAMİ	1325	1579	2082	2092
MEHMETÇİK	586	839	1249	1504
TARIM	1263	1479	1554	1901
TOPÇULAR	344	5610	2482	804
YEŞİLOVA	2165	4420	2883	3470
ZÜMRÜTOVA	595	913	4037	1678
TOTAL	9037	18971	19375	17957
ANTALYA TOTAL				**913568**

Data Source: A.M.M. 1/ 5 000 scaled Master Development Plan Report, 2008

3.4.2. NATURAL STRUCTURE OF KIRCAMİ AREA

3.4.2.1. Topographic Structure

Kırcami Area locates in the Düden Plain connecting to Yamansaz and airport area at the east to the southern sides of Masa Mountain. Plain is flat and the slope in the area is almost 5 per cent and this slope continues until Bıyıklı Mountain in 25 km distance.

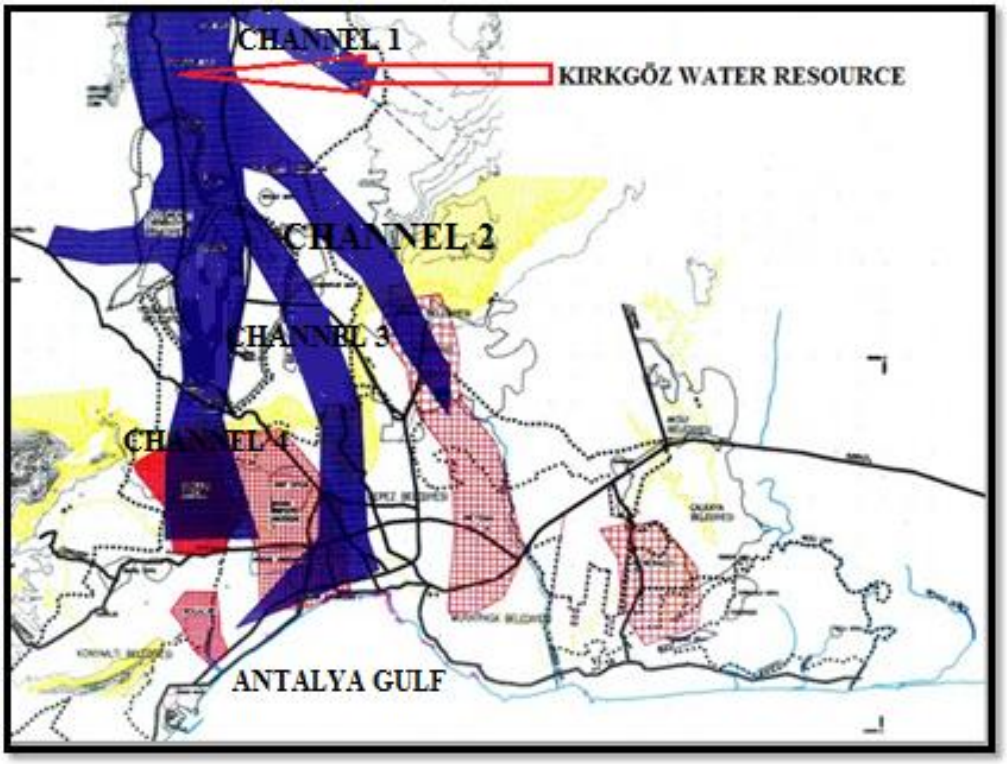
3.4.2.2. Water Resources and Irrigating Channels

Geological structure is the main factor on the formation of the underground water resources. This structure is constituted of limestone and travertines and it has 630 km² surface areas among Mediterrenean Sea in the south, Aksu Valley at the east and Toros Mountains at the north (Antalya Environment Status Report, 2009).

Kırcami Area is irrigating by Düden Waterfall Irrigating Channel since 1966 and totally irrigates 3500 ha area (Antalya Environment Status Report, 2009, **Map 8)**.

Kırcami Area is on the Düden River Water Resource and also in the second level of Duraliler Conservation Area of Drinking Water Resource (**Map 9)**. Emerging point of Düden River Basin is Düden Water fall that is at the north and this waterfall emerges from Kırkgöz Underground Water Resources at the north-west of Antalya. Düden River Basin is feeding up by Kırkgöz Underground Water Resources that is the biggest underground water resources of Toros Mountains. The basin that is feeding up by the Kırkgöz Underground Water Resource includes a huge area containing Burdur, Isparta and Korkuteli.

In **Map 8,** it is seen the Kırkgöz Water Resources. Resource provides important amount of water of Antalya and also Kırcami Area. **CHANNEL 2** transfers the water to Yedi Arıklar irrigating channel in Mehmetçik District. Here it connects to Düden River and Yedi Arıklar irrigating channel provides the water requirement of Kırcami Area.



Map 8: Antalya Kırkgöz Water Resource

Data source: Tunçer and Ercoşkun, (2007)

3.4.3. AGRICULTURAL STRUCTURE OF KIRCAMİ AREA

Kırcami Area's economy is based on agricultural economy. In the area green vegetables are producing dominantly. There were huge citrus fruit gardens in the past of Kırcami Area. However, today the number of citrus fruit gardens is too little. In the area, more than half of the agricultural production area is greenhouse production area with 51.13 percentage an cultivated lands have 38.91percentages (**Table 14**).

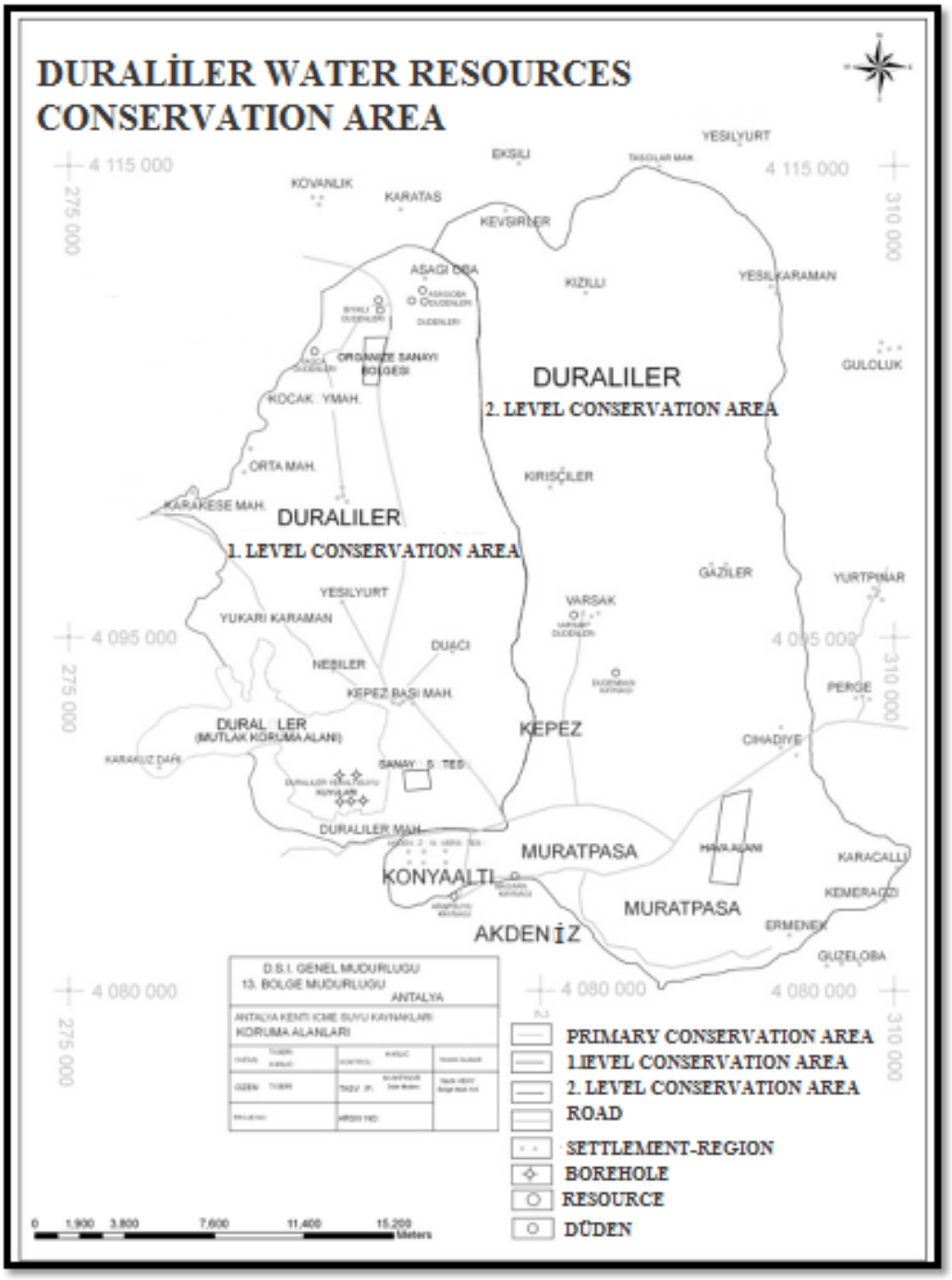
Kırcami Area has the most valuable lands of Antalya city. **Maps 10, 11, 12** are shown the quality levels of the lands of Antalya. In **Map 10** it seen that Kırcami has alluvial lands due to locating in a river basin. In **Map 11** it seen that lands of Kırcami area in the first level of soil depth group. **Map 12** shows that the lands of the Kırcami Area are primary lands as being second level agricultural lands.

In the area irrigating is providing by Düden River. ***Yedi Arıklar Irrigating Channel*** provides the water requirement of the whole area. Area is well irrigated. However, in the areas those are close to the urban borders there are some irrigating channels those are in need to be maintained (**Map 13)**.

Table 14: Agricultural production types, amounts and land percentages

AGRICULTURAL PRODUCTION TYPE	AGRICULTURAL PRODUCTION AREA (ha)	%
GREENHOUSE	728	51.13
CULTIVATED LAND	554	38.91
EMPTY LAND	124	8.70
TREE LAND	18	1.26
TOTAL	**1424**	**100**

Data source: 2008, 1/5 000 scaled Master Development Plan Report



Map 9: Duraliler 1. and 2. Level Water Resources Conservation Area

Data source: Antalya XIII. Regional Directorate of Turkish General Directorate of Hydraluic Works and General Directorate

Table 15 shows the distribution of agricultural production areas according to the districts. It is seen that Mehmetçik, Topcular and Doğuyaka Districts those constitutes the northern part of the area is the agricultural production is weaker than the southern part of the Kırcami Area.

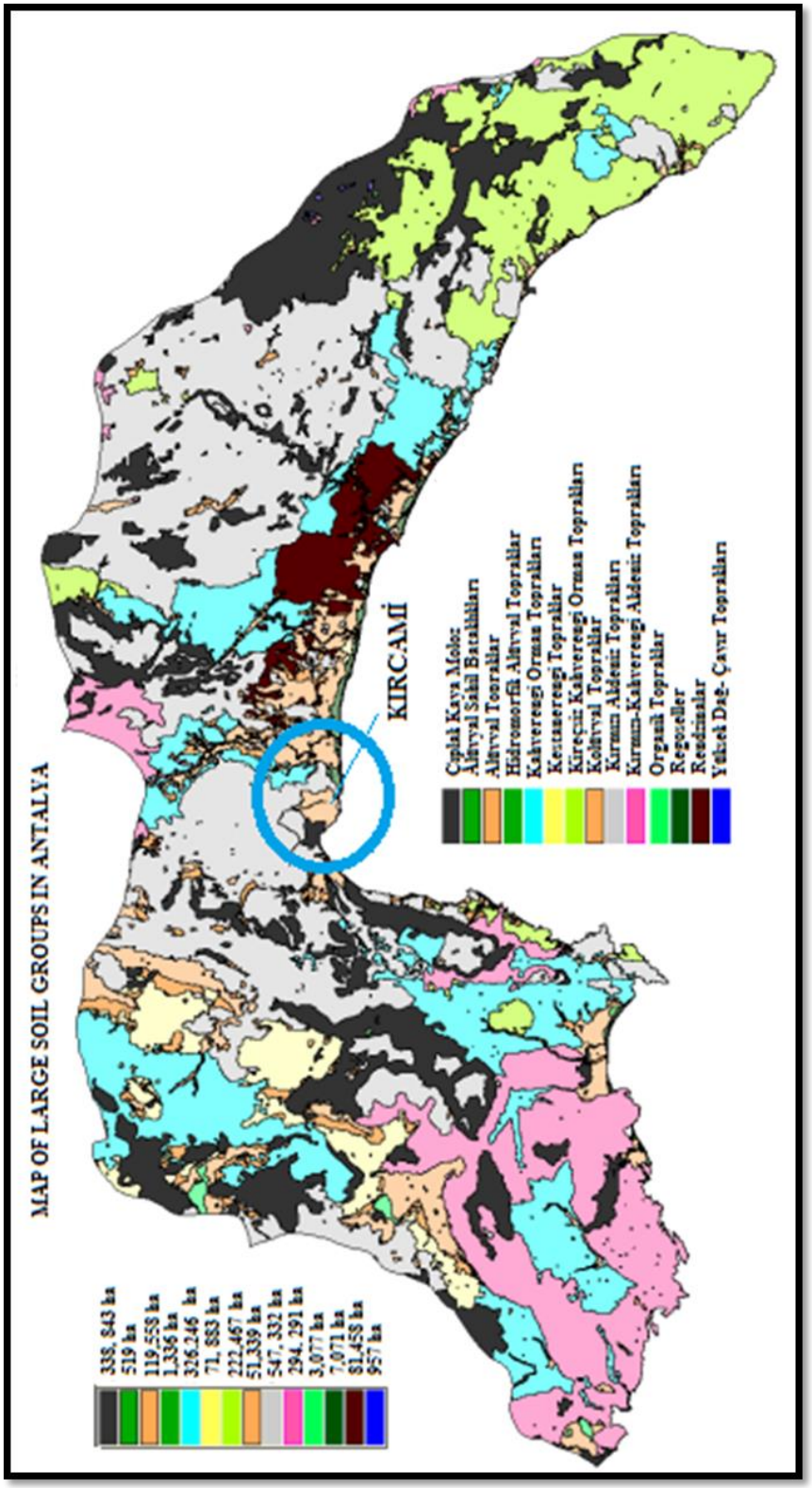
Table 15: Distribution of the greenhouse areas in Kırcami Region

DISTRICT NAME	AGRICULTURAL PRODUCTION AREA (ha)	%
YEŞİLOVA	149.29	24.27
TOPCULAR	35.73	5.8
GÜZELOLUK	212.64	34.5
MEHMETÇİK	26.08	4.2
DOĞUYAKA	46.67	7.5
KIRCAMİ	48.09	7.8
TARIM	43.33	7.04
ZÜMRÜTOVA	53.16	8.64
TOTAL	**614.99**	**100**

Data source: 2008, 1/5 000 scaled Master Development Plan Report

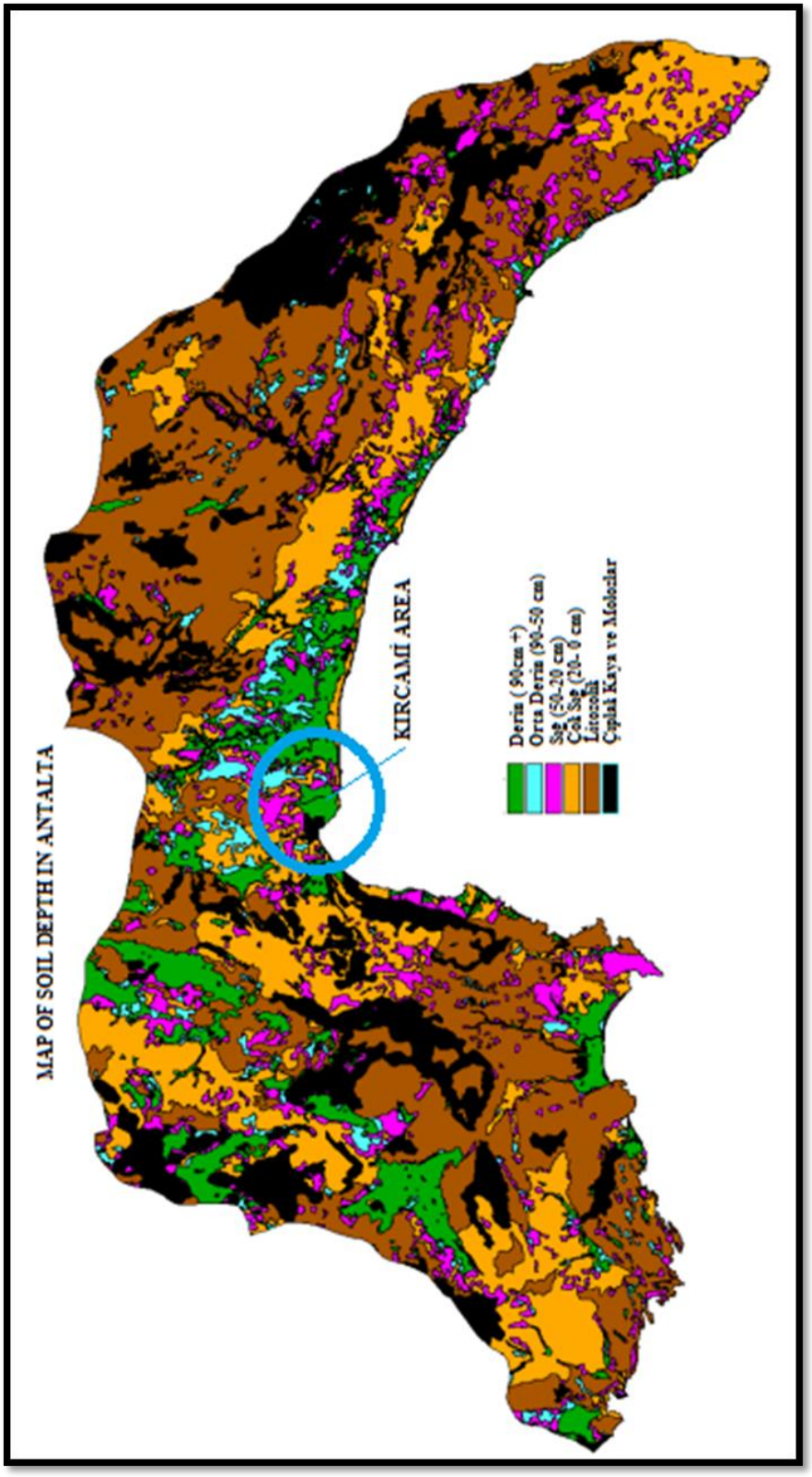
Photograph 3: Düden River cliff waterfall on Mediterranean Sea

Data source: http://www.antalyakulturturizm.gov.tr/Eklenti/8696,618-dundenbuguneantalya-1cilt-muratpasapdf.pdf



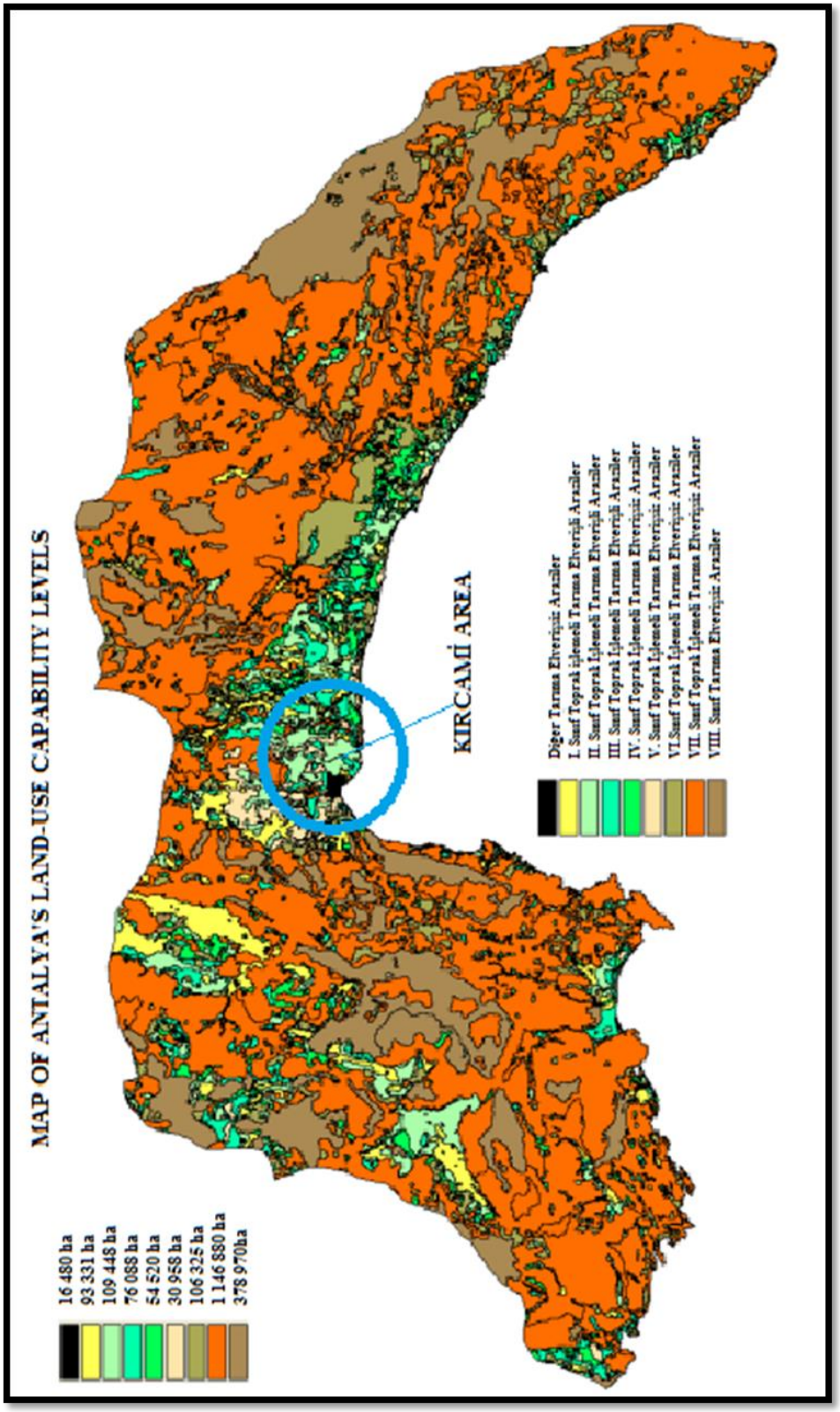
Map 10: Map of Large Soil Groups in Antalya

Data source: Antalya Environment Status Report (A.E.S.R.), 2013



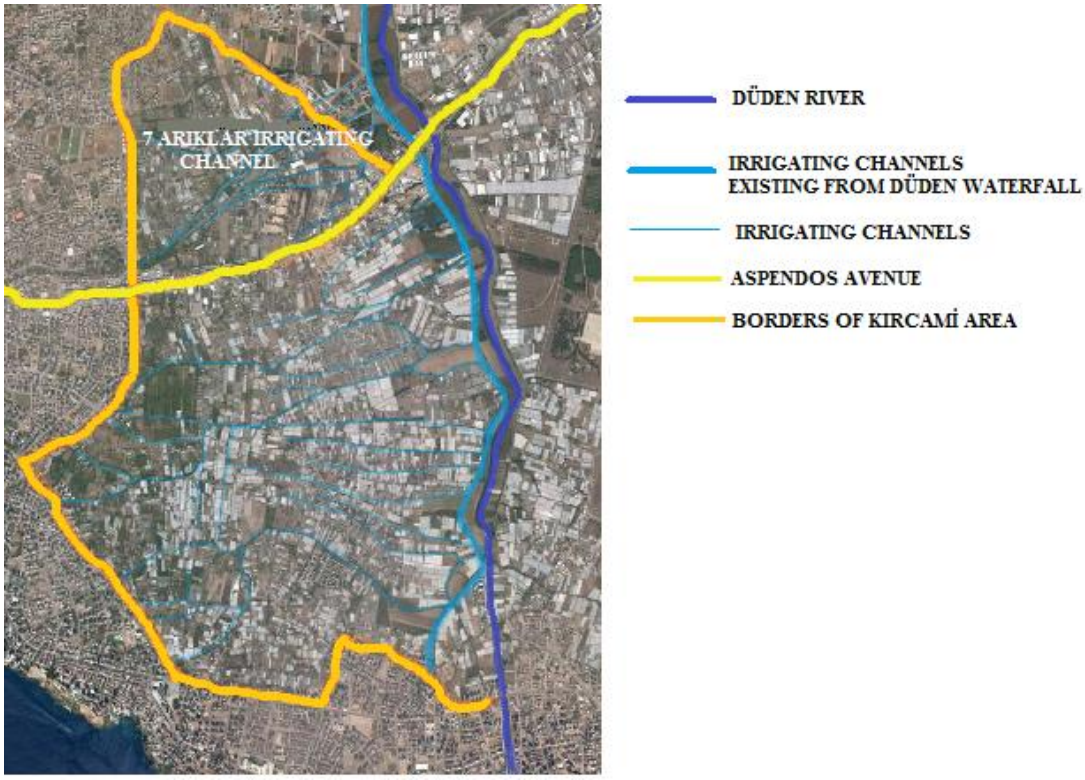
Map 11: Map of Soil Depth in Antalya

Data source: A.E.S.R., 2013



Map 12: Map of Antalya's Land-Use Capability

Data source: A.E.S.R., 2013



Map 13: Irrigating system of Kırcami Area

Data source: www.google.earth.com

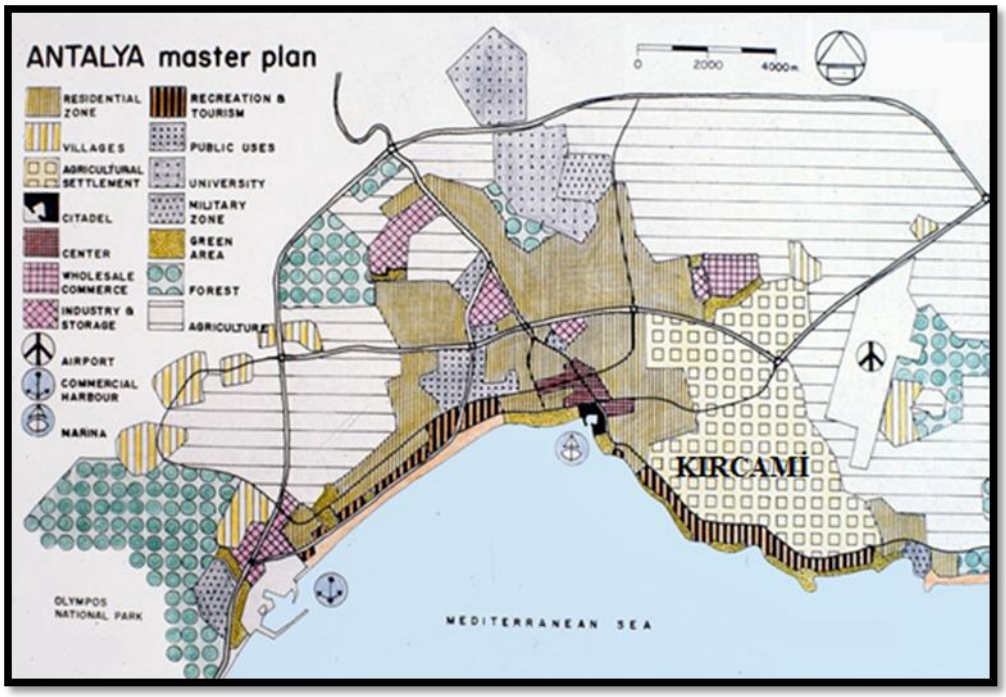
3.4.4. KIRCAMI AREA'S PLANNING CHRONOLOGY

In this section, planning process of Kırcami Area's development problem is reviewed chronologically. Kırcami Area was suggested to incorporate to the urban planning area by UTTA plan in 1996. From the approvement of UTTA Plan to today, all municipal attitudes of both A.M.M. and Muratpaşa Municipality is toward the development of Kırcami Area.

1. **1/5000 scaled Master Development Plan** of Antalya (City planner Zühtü Can's plan) was approved in **19.02.1980** by the Republic of Turkey Ministry of Development and Housing. According to the plan decision, area was *agricultural settlement area* that its agricultural character had to be protected through E: 0.10
2. **1/25000 scaled Environment Plan** was approved by Republic of Turkey Ministry of Development and Housing in **24.09.1985.** According to the plan decision Kırcami Area was accepted as being an agricultural settlement area that its agricultural character has to be protected.
3. **Revision plan of 1/5000 scaled Master Development Plan** was approved through the 304 numbered decision of Parliament of Antalya Municipality in **20.08.1986**. In the plan decision, sides of Aspendos and Termessos Avenues, Aşık Veysel Street and D400 Road is planned as settlement area by E: 0.60 – 0.90.
4. **Revision of 1/5000 scaled Master Development Plan** was approved by Parliament of Antalya Municipality in 1993. In the plan, two sides of the road locating between Demokrasi Kavşağı and airport area is planned as 'urban business area without housing'. However, plan was rejected because of the decision is not appropriate with the decision of the 1/25 000 scaled upper plan**.**
5. **1/5000 scaled Master Development Plan** was prepared by UTTA Group in **1996.** This plan is known as **UTTA Plan** and in the plan

area was planned as ‘housing area with E: 0.80. Plan was rejected by Antalya 2. Administrative Court because of being not appropriate to decision of 1/ 25 000 scaled upper plan.

6. **In 1997, 1/1000 scaled Implication Development Plan** was prepared by Muratpaşa Municipality. But, because it was rejected because of being inappropriate to the previous plan’s decision, plan did not implement.



Plan 1: 1980 Zühtü Can Plan

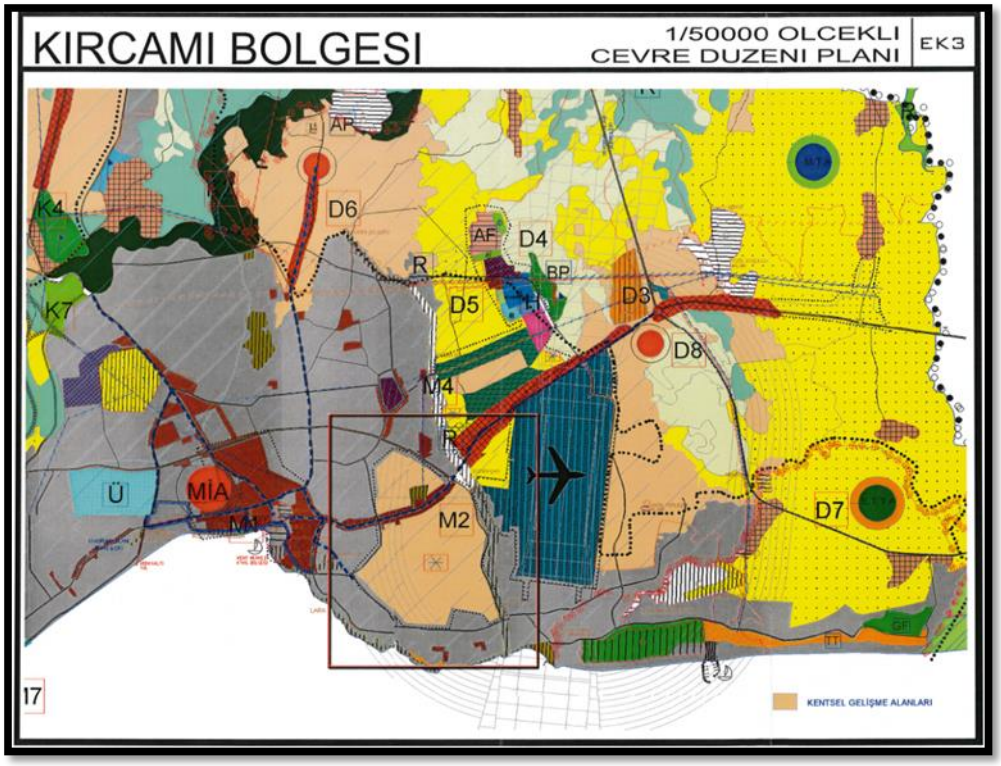
Data source: 1/5000 scaled Master Development Plan of Antalya, Kırcami Area is seen as *agricultural settlement area*

7. **1/ 25000 scaled Environment Plan** was prepared in **2003.** Plan included the borders of Antalya Metropolitan Municipality and Kırcami Area was planned as *‘settlement area with agricultural character and low density’.*

8. In **2003**, as accordingly with 1/ 25 000 scaled Environment Plan, **1/ 5000 scaled Master Development Plan for Kırcami Area** was prepared through the decision of low density and agricultural character. However, due to the disapprovement of the previous plans by Republic of Turkey Ministry of Development and Housing; Parliament of Antalya Metropolitan Municipality also did not approve the plan.
9. **1/ 50000 scaled Environment Plan** was approved by Republic of Turkey Ministry of Development and Housing in **03.03.2005**. According to the plan decision Kırcami Area was planned as *housing area with agricultural character* through E: 0.10. Plan emphasized the national and international dimension of the agricultural production areas those are locating at the edge of Antalya (Kırcami, Çakırlar and Altınova) and indicated the requirement of providing connection between these rural areas and urban Antalya. Plan also indicated that:
    - Requirement of an approach that provides the sustainability of the economic and spatial potentials of the agricultural areas those are locating at the edge
    - Requirement of improving the agricultural character of *citrus fruits and forests* in agricultural areas those are locating at the edge
    - Requirement of preventing the non-agricultural uses in the agricultural areas
    - Improvement of the possibilities for organic production and development of organic marketing ways
    - Establishing relations between the agricultural life style and urban dwellers
10. **1/ 25000 scaled Master Development Plan** was approved by the 464 numbered decision of Parliament of Antalya Metropolitan

Municipality in **17.06.2005**. Plan decision determined the area as being a *housing area with agricultural character through E: 0.10*

11. **1/25000 scaled 2nd Part of Master Development Plan** was approved by the 525 numbered decision of Parliament of Antalya Metropolitan Municipality in **10.09.2007.** In the plan area was planned as '*urban agricultural planning area'*. In the plan notes, urban agricultural planning area is described as being *'the areas for ecological urban renewal projects'*.
12. In **04.03.2007,** according to the 13. Matter of 5403 numbered Land Conservation and Land Protection Law, decision of 'public interest' was accepted by Republic of Turkey Ministry of Interior.
13. In **16.04.2007, 1/100000 scaled Antalya- Burdur Environment Plan** was approved by Republic of Turkey Ministry of Environment and Urbanisation. Plan was rejected through the objection of Antalya Bureau of Chambers of Architects due to the reasonof not including Isparta**.**
14. In **25. 10.2007,** the decision of 'Lands should be used for non-agricultural purposes' is approved by Republic of Turkey Ministry of Food, Agriculture and Livestock
15. Through the decisions of related ministries (Republic of Turkey Ministry of Development and Housing and Republic of Turkey Republic of Turkey Ministry of Food, Agriculture and Livestock) **1/ 50000 scaled 2nd Part of Strategical Environment Plan** was accepted by the 101 numbered decision of Parliament of Antalya Metropolitan Municipality in **18.01.2008**. Kırcami Area was planned as *'Urban Development and Prestige Project Area'.*
16. **Revision plan of 1/ 25000 scaled Master Development Plan** was approved by the 84 numbered decision approval of Parliament of Antalya Metropolitan Municipality in **15.02.2008**. According to the plan decision, Kırcami Area was planned as being *'housing area through E: 0.41-0.80'*



Plan 2: 1/ 50000 Scaled Environment Plan, 2005

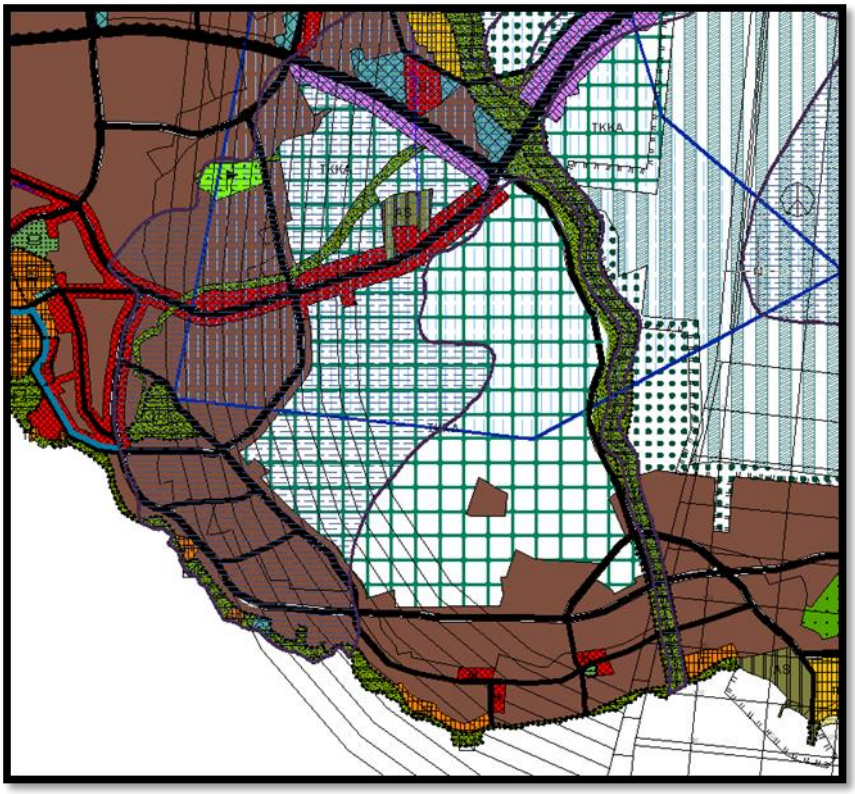
Data source: A.M.M 1/50000 scaled Environment Plan, 2005

17. Antalya's Body of Lawyers, Antalya Bureau of Chambers of Architects, Antalya Bureau of Chambers of Mechanical Engineers, Antalya Bureau of Chambers of Agricultural Engineers and Antalya Bureau of Chambers of Electrical Engineers objected to the **1/50000 scaled Environment Plan** and 1/**25000 scaled Master Development Plan** because of the agricultural settlement character of Kırcami Area that is planned as housing area. Court was demanded the experts' evaluation related with the objection matter.

18. 1/**5000 Master Development Plan** was approved by the 550 numbered decision of Parliament of Antalya Metropolitan Municipality in 14.11.2008. According to plan decision area was planned as '*housing settlement area through E: 0.80*'.

19. Revision plan of **1/5000 scaled Master Development Plan** was approved by the 447 numbered decision of the Parliament of

Antalya Metropolitan Municipality in 16.10.2009. In the plan area was planned as Housing Settlement Area with E: 0.80.

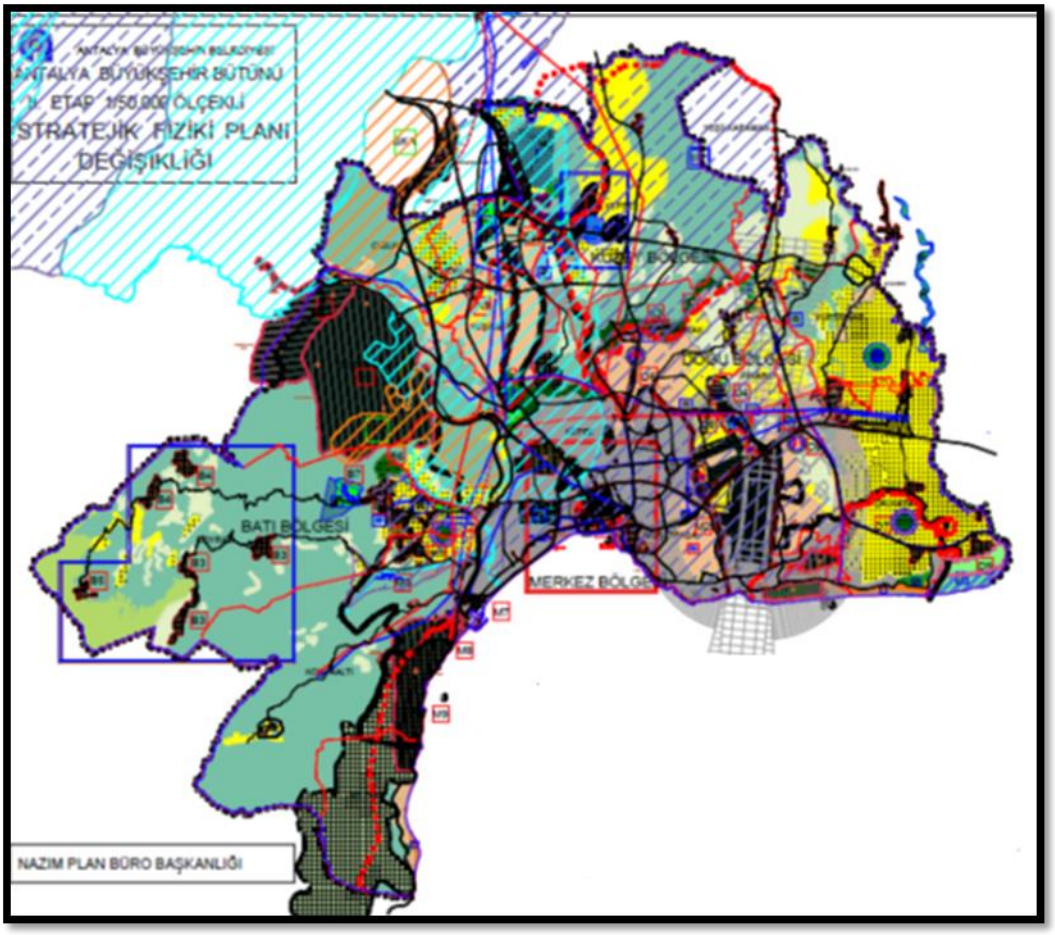


Plan 3: 1/25 000 scaled Master Development Plan

Data source: A.M.M. 1/25 000 scaled Master Development Plan

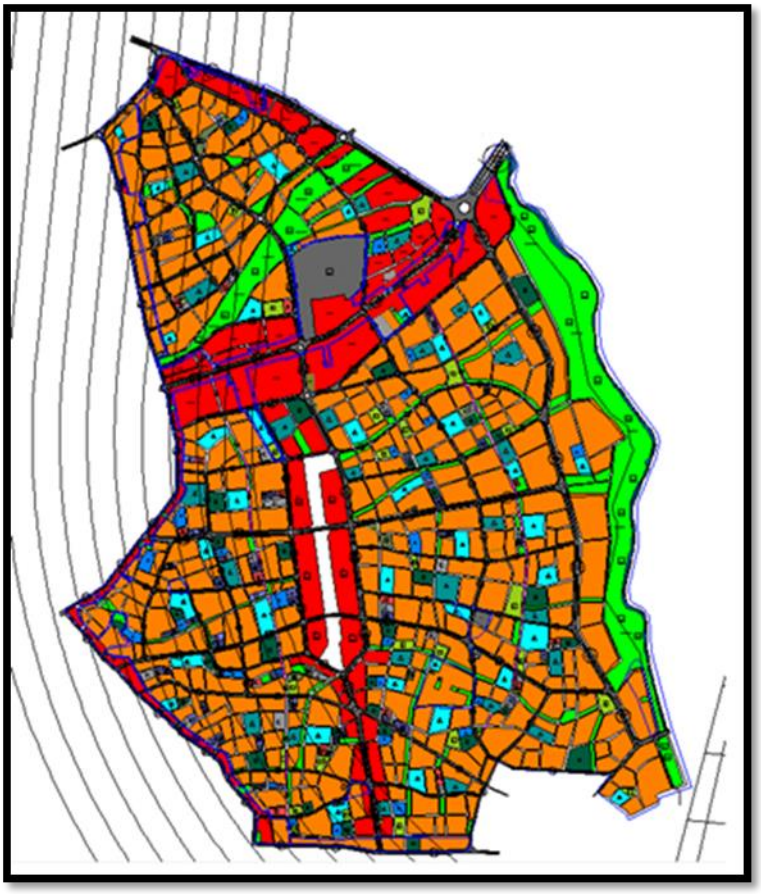
20. In **03.09.2009, 1/ 100000 scaled Antalya-Burdur Environment Plan** that was not including Isparta was approved by Republic of Turkey Ministry of Environment and Urbanisation. Plan was rejected by 6th Department of Council of State towards the objections of Antalya Bureau of Chambers of Architects by the reason of 'not being appropriate to the legacy, urban affairs, planning principles and public interest' in 30.05.2012

21. The *Turkish Foundation for Combating Erosion, Reforestation and the Protection of Natural Habitats* prosecuted against the 'public interest' decision of Ministry of Interior and the decision of 'using through non-agricultural purpose' of Republic of Turkey Ministry of Food, Agriculture and Livestock. In **30.07.2009**, Antalya 1. Administrative Court rejected the related decisions.



Plan 4: 1/50000 Strategical Environment Plan approved in 18.01.2008

Data source: A.M.M.



Plan 5: 1/5000 scaled Master Development Plan

Data source: A.M.M. 1/5000 scaled Master Development Plan, 2008

22. *Antalya Bureau of Chambers of Architects, Antalya Bureau of Chambers of City Planners, Antalya Bureau of Chambers of Agricultural Engineers and Antalya Body of Lawyers* prosecuted against the plan decisions those are written in the 14. and 15. articles of this section above. Antalya 2. Administrative Court was rejected these decisions for Kırcami Area by the 1146 numbered decision in **30.09.2009**.

23. *Antalya Bureau of Chambers of Architects, Antalya Bureau of Chambers of City Planners, Antalya Bureau of Chambers of Agricultural Engineers and Antalya Body of Lawyers* prosecuted

against the plan decisions those are written in the 16. article of this section above. Antalya 2. Administrative Court was rejected the decisions for Kırcami Area by the 1504 numbered decision in **31.12.2009**. Due to this objection, Antalya 2. Administrative Court was demanded the experts' opinion about the related objection. The expert commission that is constituted by *Prof. Dr. Duran Taraklı, Assoc. Prof. Dr. Baykan Günay and Assoc. Prof. Dr. Çağatay Keskinok* is emphasized the necessity of establishment of a strong relationship between conservation- development and conservation-usage in the context of evaluation of the problem for obtaining the public interest. Expert Commission examined the *conservation level of the problem* through the subjects of *(i) conservation requirement of agricultural lands, (ii) sustainability of ecological corridor (Düden River coming from Toros Mountains and the sustainability of its environment) and the open areas systems around the area, (iii) Conservation requirement of the open areas system in the region that also includes the airport area.* In the report, Expert Commission said that:

- Area is well-irrigated and according to the Turkish 5403 numbered Land Conservation and Land-Use Law lands of Kırcami Area are 1. classified agricultural lands.
- The conditions that may cause to land use through non-agricultural purposes are not constituted in the area yet now and area have to be used as agricultural production area.
- It is seen that, until the planning interventions, area was a part of whole larger region of Düden River Valley including Aksu, Altınova, Koyunlar and Pınarlı agricultural production areas. They indicated that Kırcami is physically separated from these agricultural production areas and locating in the urban areas as being an *urban agricultural production area*.

- Along the Düden River Valley, open-green areas systems have to be sustained and Kırcami Area should be play ecological maintaining and conservation-development role on the constitution of open green areas system in the metropolitan borders of Antalya city.
- Commission also reported the risk factors of high building constructions around the airport area. Report described the reasons of the risks due to the multi-storey speculative housing areas around the airport area. Commission emphasized the significance of being aware of those risks at the region due to the importance of airport area's planning and designing principles.

In the **Figure 7,** the red colored area in the 1/ 50000 scaled II. Part of Strategic Physical Plan revision is described as *conservation ribbon of aerial corridor.* This corridor is described as *Restricted Areas ve Restrictions* according to the 7th article of *General Directorate of State Airports Operations Obstruction Control Regulations of Airports*. In the **Figure 8**, the risk ribbons are determined as *I., II. and III. Risk Ribbon.* It is seen that large part of Kırcami Area locates in the II. Risk Ribbon of the airport.

24. Through the **27.04.2011** dated written document, decision of *Antalya Land Conservation Committee of* Antalya Directorate of Agriculture decision for 'compatibility of non-agricultural uses' in Kırcami Area is demanded by Antalya Metropolitan Municipality.

25. Through the **05.05.2011** dated written document of A.M.M., decision of 'public interest' is demanded from Ministry of Interior are demanded.

26. In **01.02.2012**, the decision of 'Area is appropriate for the use of non-agricultural purposes' was given by Antalya Land Conservation Committee.

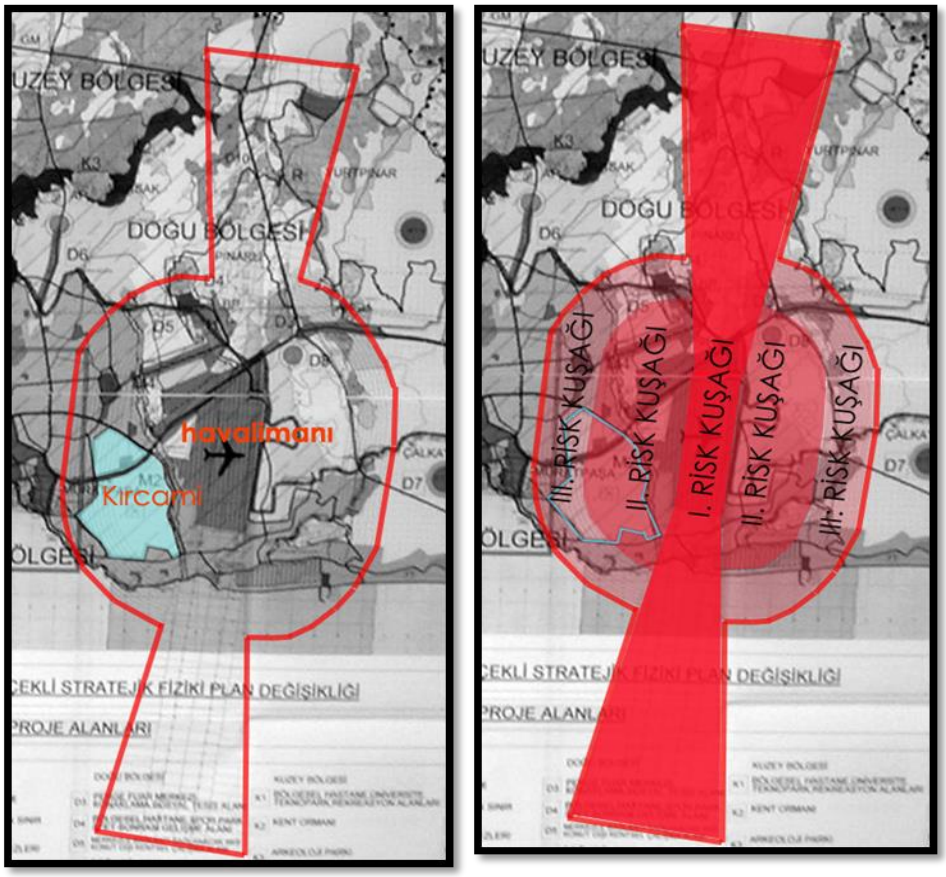


Figure 7 and Figure 8: Figures illustrate the aerial risk corridor and risk ribbons
Data source: Expert Commision Report for Kırcami Area (2008)

27. ***Coordination Committee of Chambers of Antalya*** was organized a press conference due to the necessity for informing the public opinion about A.M.M.'s 'public interest decision' demand from Land Conservation Committee for development of Kırcami and Varsak Areas in 28.02.2012. This press conference underlines the basic issues related with the development demands such as:
    - They indicated that conserving the agricultural quality of land has also public interest
    - Committee emphasized the vitality of food security and indicated the 240% increasing amount of food prices in the years between the years 2010-2012.

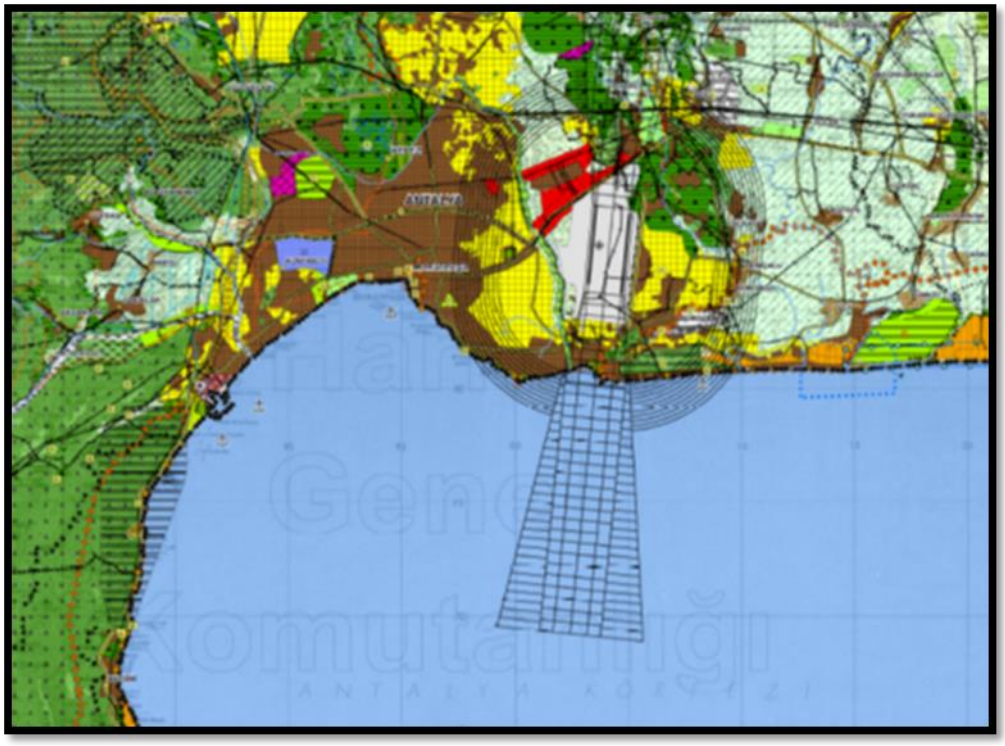
- Committee said that scientific ones should have to determine the processes instead of political and speculative approaches
- Committee indicated that there are 70000 redundant houses in Antalya city and Antalya does not have any housing settlement areas until the year of 2050 due to this redundant housing and present empty developed settlement areas.
- They said that, the development problem is not related with the agricultural productions problems; problem is based to politicians' political and speculative undertakings that cause to decrease in farmers' desire for continuing agricultural production. They also said that the decision related with these areas have to be taken not only according to the demands of local dwellers, but also the whole city dwellers.

28. In **19.03.2012**, a protocol signed by A.M.M., Antalya Bureau of Chambers of Architects, Antalya Bureau of Chamber of City Planners and Antalya Bureau of Chamber of Agricultural Engineers for designing '*Kırcami Area's Conceptual Project'* that determines the implication model of master development plan and presenting the principles and strategies that will direct the planning process of Kırcami Area. Through this protocol, A.M.M. put out the tender of the conceptual project in **29.08.2012**

29. In **30.04.2012**, **Consultation and Evaluation Committee of Kırcami Area** hold a meeting through the aim of thinking on common solution ways of Kırcami Area's development problem through scientific and participatory planning approaches. The members of the committee were from *A.M.M., Muratpaşa Municipality, Antalya Bureau of Chamber of Architects, Antalya Bureau of Chamber of City Planners, Antalya Bureau of Chamber of Agricultural Engineers, Antalya Bureau of Chamber of Landscape Architects, Antalya Bureau of Chamber of Topographical Engineers, Antalya Bureau of Chamber of Trade and Industry, Antalya City Council, Kırcami Area Development,*

Embellishment, Culture and Cooperating Association and academicians from Middle East Technical University, Istanbul Technical University, Yıldız Technical University and Akdeniz University. In this meeting, Kırcami is determined as being a *ridiculous void in the macro-form of the city*.

30. In **30.05.2012**, **1/100000 scaled** Environment Plan was rejected by 6th Department of Council of State due to the objection of Antalya Bureau of Chambers of Architects.
31. **1/ 100000 scaled** Antalya- Burdur- Isparta Environment Plan was approved by General Directorate of Spatial Planning Republic of Turkey Ministry of Environment and Urbanisation in 16.09.2013. This plan played the key role on removing the obstacles against Kırcami Area's development plan due decision that planned the Kırcami Area as a *settlement area*. (**Plan 5.** Yellow colored agricultural areas are planned as settlement areas 1/ 100000 scaled Antalya- Burdur- Isparta Environment Plan).
32. **1/25000 scaled** Master Plan Revision that was approved by Parliament of A.M.M. in **29.08.2013** is revised by Parliament of A.M.M. in **13.01.2014**.
33. In **07.10.2013,** Republic of Turkey Ministry of Interior made decision of '*public interest'* for development in Kırcami.
34. **1/ 5000 scaled** Kırcami Master Development Plan is approved by Parliament of A.M.M in **13.01.2014**. According to the plan decision, Kırcami Area is planned as *business and residential area* with E: 0.80. In the plan, there is no information related with conservation of agricultural lands or agricultural production.
35. **1/ 100000 scaled** Antalya-Burdur-Isparta Plan was approved by Republic of Turkey Ministry of Environment and Urbanisation in **15.04.2014.** In the plan Kırcami Area is planned as urban settlement area.



Plan 6: 1/100000 scaled Antalya- Burdur- Isparta Environment Plan approved by Republic of Turkey Ministry of Environment and Urbanisation in 15.04.2014

Data source: Republic of Turkey Ministry of Environment and Urbanisation General Directorate of Spatial Planning Antalya- Burdur- Isparta Planning Region 1/100000 scaled Environment Plan's Report

3.5. CONCLUSION

In this chapter, Antalya city's general structure and the urbanization process is reviewed periodically and Kırcami Area's planning process is reviewed chronologically.

From ancient past to todays, Antalya city is an agricultural production center in the region due to the appropriate climatic, soil, water and other natural conditions. However, tourism development process made the agriculture as the second economic sector in the city at the beginings of the 1980s. Thus the city's economy is

empowered due to tourism development policies. This development process caused to loss of serious amount of arable lands due to the inadequacies of development plans, land speculative policies and implementations. Uncontrolled development is realized at the eastern plain of Antalya in contrary to the plan decisions about the conservation of agricultural lands at the east and suggesting enlargement at the northern areas of Antalya in the initial plans.

Today, Kırcami Area is still locating as a natural- agricultural area in the city although it lost its some features due to the land- speculative urbanization policies. Researches showed that Kırcami Agricultural Area was a part of Antalya's agricultural system and it has a verified physical and social structure in the city.

It is seen that since 1996 UTTA plan, Kırcami Area is accepted as a meaningless void in the land-use form of the city. Plans did not evaluate the areas' specific properties for conservation; on the contrary, it is decided to transform the area to urban land use because of the land speculative pressures.

In the next chapter, the recent 1/100000 scaled Antalya- Burdur- Isparta Environment Plan, 1/ 25 000 scaled Antalya Master Development Plan and 1/5000 scaled Kırcami Development Plan are reviewed to make understand the future of Kırcami Area.

CHAPTER 4

THE RECENT DEVELOPMENT PLANS OF ANTALYA AND KIRCAMİ AREA

4.1. INTRODUCTION

This chapter is prepared for reviewing the last development plan process of Kırcami Area for making understand the present situation and future plans of Kırcami Area. Depending on this aim, the last **1/100000 scaled Antalya- Burdur- Isparta Environment Plan, 1/ 25000 scaled Antalya Master Development Plan, 1/ 5000 scaled Kırcami Master Development Plan** and **1/ 1000 scaled Kırcami Implementation Plan** are reviewed.

4.2. 1/ 100000 SCALED ANTALYA-BURDUR-ISPARTA ENVIRONMENT PLAN

1/ 100000 scaled Antalya- Burdur- Isparta Environment Plan is approved by Republic of Turkey Ministry of Environment and Urbanisation in 15.04.2014, through the 7th article of 644 numbered legislative decrees. Plan targets the year of 2025 and basically aims exposing the conservation and development principles of the planning region. In this plan Kırcami Area is planned as 'Urban Development Area' that allows usage through non-agricultural purposes.

4.3. 1/ 25000 SCALED ANTALYA MASTER DEVELOPMENT REVISION PLAN

1/ 25000 scaled Antalya Master Development Plan is approved by the Parliament of A.M.M. in 13.01.2014 as the revision plan of the 1/ 25000 scaled plan which was approved by the Parliament of A.M.M through the 84 numbered decision in 15.02.2008. While the previous plan targets the 2020 vision, last plan of Antalya targets 2030 vision. The report of the plan exposes the target of 2030 Antalya Vision

as empowering the economic and social structure and increasing the living and spatial quality of the city due to a ‘sustainable spatial development approach’. Through this sustainability approach, plan describes the strategic and spatial aims of the plan as:

1. Conservation of the natural resources such as forestry, agricultural areas, water resources and ecological values
2. Conservation of historical and architectural beings and values; empowering the identity of the city
3. Planning the urban land-use form due to the plan that presents a rational and balanced distribution of urban uses, population and labor force
4. Development of urban services
5. Empowering the identity of the ‘being tourism city’
6. Verifying the types of tourism that takes place in the city during all the seasons of the year
7. Developing healthy, livable urban spaces and empowering the spatial quality
8. Planning organized business and service areas at the urban edge for preventing the urban sprawl through a decentralization approach
9. Determining development and transformation areas and describing general principles of center and sub-center areas for the development of central business areas.
10. Describing the essentials of urban renewal for the regions that have risks or unplanned development

Main aim of the plan is declared as directing the urban land-use form not only due to Kırcami Area’s development but also the other undeveloped areas at the city’s edge. However, it is appearently seen that, plan dominantly targets the development of Kırcami Area and development of the area has the key role on planning the urban land-use form of Antalya.

The aims of the plan that target *conserving the natural resources such as forestry, agricultural areas, water resources and ecological values, conserving the historical and architectural beings and values; empowering the identity of the city, developing healthy, livable urban spaces and empowering the spatial quality* are directly related the issue of conservation of Kırcami Area. However, A.M.M did not change its attitude for Kırcami Area that is decided to plan the area as an urban area by this latest plan once more. Kırcami Area did not be accepted as a natural resource area but area should go on playing an active role on developing healthy, livable urban spaces and spatial quality and empowering the identity of the city through the environmental aims of the plan. However, by all means, development of Kırcami Area will transform and eradicate the whole natural and cultural identity of the area.

Evaluation of plan decisions according to the Kırcami Area shows that in the plan decision that is '***The essentials related with preparing the development plan***', Kırcami Area is planned through the *Special Planning Area* (SPA) decision. According to the SPA decision, SPAs are defined as the areas that have strategical significance and priorities for the implication of the development plan. It is said that, the 1/5000 scaled master development plans and 1/1000 scaled implication plans have to be prepared based to the both 'planning area as a whole' and 'conceptual design and/or urban design' projects. Plan decisions also emphasize that each SPAs should be determined as 'planning stages'.

4 SPAs were stipulated for master development plans those are:

1. SPA1- Kırcami Urban Development Area and Sub-center Special Planning Area
2. SPA2- Çalkaya Expertize Sub-center Special Planning Area
3. SPA3- Masadağı Special Planning Area
4. SPA4- Northern Center Development Corridor Special Planning Area

According to the SPA1 decision, construction density is determined as E= 0,80 for the whole area. Plan says that the adequacy of social equipment for the requirement of the increasing population and usages that will be located in the area, will be planned by the small scaled plans.

Another plan decision related with ***settlement areas that have rural qualities*** defined those areas as the 'areas that include the settlement and development areas of rural qualified units that they are in the scope of the 1/25000 scaled plan'. Plan decision foresees the minimum parcel amount as 300m² and allows construction of maximum 2 storeyed buildings. It is a certainty that Kırcami Area is a rural settlement area due to having rural qualities. High constructions around the area did not change the main character of the whole area. However, development plan took Kırcami Area into the scope of the development plan although being a rural settlement area.

The plan decision related with the ***open and green areas*** examines the open green areas under 3 articles those are:

1. *Urban-Regional Open and Green Areas:* These areas are defined as public open and green areas such as parks and children playgrounds that they serve recreational services for the community in the urban and regional scale.
2. *Recreation Spots and Picnic Areas:* These areas are defined as the areas that allotted by the Ministry of Forestry and Water Affairs for the social, cultural and visual purposes such as recreation areas in the forests and city forests.
3. *Theme Park Areas:* Theme Park areas are defined as open and green areas that focused on themes such as science-fiction, archeology, botanic and natural living areas that operates in the urban and regional scale. In the 1/25000 development plan, there are five types of theme parks those are *nature park, culture park, botanic park, zoo* and *water park.*

As it is seen above, agricultural areas do not accepted as one of the element of the open and green areas system of the city in the 1/ 25000 development plan. Plan does not serve agricultural theme parks or urban agriculture areas and evaluates the agricultural areas according to their rural identity.

Areas that their agricultural quality will be protected decision says that, in these areas the required operations will be operated under the regulations and the instructions of 5403 numbered Land Conservation and Land- Use Law of Republic of Turkey Ministry of Food, Agriculture and Livestock. As being an agricultural area, Kırcami Area's development decision is approved by the instructions of Land Conservation Committee of *Republic of Turkey Ministry of Food, Agriculture and Livestock* according to the the legal procedure.

About the **conservation of the river beds**, plan decisions only says that the natural beds of the river will be protected and the spate preventing institutions will be projected and constructed through the opinions of General Directorate of Hydraluic Works and General Directorate of Antalya Water and Wastewater Management Institution.

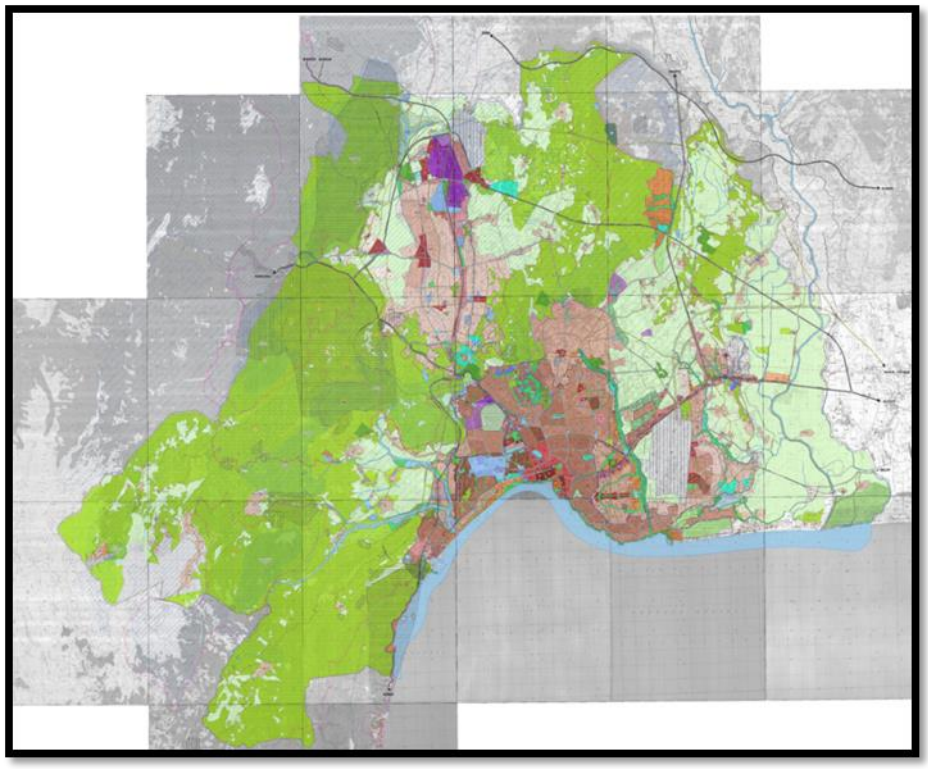
1/25000 plan defines an *Ecological Movement Conservation Line* as being vital areas for sustaining the ecological life and conserving the ecological system of the city. According to the decision, plan does not allow high and middle density in settlement areas, high amount of vehicle traffic and industrial facilities. In this line, recreational areas those are appropriate with natural structure such as sportive areas, camping areas, pedestrian-bicycle and horse trip roads, zoos, arboretums and health tourism centers such as therapy and rehabilitation services.

Decision about Water Resources and Düden Conservation Area of the plan says that, conservation of these areas will be provided by the 'Water Basins Conservation and Control Regulation' and 'Waste Water Control Regulation' of General Directorate of Antalya Water and Waste Water Management Institution.

4.3.1. CRITIQUE of 1/25000 SCALED ANTALYA MASTER DEVELOPMENT PLAN

This thesis submits some critiques that are listed below about the 1/25000 scaled Antalya Master Development Plan:

1. Plan does not explains the rational reasons of the requirement of Kırcami Area's development through any scientific reasons such as statistical data
2. Plan transforms all the areas those have natural-agricultural qualities around the close environment of Antalya city



Plan 7: 1/ 25000 scaled Antalya Development Plan approved in 13.01.2014

Data Source: 1/ 25000 scaled Antalya Development Plan Decisions Document, January 2014

3. Plan do not emphasize both the natural and agricultural character of the environment that Kırcami Area locates in and the role of Kırcami Area in this area
4. Plan decisions about Kırcami Area were taken according to the relationship of city with the urbanized parts of Kırcami Area
5. The locational opportunities of Kırcami Area is evaluated just for the aim of urbanization
6. Plan decisions about multi-storeyed constructions (8 to 12 storeys), may have risks due to the the presentation of the Antalya Airport in the close environment of the area
7. Planning process is managed by a 'participatory process'; however, this process has not include the participation of landowners who have little amount of lands and do not support the development
8. Plan does not have any decision for the economic satisfaction ways of the landowners who have little amount of land
9. Plan does not explains the ways of how the agricultural-workers will be employed after development
10. Plan does not have any decision about the ways of 'providing the ecology-economy balance' principle that was presented in the Preliminary Plan Report of the 10th National Five-Year (2014-2018) Development Plan of Turkey
11. Plan does not evaluate the agricultural areas as the components of open-green areas

4.4. 1/ 5000 SCALED KIRCAMİ MASTER DEVELOPMENT PLAN

1/ 5000 scaled Kırcami Master Development Plan was approved in 13.01.2014 and thus 1600 ha agricultural lands of Kırcami Area completely transformed to urban usages. According to the land-use decisions of the plan, 13 types of land-use are planned these are: *Housing areas, Central Development Corridor (MGK), Sub-center, Mixed Land-Use Area, Commercial Areas, Tourism Facilities Area, Culture and Convention Center Area, A.M.M. Municipal Service Area, Hospital Area, Area*

for Education, Urban Equipment Area, Active Green Areas (**Plan 8**). Plan decisions of these uses are exposed below.

1. **Plan Decisions about Housing Areas**

   According to the land-use decisions, two types of housing area is planned as Housing Area I (K I) and Housing Area II (K II) through the construction density as being E: 0,80. For K I, minimum allotment circumstance was determined as 2500m², Hmax was determined as 24,50 m and 8 storeys. For K II, minimum allotment circumstance was determined as 5000 m² and more, Hmax: 36, 50 m and 12 storeys. Plan note also says the basement height as being 0,50 m.

2. **Plan Decisions about Central Development Corridor (MGK)**

   In the middle side of the southern part of Kırcami Area a central development corridor plan as MGK is planned (**Plan 8**, the red colored corridor area in the middle). In MGK, expertize business centers, bureaus, office blocks, commerce, showrooms, private health and education facilities, banks, multi-storey shops, shopping mall, hypermarket, administrative, social and cultural facilities are allowed by the plan th Erough: 0,80, allotment circumstance between 2000-10000m² and Hmax: 18, 50m.

3. **Plan Decisions about Commercial Corridor**

   Plan says that bureaus, office blocks, multi-storey shops, banks, hotels, cultural facilities such as cinema and theatre, administrative and municipal facilities should be take place in the commercial corridor according to E: 0,80, minimum allotment circumstance as 2000 m²,Hmax 21,50m and 7 storeys. Plan also allows housing usages in the commercial buildings except ground floors.

4. **Plan Decisions about Sub-Center Area**

   The sub-center area is planned at the inner side of the intersection point of Sinanoglu Street and Perge Avenue (**Map14** in **CHAPTER 5**) under the same decisions about commercial corridor that allows

construction of bureaus, office blocks, multi-storey shops, banks, hotels, cultural facilities such as cinema and theatre, administrative and municipal facilities may take place in the commercial corridor according to E: 0,80, minimum allotment circumstance as 2000 m², Hmax 21,50 m and 7 storeys and plan also allows housing usages in the buildings except ground floors.

5. **Plan Decisions about Mixed Land-Use Area**

   Mixed land-use area is the area that may be constructed bureaus, office blocks, multi-storey shops, banks, hotels, cultural facilities such as cinema and theatre, administrative and municipal facilities should in with E: 0, 80. For mixed usage areas, 2 types of usages are determined as Mixed Usage I and Mixed Usage II. In Mixed Usage I areas, as being optional, maximum 15% of construction area in total should be housing usage in the parcel. In Mixed Usage II areas, as being optional, maximum 50% of construction area in total should be housing settlement except ground floors with minimum allotment circumstance as 5000m², Hmax: 21,50m and 7 storeys.

6. **Plan Decisions about Commercial Areas**

   Commercial areas are planned as the center of the districts and planned through the aim of providing the basic requirements of a district such as bureau, restaurant, café, market, bank, administrative and municipal service areas, family medicine services according to E:0,80, minimum allotment circumstance as 1000 m² and Hmax:8,50 m.

7. **Plan Decisions about Tourism Service Areas**

   The decisions of Certifying and Qualities of Tourism Facilities Regulation will be the determinative instrument for the tourism planning process with E: 0, 80 and unconfined Hmax for the tourism service areas planning studies.

8. **Plan Decisions about Culture and Convention Center**

   This area is designed as a symbolic project area for Antalya city with E:2 and it is decided to obtain the center project through an international planning project contest.

9. **Plan Decisions about A.M.M. Municipal Service Area**

   This area is planned depending on the decision of E: 2 and unconfined Hmax.

10. **Plan Decisions about Hospital Area**

    This area is planned depending on the decision of E: 2 and unconfined Hmax.

11. **Plan Decisions about Educational Facility Area**

    This area is planned depending on the decision of E: 2 and Hmax: 16,50 m.

12. **Plan Decisions about Urban Equipment Area**

    In this area, social facilities such as municipal service areas, governmental agency areas, urban sport areas, religious areas and bazaar areas will take place. The construction order of these areas will be determined in the 1/1000 scaled Kırcami Implication Plan according to the qualities and requirements of the facilities.

13. **Plan Decisions about Active Green Areas**

    The decision about the active green areas of the plan determines the planning essentials of 3 types of park areas. In the plan, along the Düden River, an urban regional green area line planned that will operate as urban and regional recreation area.

4.4.1. CRITIQUE of 1/5000 SCALED KIRCAMİ MASTER DEVELOPMENT PLAN

This thesis submits some critiques that are listed below for the last development plan of Kırcami Area.

1. 1/5000 scaled Kırcami Master Development Plan is not appropriate with the natural and cultural values of the area and demographic and economic structure. The inhabitants of the area

have habits of living in 1-2 storey houses locating in personal gardens.However, the future of Kırcami people is planned according to the 8-12 storeyed construction decision.

2. Kırcami Area is an area that has local characteristics. However, plan does not have any decision that reflects the characteristic value of the area.

3. An open green areas system is planned along the transportation network in the area. However, the relationship between Kırcami Area's open green areas and Antalya city's open green system are not determined briefly in the plan.

4. Düden River bed is planned as an open green area through the aim of 'regional usage'. But, plan decisions do not explain the meanings of 'regional usage' In other words, it is not apparent that with which regions this recreational area will be in relation and how they will be connected.

5. According to the plan, Yedi Arıklar Water Channel is completely surrounded by urban uses.

4.5. 1/ 1000 SCALED KIRCAMİ IMPLEMENTATION PLAN

The aims of the plan are exposed in the report of the 1/1000 scaled Kırcami Implementation Plan as 'Sustaining the development of Kırcami Area in a planned way due to having accordance with the decisions of the 1/5000 scaled Master Development Plan that was approved in 13.06.2014 by the 297 numbered Parliament decision' and 'Providing conservation- usage balance between natural values and urban development' are the two aims of the 1/1000 scaled Kırcami Implementation Plan.

The expression of 'natural values' is used only in the description of the aim of the plan; on the rest of the report there is no emphasis on natural values of Kırcami Area both natural or cultural.

In the plan report of 1/1000 scaled Kırcami Area Implementation Plan, the reasons of the requirement of Kırcami Plan are listed in 7 main headings. These reasons and this study's critics about them are listed above:

1. **Inadequacy of transportation network:** In the report it was not clearly defined the implied meaning by the expression of inadequacy of transportation network. It is not described obviously that if the inadequate transportation there is in the whole Antalya, a specific part of Antalya or only in Kırcami Area. It is also not described obviously what conditions cause to this problem and what is the role of Kırcami Area in this inadequacy.
2. **Land speculation on Kırcami Area:** Land speculation is a phenomenon that supported by local governors and benefit groups of the city. Locational advantages such as being closed to city center and airport makes the area more desirable for development with regard to benefit groups. However, the general decision of landowners about the future of their lands has to be evaluated as a determinative factor of the Kırcami Area. Some municipal resources mention about their survey studies those were done in the area but there are no tangible documents as the result of this survey studies. It is seen the participation of the land owners union that has large amounts of land in Kırcami Area to participatory planning process. However, this union does not represent the raid opinion in the area. This kind of a planning process briefly means that the benefit groups will be determinative element for the future of the landowners who have little amount of lands. The second critic that has to be exposed is that 'land speculation on Kırcami Area should be managed by conservation plans'. Economic land speculation can not be the reason for the plan decision because of the agricultural and natural value of the area for Antalya city. Development decision of Kırcami Area has to be evaluated in respect to not only for the area but also for the whole Antalya.

3. **Irregular urbanization / urban sprawl due to the unplanned development:** Since 1990s, A.M.M. did not embrace a conservative approach for the Kırcami Area. Area is allowed for construction by the partial development plans of A.M.M. in years. However, 'conserving and/ or establishing green areas' should be one of the preventing instruments against urban sprawl. As being one of the basic recreative areas of cities green areas should also play a preventing role on preventing urban sprawl. However, plan works as presenting 'development'decision as the indispensable solution way for the urban sprawl problem of Antalya city.

4. **Irregular Landscape of Kırcami Area due to the unplanned development:** First of all, it is obvious that the unplanned development of Kırcami Area is the responsibility of A.M.M. For almost 20 years, in spite of the legal regulations, objections and decision of experts' expressions through the conservation requirement of the area, A.M.M. did not embrace and develop any conservative programs, on the contrary A.M.M. itself allowed the partial developments in the area.

5. **Deficiency of social equipment in the area:** In their studies, Eminağaoğlu and Çevik (2007) mention about that nowadays, rural settlements include verified qualities and activities due to the transformation of socio-economic conditions in rural areas. They also emphasize the increasing significance of rural settlement areas due to their natural qualities for the urban dwellers and the essentials of policies and principles of physical planning of rural settlement areas. Putting into words the deficiency of social reinforcements in Kırcami Area is the irony of both A.M.M. and Muratpaşa Municipality, because of not serving any municipal services but development promises for years.

   Kırcami Area is a rural settlement area that has distinct geographical, cultural and demographic structure from the rest of

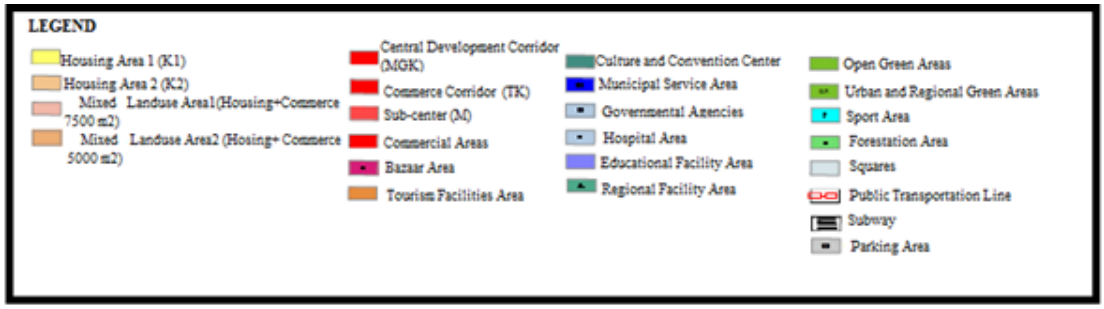
the city; therefore, these properties have to be evaluate as a whole in itself and Kırcami Area's physical planning studies' policies and principles have to be made by considering these features and their relations with the city. While small scale agricultural areas are protected in the urban areas at the western world under the urban agriculture context for sustaining the distinct living areas in the world, treating 1600ha rural settlement area as an urban area cannot be acceptable.

6. **Deficiency of employment opportunities in the area:** Today Kırcami Area is still an agricultural production area and almost all of the area's population is the farmers' families who work as agricultural workers for years. This problem expression may be evaluate as an invitation for urban employment opportunities but plan do not serve any solution way for the deficiency of employment opportunities for the agricultural workers of the area after realization of development in Kırcami Area. As a certain, while the landowners who have large amounts of lands will be pleased, the consequences for the landowners who have little amount of land is left uncertain in the plan.

7. **Deficiency of sectorial diversity despite being closed to city center:** This problem is again the result of urban approach to an agricultural settlement area. Plan does not evaluate the area's own distinctive properties but tries to evaluate its proximity to city center. Plan offers an economic development through opportunities of the urban sectorial diversity; however Kırcami Area's economic conditions should be developed by planning the area's present potentials.

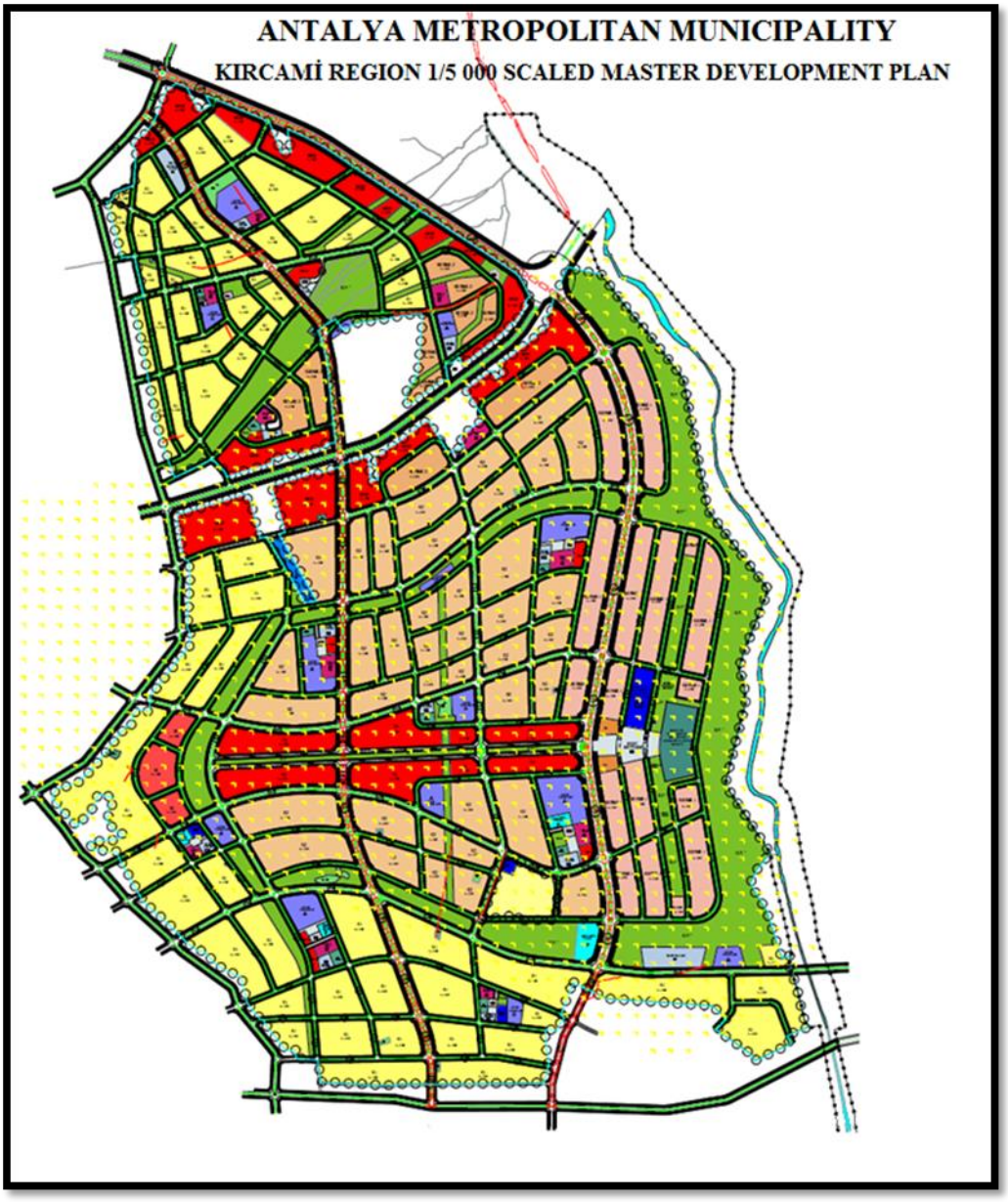
In the plan report of 1/1000 scaled Kırcami Implementation Plan, the opportunities those are submitted for supporting the development decision listed in 6 articles those are:

1. Potentials of the area for not only housing but also every types of urban usages
2. Area's proximity to city center, Antalya Airport and sea
3. Accessibility of the area
4. Being located on the Aspendos Avenue that has high amounts of facilities those present opportunities for urban development
5. Partial planned areas of southern and northern sides of Aspendos Avenue and Perge Avenue presents opportunities for urban development
6. Presentation of Yedi Arıklar Irrigating Channel and Düden River in the area



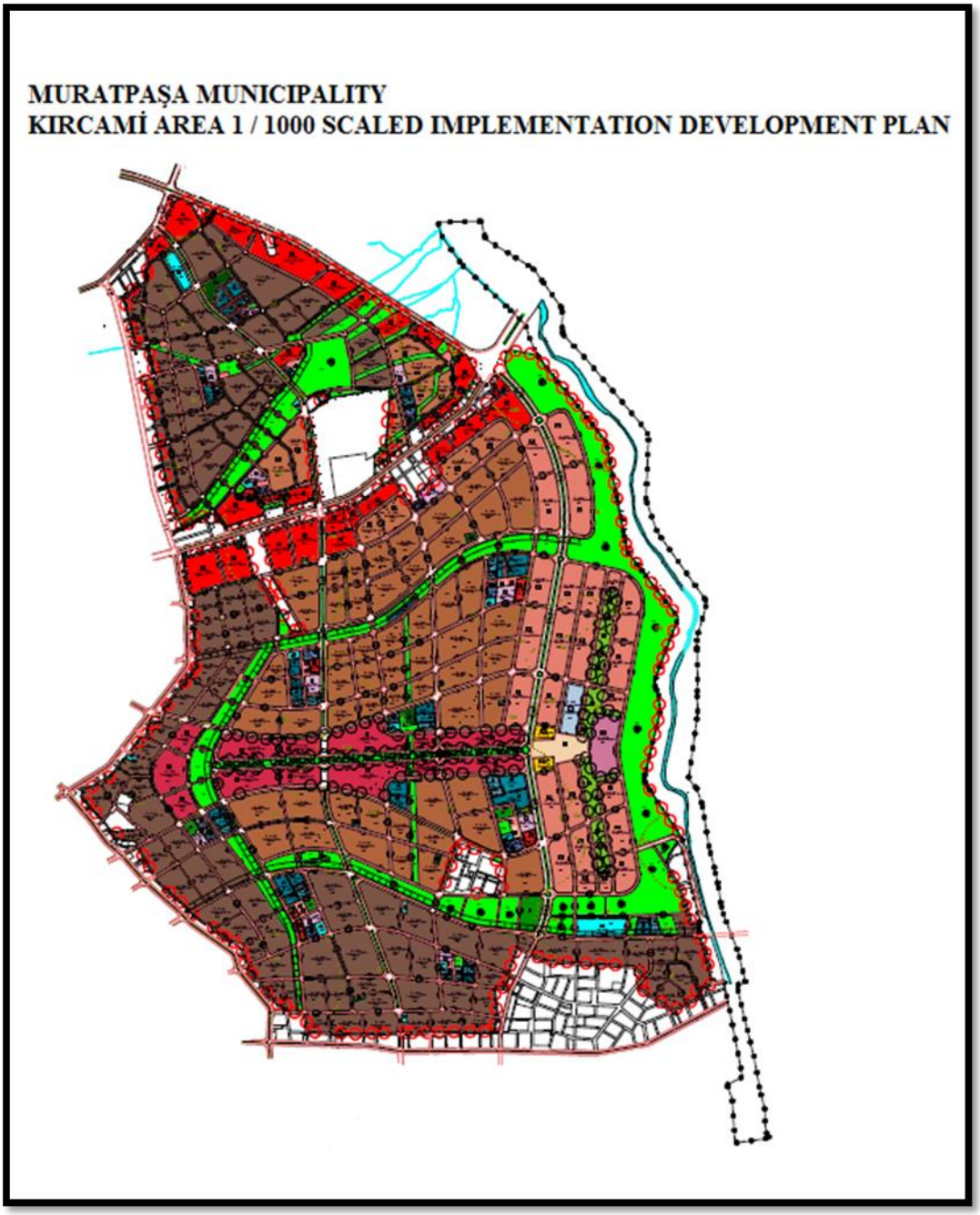
Legend 1: Legend Of Kırcami Area 1/5000 scaled Master Development Plan

Data Source: A.M.M.



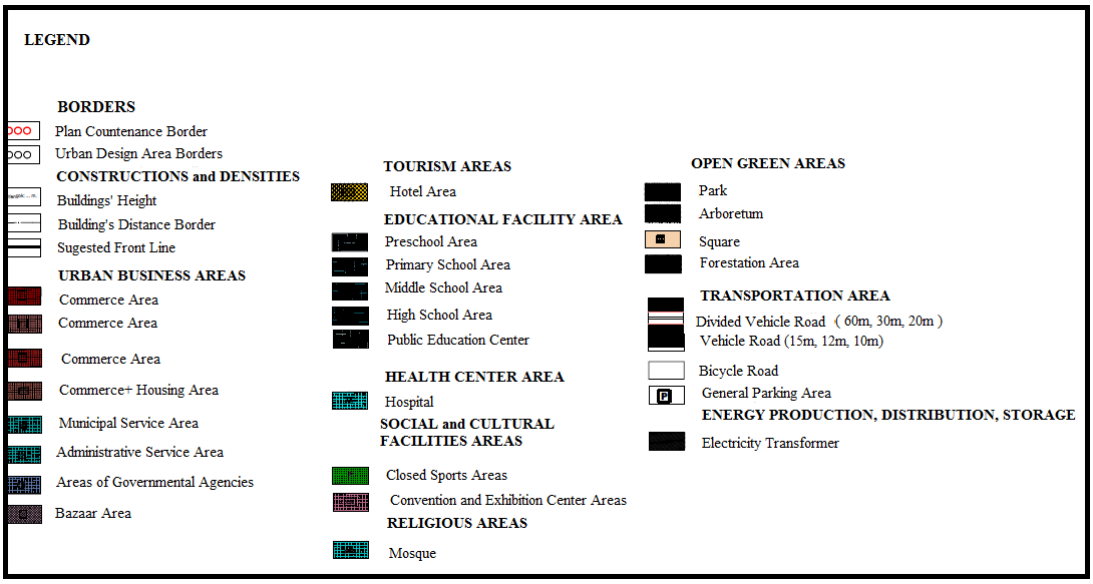
Plan 8: 1/ 5000 scaled Kırcami Area Master Development Plan

Data Source: A.M.M.



Plan 9: Kırcami Area 1/ 1000 scaled Implementation Plan

Data source: A.M.M.



Legend 2: Legend of 1/ 1000 scaled Kırcami Implementation Plan

Data source: A.M.M.

4.6. CONCLUSION

1/25000 scaled Antalya Master Development Plan was approved by the Parliament of A.M.M in 13.01.2014. Both the inappropriateness to the upper scaled environment plans and the Turkish land-use and land conservation legislation were the reasons of the rejections of previous Kırcami plans until the decision of 'public interest' by *Republic of Turkey Ministry of Interior*, in 2007. Kırcami Area was planned as housing settlement area for the first time in 1/ 100 000 scaled Antalya- Burdur-Isparta Environment Plan in 2008 due to the public interest decision. Because of the objections for the plan again, in 2009 decision of Experts Committee declared the requirement of protection of the area as being rural settlement area. However, after this declaration establishment of Land Conservation Committee was approved by the Land Conservation and Land-Use Regulation. Land Conservation Committee's authority on the decision for land-use by non-agricultural purposes played the key role on the last Antalya Master Development Plan that approves the urban development in Kırcami Area and the other agricultural lands at the edge of the city.

Today, there are still some debates especially about the decisions of Kırcami Implementation Plan. However, anymore it is apparent that, the development process is in an irrevocable way and loss of whole values of Kırcami Area will be realized in the immediate future.

CHAPTER 5

CASE STUDY OF KIRCAMİ AREA

5.1. INTRODUCTION

In this case study chapter, the information obtained by case study method is analyzed in the following four sub-sections: description of the case study method and its application specific to this thesis, *plotting the case study area, survey analyses and findings.*

5.2. CASE STUDY

'In Turkey, data sources at national, regional and local levels are quite poor and the state is the main provider of statistical data' (Ecevit, 1999). This chapter benefits from two data sources, those are; the documents of Antalya Metropolitan Municipality and Muratpaşa Municipality (those are also based on the state's statistical data) and primary data obtained through observations, interviews and survey.

5.2.1. DECIDING KIRCAMİ AREA AS THE CASE STUDY CONTEXT

Kırcami Area is chosen as the case study area of this thesis for five reasons, those are; being one of Turkey's rapiply urbanizing cities, having lost a substantial amount of its arable lands, facing threat of development on its eight districts since 1980s, 'being value' for Antalya and emcompassing all qualities that yield answers for all the research questions of the study.

5.2.2. DETERMINING THE BORDERS OF CASE STUDY AREA

The Kırcami area is named after one of its eight districts and it is 3 km distant to the Antalya city-center. Area has 1660 ha surface area in total and is constituted of two

parts i.e. northern and southern those are divided by the Aspendos Avenue. Aspendos Avenue separates these parts. The southern side is constituted by five districts that are Kırcami District, Tarım District, Yeşilova District, Güzeloluk District and Zümrütova District, which are determined as the case study area of this study (**Map 14)**. It has 1103.56 ha surface area and 10958 inhabitants. It has borders to Aspendos Avenue and the partially developed housing area at the north, Perge Avenue and the partially developed housing area at the west, Sinanoğlu Street and the partially developed housing area at the south-west, Bülent Ecevit Avenue and the partially housing area at the south and lastly Düden River at the east.

Map 14: Case study area

5.2.3. PHASES OF THE CASE STUDY

Case study has three major phases as follows:

- Phase I: Introductory knowledge
- Phase II: Initial field study (July 2-6, 2012)
- Phase III: Second field study (October 7-12, 2013)

5.2.3.1. PHASE I: INTRODUCTORY KNOWLEDGE

This preparation step of the case study is targeted to have initial information before the field research for having general insight about the area and its dwellers. This general notion about the field helped to decide and organize the main study's method. In this step, electronic local sources, Antalya development plan reports, experts' decisions and literature review about Antalya are used to form the latter steps.

For having introductory knowledge especially local electronic media resources were examined. Local authors' articles were read to understand the prominent views about Antalya related with development of Kırcami. Also the development plan reports, objections to them, and experts' decisions reports are read as informative sources.

For having information about the Kırcami dwellers, general opinions and the agricultural production in Kırcami, some electronic blogs were watched to understand the general condition in Kırcami.

Literature review about urbanization and agriculture of Antalya helped to form the structure of the field study. This literature review also yielded the fact that there was a lack of data and documents about Kırcami.

In this step also interviews were conducted by telephone with two local governors from Kırcami Area as to have further insight about the development process. In this step, City Directorate of Land Registry and Cadaster (Tapu Kadastro İl Müdürlüğü) and City Directorate of Agriculture (Tarım İl Müdürlüğü) are also visited for obtaining official information and documents.

At the end of this introductory step, the writer of this study had four general ideas for the latter step as follows:

1. Kırcami is an important agricultural and recreational area in Antalya' history.
2. Area is a part of Antalya's agricultural land system.
3. Agricultural production is under the negative effects of soil, water, and climate conditions and hence agricultural production is almost ending today.
4. Almost all Kırcami dwellers support development plan.

5.2.3.2. PHASE II: INITIAL FIELD STUDY- INTERVIEW AND OBSERVATION

The first field study was done in July 2-6, 2012. In this step interviews and observations were done. Interviews were conducted with the chairman of the Chambers of Agricultural Engineers, mukhtars of Kırcami and Güzelova Districts, two planners from Antalya Municipality and Muratpaşa Municipality and lastly with Kırcami dwellers.

The aim of the interview with Vahap Tuncer, the chairman of the Chambers of Agricultural Engineers, was to collect information about the development process, the reasons of the objections of the chamber as well as how they plan to take a position in the following process. He talked about the significance of the area in Antalya's agriculture sector as being the first classified production area and a part of the whole agricultural lands of Antalya as well as their objections to development plans.

The aim of the interview with Kırcami, Yeşilova and Güzeloluk District's mukhtars, was to understand the general opinions of what they are thinking about development of Kırcami and present condition of both agricultural production and life in Kırcami Area. Mukhtars were asked not only their personal ideas but also the general thoughts of Kırcami dwellers if they knew. It is seen that these two mukhtars have distinct ideas about agricultural production in Kırcami and its development. While

one of them was advocating the sustainability of lands, the other was supporting development by expressing the reasons of bad conditions for agricultural production. One of them is supporting the idea of 'Agricultural production should be continuing perfectly by some maintenance on irrigating channels and greenhouses'. However the other mukhtar was supporting development if the plan gave permission to high buildings. The other mukhtars did not want to answer the questions about Kırcami and its development; did not about Kırcami Area's development problem.

The purpose of the interviews with planners from Antalya and Muratpaşa Municipalities was to explore the development process' past, present and future. Through these interviews official documents related with Kırcami development issue were also collected. Planners informed the researcher about the land necessity of Antalya and emphasized the need for the development of Kırcami.

In the interviews step, people who were approached casually were asked about their family, opinions about living in Kırcami, agricultural production (land, production, marketing, and problems), educational and economic conditions and also their opinions about development. For these interviews semi-structured questions were prepared to leave room for the prominent questions during the interviews. These interviews were done in the houses of the dwellers and this condition also provided possibility for making observations about rural life and agricultural production in Kırcami. By these interviews with Kırcami dwellers and observations on the area, the essential information of the study was obtained about the present situation in Kırcami. This information revealed the need of a questionnaire as to collect detailed data about agricultural production, demographic and socio-cultural structure. Since, at the end of this secondary step, it is obviously seen that:

1. Agricultural production is still continuing in the area.
2. Area is still an important vegetable production area for not only Antalya's markets, but especially for big cities of Turkey.
3. Almost each adult member of the families is agricultural worker.
4. Educational level is low and especially all women work in agriculture.

5. All landowners do not want development; only the land-owners who have large lands want development. The landowners who have smaller lands do not support the development idea.
6. Almost all participants indicated that they want to go on agricultural production in other agricultural areas of Antalya if development realized.
7. Kırcami dwellers who support development do not want to tell the certain information about their amount of production; they are in tendency of indicating that they are in hard income conditions.
8. Kırcami dwellers are bored about the development issue and they do not trust governors.
9. Although some areas have irrigating problems Düden, River is still irrigating the whole area. Through maintenance every farm should be irrigated easily.
10. Generally greenhouses need maintenance. People do not want to invest in their greenhouses because of the development speculation.
11. Development speculation prevents the farmers from having more attention on their production.

By these collected information, the 'value' of Kırcami Area and the necessity for conserving the area are observed. However, the third step –Survey- of the case study is planned for having quantitative data in order to further invetigate the 'value' of Kırcami.

5.2.3.3. PHASE III: SECOND FIELD STUDY- SURVEY & OBSERVATION:

The last field study was realized in October 7-10, 2013. In this step, a survey with 32 semi-structured questions is prepared and implemented in three days with 50 respondents that were chosen conveniently. From Tarım District **9 people**, from Kırcami District **10 people**, from Güzeloluk District **13 people**, from Yeşilova District **13 people** and from Zümrütova District **5 people** answered the questions

(For survey see **Appendix A** and **Appendix B**). Questions of the survey were targeted to have information about five main issues that are:

1. **Demographic Profile:** For obtaining household demographic information 6 questions were asked, those are; *the relationship of the respondents with the landowner, household size, household members, their ages, education levels and jobs.*
2. **Housing and Land Profile:** For obtaining data about housing and land profile, 4 questions were asked; *the ownership status of the land, amount of the land, land ownership history and the number of its current inheritants.*
3. **Economic Profile:** For determining the economic profile of the respondents' family, 5 questions were asked: *annual income from agricultural production, existence of other income sources, additional house ownership and rent status, number and type of vehicles owned.*
4. **Agricultural Production Profile:** For obtaining the data of agricultural production of respondents' family, 13 questions were asked*: who is/are operating the land, type of the agricultural production, types of agricultural products and animals, the type of products in the previous years, having tractor/s, having irrigating systems, applying medicine and doing fertilizing, renting any agricultural equipment, renting out agricultural equipment, amount of annual agricultural product, number of annual harvesting, type of marketing approaches for products, the cities where products are marketed to.*
5. **Kırcami's Dwellers' General Ideas about Kırcami and Development:** For obtaining information about the general ideas of Kırcami dwellers' about Kırcami, development and related problems, 4 questions were asked to respondents: *the main problems of agricultural production in Kırcami, the expectations about their lands (question is also asked for women and children of*

the houses), the most important problem of Kırcami Area and the future of agriculture sector in Kırcami.

5.3. CASE STUDY AREA

5.3.1. ENVIRONMENT OF THE CASE STUDY AREA

Case study area covers urban housing, trade and trade within housing except Düden River on the eastern border. Aspendos Avenue, Perge Avenue, Bülent Ecevit Avenue and Sinanoğlu Streets are important in the transportation system of Antalya city. Perge and Aspendos Avenues and Sinanoğlu Street connect city center and Antalya airport. Sinanoğlu Street and Bülent Ecevit Avenue are the main roads of connection between the city center and the eastern regions of the city (**Map 15**).

Area is in 3 km distance to Antalya Airport, has traffic problem because of the drivers who prefer the area's roads and want to arrive to the airport by a shorter distance especially in the morning and evening hours. Especially the *1830 numbered road* that is connecting Yalı Street to the Aspendos Avenue by passing through Güzeloluk and Yeşilova Districts. Another intense traffic problem is seen in Kırcami Distict on the *Göller Street* that connects the Perge Avenue to the airport road. *9 Eylül Street* is the most disadvantaged road because being on the connection point of these roads (**Map 15**).

At the urban side of the area, there are housing and trade as the results of partial development plans. Because of being an agricultural settlement with first classified agricultural lands, area is developed through partial development plans as the result of consuming the arable lands of Kırcami Area. At the borders of the area there is urbanized areas that are 5 to 10 storeyed buildings, trade, trade under housing, private school, private hospital, shopping mall and some small industrial sites. In **Figure 9,** it is seen the land-use of Kırcami Area and the locational relations between urban Antalya and Kırcami Area. Being on the intersection points of main roads and proximity to city center and Antalya Airport cause to land speculation in the area.

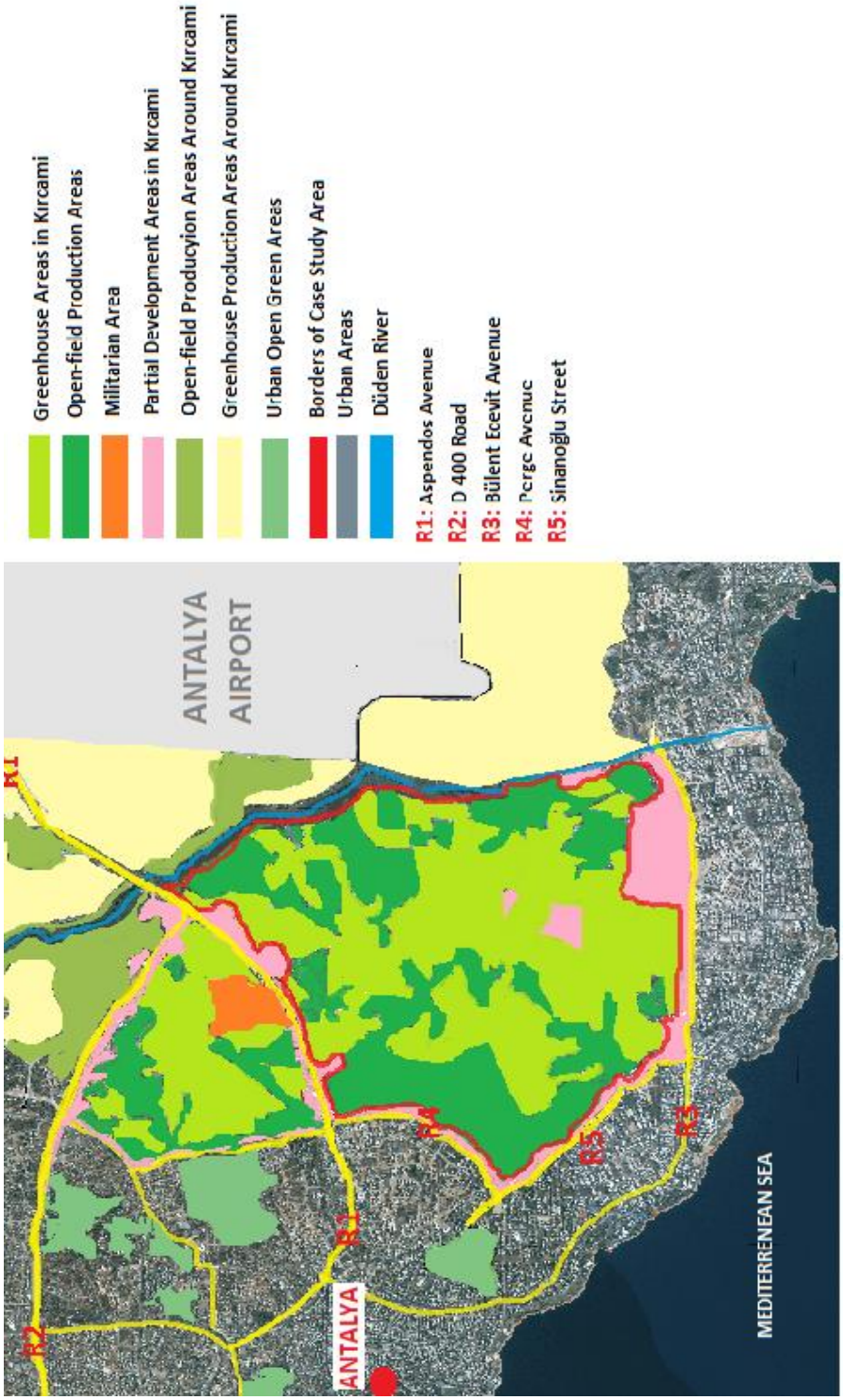


Figure 9 : Land-use in Kırcami Area and Urban Antalya- Kırcami Area Relation

Map 15: Streets those have traffic problem in Kırcami Area

Data source: www.maps.google.com

Photograph 4: Perge Avenue

Case study area is surrounded by arable lands throughout its eastern border. Due to being located near to the Düden River, the lands between the airport and the case study area have the most arable lands of the whole area. However, by partial development plans, there is also urban housing in the area and the buildings are maximum 3 storeys.

Although case study area has agricultural character, in the area there are two driving training roads (both in Güzeloluk and Yeşilova Districts) and small commercial shops that are selling agricultural products i.e. agricultural chemicals and seeds. There are two housing sites in Güzeloluk District that were constructed through partial development plans.

Photograph 5: A housing area on the location between Kırcami Area and Antalya Airport.

Photograph 6: A view from Tarım District shows the rural settlement character of the case study area

Photograph 7: Connection point of urban and rural sides of Güzeloluk Distric

Photograph 8: An example for commerce in the area

5.3.2. DEMOGRAPHIC STRUCTURE OF THE CASE STUDY AREA

There is no actual rural inhabitant population data for people living in the rural side of the Kırcami Area. Data given in **Table 16** is from 2002 and it is obtained from 1/5000 scaled Master Development Plan that was approved in 14.11.2008. Population in the area is increasing due to the urbanization on the borders of the area as a result of the partial development plans.

In the area generally two or three families live together in two or three-storey houses. It is seen that rural inhabitants of the area dominantly work as agricultural workers in their own lands. Their houses are located on their lands and agriculture is the dominant factor that leads the Kırcami dwellers to live in the area. They indicate that they would prefer to live in another agricultural area and continue to agricultural production if agriculture ends in Kırcami.

Table 16: 2002 rural population, rural area and population density of the districts

DISTRICT NAME	2002 POPULATION	NUMBER OF HOUSING(*)	AREA (ha)	POPULATION DENSITY (person/ha)
KIRCAMİ	1752	207	141.05	8
YEŞİLOVA	2986	410	302.02	10.1
GÜZELOLUK	3415	720	434.80	12.7
TARIM	1780	190	113.14	6.35
ZÜMRÜTOVA	1025	165	112.55	10.9
TOPLAM	**10958**	**1692**	**1103.56**	**10.07**

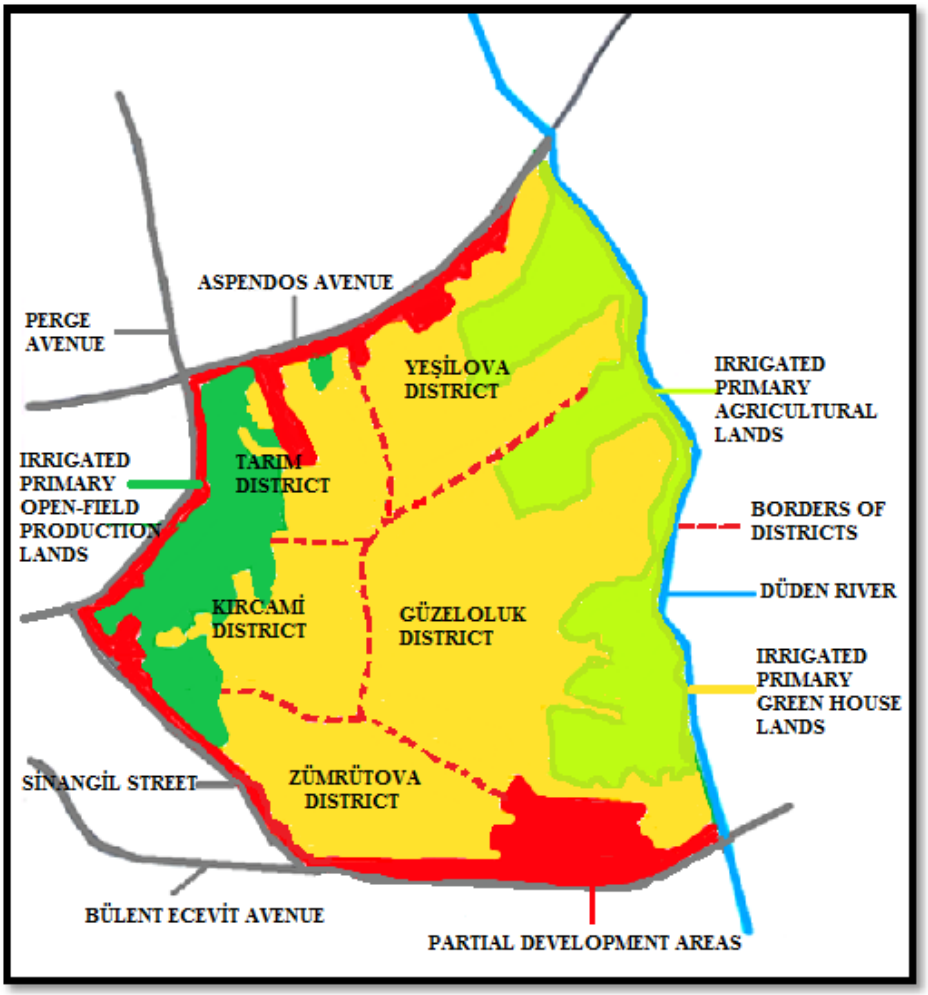
Data source: 2008, 1/5000 scaled Master Development Plan Report, (*) Number of Housing Data is obtained by Elif Demirbaş Topcu.

5.3.3. AGRICULTURAL STRUCTURE OF THE CASE STUDY AREA

Dwellers of Kırcami Area generally work in the agricultural sector. Especially almost all women are agricultural workers. Young population dominantly does not continue to higher education and join in the family's agricultural labor. In the area, essentially, two types of agricultural production are done that are open-field/ cultivated production and green house production. Greenhouse production is the dominant type of agricultural production. Initial greenhouses were built in the area about 50 years ago. While in those years vegetable and fruit (e.g. dominantly citrus fruits) were produced, today, a few types of green vegetables are dominantly produced (Related data is given in the questionnaire section).

Today in Kırcami, development issue interests almost any Kırcami dwellers. Every land-owner is wondering about his/her land's future. There are empty and neglected

greenhouses because of the expectation of the development plan. It is apparent that this 30 years ambiguity reverberates on the agricultural production negatively. However, area is still productive and agricultural production is continuing even though as it is not as in the past. In the area, agricultural production is continuing especially in Yeşilova and Güzeloluk Districts because both are affected less from urban uses than the other districts. Being closer to Düden River provides irrigating of whole area by channels. However, in the parts of the area locating near to urban areas have some deficiency because of maintenance problems. However, area does not have a vital irrigating deficiency.



Map 16: Types of agricultural production lands in Kırcami Area

In the **Table 17**, the greenhouse areas are presented. Case study area is 1103.56 ha and 506.51 ha of land in total (48%) are greenhouse.

Table 17: Total sizes and percentages of greenhouses in the case study area

DISTRICT NAME	GREENHOUSE AREA (ha)	PERCENTAGES (%)
KIRCAMİ	48.09	9.49
YEŞİLOVA	149.29	29.47
GÜZELOLUK	212.64	41.98
TARIM	43.33	8.55
ZÜMRÜTOVA	53.16	10.49
TOTAL	**506.51**	**100**

Data source: 2008, 1/5 000 scaled Master Development Plan Report

Photograph 9: A view from a productive greenhouse

Photograph 10: Irrigating channel (arık) in Güzeloluk District. Channels are observed all along the area.

Photograph 11: Glass and polythene greenhouses and open-field agriculture are together.

5.3.4. HOUSING IN THE CASE STUDY AREA

Housing typology in Kırcami Area is generally one, two or three storey. Generally houses are two-storey and are located in the agricultural land. Houses generally are grouped as five or more. Güzeloluk District is the most crowded district of the area with 720 houses and 3415 number of people. Yeşilova District is the second crowded district of the area with 410 houses and 2986 number of people.

Photograph 12: Generally one or two storey houses locate in the agricultural production land.

Photograph 13: An example of one-storey house and irrigating channel in the garden.

5.3.5. OWNERSHIP STATUS IN THE CASE STUDY AREA

According to the ownership status map (**Map 17**) the number of parcels is listed in **Table 18. Table 19** that represent the average, small and large parcels' size in the case study area.

Table 18: Table shows the number and percentages of land parcels

DISTRICTS	NUMBER OF PARCELS	PERCENTAGES OF PARCELS
GÜZELOLUK DISTRICT	222	31.53
YEŞİLOVA DISTRICT	166	23.57
KIRCAMİ DISTRICT	148	21.02
ZÜMRÜTOVA DISTRICT	99	14.06
TARIM DISTRICT	69	9.80
TOTAL	**704**	**100**

Data source: 2008, 1/5 000 scaled Master Development Plan Report

5.4. SURVEY ANALYSES AND RESULTS

5.4.1. DEMOGRAPHIC PROFILE OF RESPONDENTS

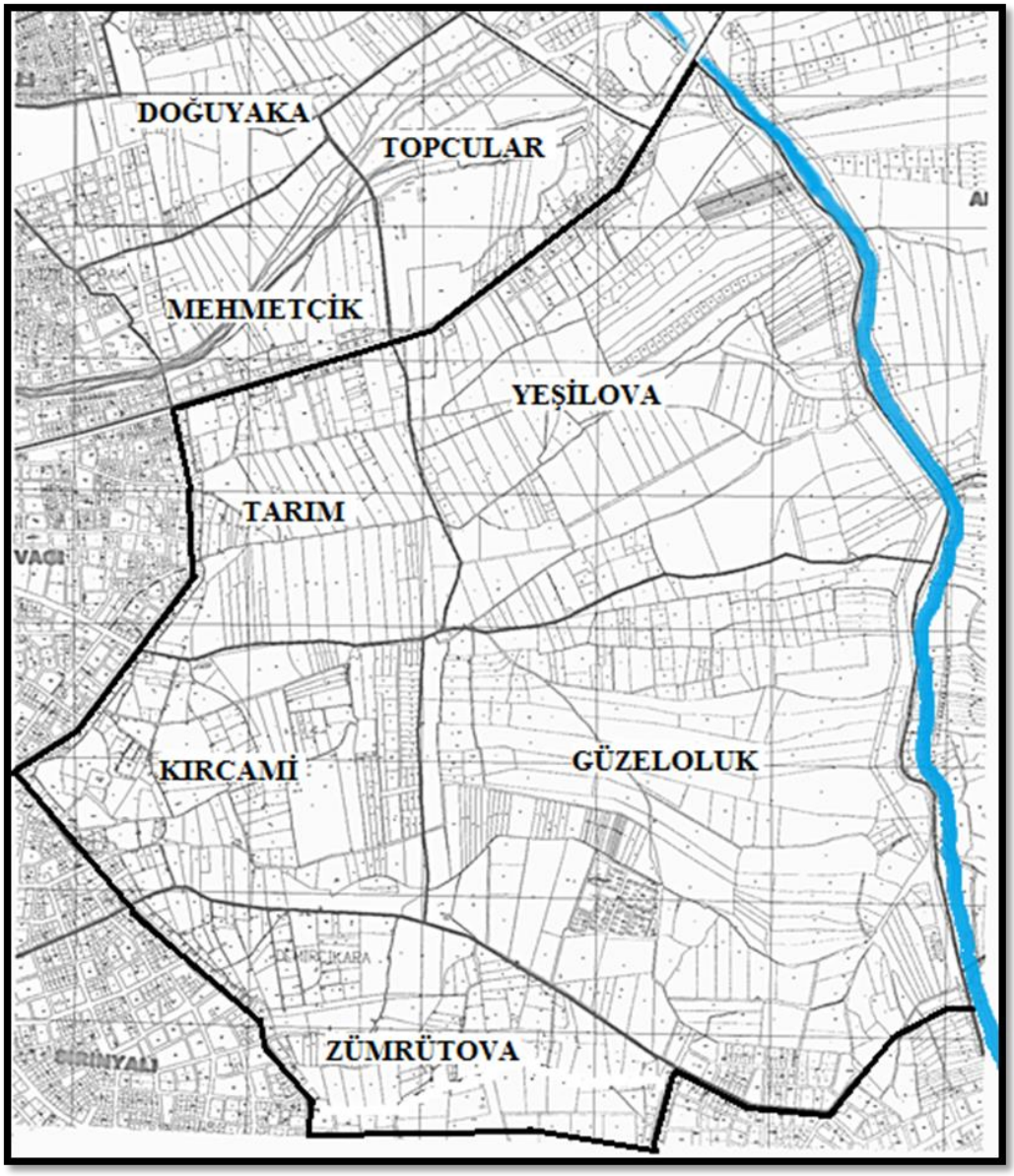
The first part of the survey was designed to gather demographic information about the sample. Accordingly, demographic data constituted of age, education level and employment condition of 203 people who share household with the respondents. The age groups of the 50 respondents are shown in **Table 20** and age groups of 203 household members are listed in **Table 21.**

Table 19: Average, small and large parcels' size

DISTRICT NAME	AVERAGE PARCEL SIZE	SMALL PARCELS' SIZE	LARGE PARCELS SIZE
KIRCAMİ	13617	4500	28125
YEŞİLOVA	14451	5312	26000
GÜZELOLUK	29780	4675	69000
TARIM	19402	3750	38000
ZÜMRÜTOVA	15972	3000	75000
TOTAL	**93222**	**21237**	**236125**

Data source: 2008, 1/5 000 scaled Master Development Plan Report

In Kırcami, younger parents between 30-50 years old generally have two children. However, the parents from the older generation, between 50-60 years old generally have three or more children. This shows that the older generation tends to have more children in the household. **Graphic 6** shows the population distribution of the families ranging between 1 and 14.



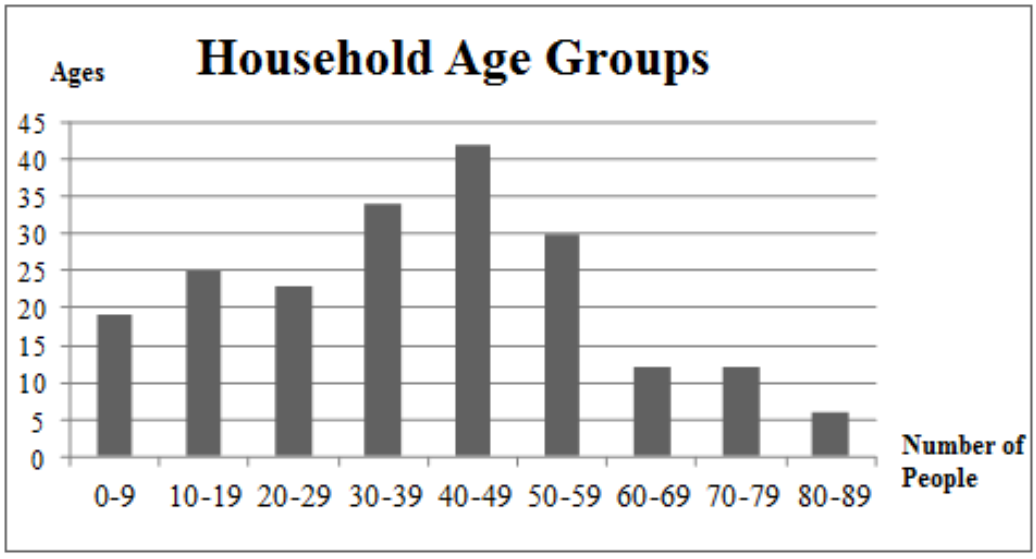
Map 17: Ownership status in the case study area

Data Source: Muratpaşa Municipality

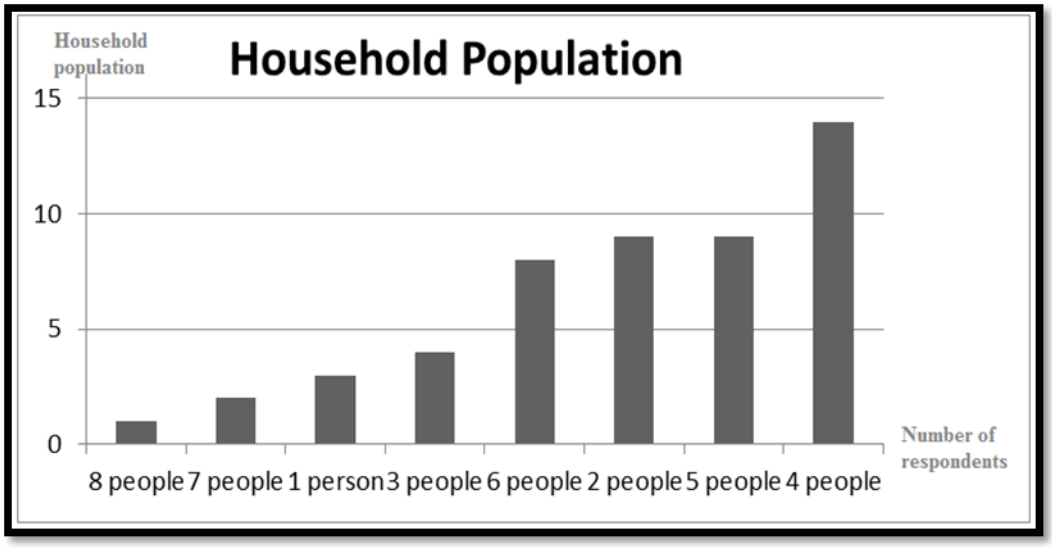
It is seen that the average age of household is **38.7** and the dominant age group is **40-49** years old in Kırcami Area. This is followed by **30-39** and **50-59** age groups. **Graphic 5** shows that young and middle age groups are the dominant age group in the area.

Table 20: Age groups and proportions and percentages of households

AGE GROUPS	NUMBER OF HOUSEHOLD PEOPLE	PERCENTAGE %
0-9 ages	19	9.35
10-19 ages	25	12.31
20-29 ages	23	11.33
30-39 ages	34	16.74
40-49 ages	42	20.68
50-59 ages	30	14.77
60-69 ages	12	17.64
70-79 ages	12	5.91
80-89 ages	6	2.95
TOTAL	203	100
AVERAGE AGE	**38, 7**	-



Graphic 5: Household age distribution according to number of people



Graphic 6: Proportion of 50 families' population

Secondly, for obtaining the educational level of household members, the respondents were asked their education level. It is seen that, while almost **15%** of participants received no schooling; almost **3%** went to primary school but did not graduate and **32%** graduated from high school. This amount is almost equal to 50% of the total population. **14.28 %** of people is graduated from high school mostly younger generation. Higher education attendence is very low in the middle age groups. Only **4.43%** of people have a university degree, **2.46 %** left university education and **2.46%** of people is currently attending university education. **Table 22** shows the educational level in Kırcami Area.

It is also observed that education is still not valuaed for Kırcami inhabitants. Although it seems higher education gains more importance for the younger age groups, nevertheless education does not have significance according to their agricultural-rural based life. Through the interviews, almost half of the young people indicate that they prefer to work as workers in their land or in any work in Antalya or Turkey instead of other jobs.

Table 21: Educational data of the case study area

EDUCATIONAL DATA	NUMBER OF PEOPLE	PERCENTAGE (%)
Not go to any school	30	14.77
Less than primary school graduate	6	2.95
Less than secondary school graduate	3	1.47
Less than high school graduate	4	1.97
Less than university graduate	5	2.46
Primary school graduate	65	32
Secondary school graduate	20	9.85
High school graduate	29	14.28
University graduate	9	4.43
Primary school student	19	9.35
High school student	13	6.40
University student	5	2.46
TOTAL	**203**	**100**

Thirdly, the respondents were asked about their employment status. Answers that are seen on **Table 23** show that **75%** of respondents work in agriculture sector. Although **24%** indicate that they have other employments, however they do not have expertise of any work other than agricultural labor.

Fourthly, the respondents were asked the other households' employment data. Answers expose that the 65% of household population are working in agriculture sector. Essentially this percentage and the 75% percentage of the previous data are almost corresponds to all labor force of the area (except children and old people) (**Table 24**).

Table 22: Employment situation of the respondents

JOB/EMPLOYMENT	NUMBER OF PEOPLE	PERCENTAGE %
Agriculture worker	26	52
Agriculture worker + Anotherjob (marketing, mukhtar, worker trade...	12	24
Worker	9	18
Housewife	1	2
No employment	2	4
TOTAL	**50**	**100**

Table 23: Household's employment data except respondents

JOB/EMPLOYMENT	NUMBER OF PEOPLE	PECENTAGE%
Agriculture worker	58	62.5
Agriculture worker + worker	2	2.5
Housewife	8	10
Government employee	1	1.25
Retired	2	2.5
Worker	8	10
Teacher	1	1.25
TOTAL	**80**	**100**

5.4.2. ANALYSES OF AGRICULTURAL LAND PROFILE

For exposing the agricultural land profile in Kırcami Area, the first question-land size that they have, is asked to the respondents. By this question, data related with totally 362600 m² lands is obtained. The data about who the owner of the land is (the relationship with the survey respondent), size of the land, house-land relation, type of the house, way of owning the land, separation of the land in the future and who is operating the land are obtained. Answers are illustrated in **Table 25, Table 26, Table 27,** and **Table 28.**

Table 24: Landowner - land size amounts in the case study area

Land Owner/Owners (Relationship with the Survey Respondents)	Number of People	Owned Land Size (m²)
Respondent	19	65900
Respondent's Wife/Husband	2	7500
Respondent+ 4 Brothers	1	5500
Respondent + 5 Brothers	1	5300
Father + Father-in law +Mother+ Mother-in-law+ Grandfather	22	215400
Aunt	1	5000
Landowner (Rented)	4	58000
TOTAL	**50**	**362600**

Secondly the respondents were asked the ownership, type and use conditions of housing. 48 respondents said that the houses that they live in are located on their land and 2 people said that they do not have any house in their land. 29 people of 50 respondents (58%) indicate that the houses that they have are single-storey. 16 people of 50 respondents (32%) said that they have two-storey house and one of these houses is rented, the others are in use of families. 3 people of 50 respondents (6%) said that they have three-storey houses that are in use of their families. 2 people of 50 respondents (4%) said that they do not have any house in the Kırcami Area.

Table 25: Housing in the case study area

TYPE OF HOUSING	LOCATION	NUMBER OF RESPONDENTS
SINGLE STOREY	on the land	29
TWO-STOREY	on the land	16
THREE-STOREY	on the land	3
NO HOUSE	-	2

Thirdly the respondents were asked the way of acquiring the land that they have in Kırcami Area. 18 people of 50 respondents (36%) indicate that they obtained the land by inheritance. 27 people of 50 respondents (54%) indicate that they bought the land. The reason of why they bought the land was also asked to respondents. 4 of them said for investment, 14 of respondents indicated for agricultural production, 5 of respondents indicated for housing/living, 4 of respondents indicated for housing and agricultural production. 2 respondents (4%) indicated that they obtained their lands not only by inheritance but also by purchase. 3 respondents (6%) indicated that they do not know the answer.

Fourthly the respondents were asked how many heirs their land will be divided in the future. The answers are illustrated in the **Table 28**. 47 respondents answered the question. According to the answers, it is seen that, 47 private lands will be divided among 180 heirs in the future. Average parcel amounts in Kırcami Area are shown in **Table 18** and **Table 19.** It is understood that lands will be divided in very smaller parcels in the future.

Lastly the respondents were asked the operator/s of the farmland right now. The answers demonstrate that the 39 farmlands (%78) are operated by family members and the 5 farmlands (%10) are operated by renters and 6 farmlands (%12) are not operated (**Table 29**).

Table 26: Land acquisition type

WAY OF ACQUIRING THE LAND	NUMBER OF RESPONDENTS	PERCENTAGE (%)
BY INHERITANCE	18	36
BY BUYING	27	54
BY INHERITANCE+BUYING	2	4
UNKNOWN	3	6
TOTAL	**50**	**100**

Table 27: Number of shareholders of the lands

NUMBER OF RESPONDENTS (person/people)	NUMBER OF HEIRS OF EACH RESPONDENT'S LAND (person/people)	NUMBER OF TOTAL HEIRS
5	1	5
12	2	24
9	3	27
6	4	24
4	5	20
6	6	36
3	8	24
2	10	20
3	Unknown	-
TOTAL: 50	**TOTAL: 47**	**TOTAL: 180**

Table 28: Operator of the farmlands, their numbers and percentages

PRODUCER (OPERATOR) OF THE LAND	NUMBER OF THE PRODUCERS (OPERATORS)	PERCENTAGE (%)
FAMILY MEMBERS	39	78
RENTERS	5	10
NON-OPERATING	6	12
TOTAL	**50**	**100**

5.4.3. ANALYSES OF AGRICULTURAL PRODUCTION PROFILE

Initially the respondents were asked what type of agricultural production they make. Four types of agricultural production are determined that are *Production in greenhouses (P. in G.), Production in open fields (P. in O.F.), P.in G. + P.in O.F. + Floriculture*. Numbers of producers according to the type of production is illustrated in **Table 30**.

In Kırcami Area, general type of production is greenhouse production with 80 percantage. Non-operating farmlands are 12 per cent of the area. The last 8 per cent of includes 4 per cent floriculture, 2 per cent production in open field and 2 per cent of both production in greenhouses and open fields.

Table 29: Producer's numbers and agricultural production type

PRODUCTION TYPE	NUMBER OF PRODUCER	PERCENTAGE %
P. in G.	40	80
P. in O.F.	1	2
P. in G. + P. in O.F.	1	2
Floriculture	2	4
No agricultural production	6	12
TOTAL	**50**	**100**

Secondly, the respondents were asked the types of agricultural products that are produced in their lands. There are different types of agricultural products ranging from greens to vegetables, little amounts of fruits and floriculture. The general agricultural product types are *parsley, rucola, cress, lettuce, spinach, faba bean, radish, cucumber, melon, water melon, tomato, green pepper, dill, chili pepper, eggplant, artichoke plant, mandarin, orange, medlar, pomegranate, floriculture.* **Table 31** illustrates the types of products and the number of producer families.

As thirdly, the respondents were asked the changes in the types of agricultural products in Kırcami in years. According to the answers of respondents, it is generally seen that changes in agricultural product type started in the middle of 1980s. In those days, it is seen that almost all the farmers were generally producing tomato, chili pepper, cucumber and eggplant. However today, 29 farmers are only producing greens due to several reasons associated with the area-related, economic and marketing problems. 13 families are dominantly producing greens with vegetables. While only 4 families indicate that they are producing little amount of fruits, 2 respondents are floweriest.

Table 30: Types of products and the number of producer families

TYPE OF PRODUCTS	**NUMBER OF PRODUCER FAMILIES**
Several types of greens	29
Greens+ several vegetables	22
Pomegranate	1
Melon + Water Melon	2
Orange	2
Mandarin	1
Faba Bean	1
Eggplant	9
TOTAL	**67**

Photograph 14: Photograph is from a flower production field in the case study area

Photograph 15: Area is well- irrigated

Photograph 16: First and second ones were taken in the beginning of 1990s. Last one is the situation of today; greenhouse that was made of glass in the left is non-operated today; new one is constructed in the beginning of 2000s**.**

As the third question re agricultural equipment possessed demonstrates 11 people of 50 respondents (22%) said that they have tractor, 16 people of 50 respondents (32%) said that they have hand tractor, 1 person (2%) said that they have palet and 2 floweriest (4%) indicates that they have grass cutter, hoeing machine, scythe, and wood machine (**Table 31).**

Table 31: Numbers of agricultural equipment having by the farmers

AGRICULTURAL EQUIPMENT	NUMBER OF RESPONDENTS	PERCENTAGE (%)
TRACTOR	11	22
HAND TRACTOR	16	32
PALET	1	2
FLOWERIST EQUIPMENT	2	4
HAVING NO EQUIPMENT	20	40
TOTAL	**50**	**100**

Fourthly, the respondents were asked if they have irrigating systems for making disinfection and using fertilizers. 36 people of 50 respondents (72%) said that they have dropping irrigating system, 1 person (2%) said that they have sprinkling irrigating system, 3 people (6%) said that they have probing, and 1 person (2%) said that they have running water system. Farmers especially indicate that they do not take permission for probing and they have problems with inadequate irrigation. 42 farmers (84%) indicate that they make disinfection and fertilizing.

Fifthly, the respondents were asked how they plough the soil. 18 people of 50 respondents (36%) said that they plough with their own tractor. 17 respondents (34%) said that they plough by renting a tractor one or two times a year and they pay 40-45 Turkish Lira for 1000 m², and one respondent (2%) said that they use their own hoeing machine.

Photograph 17: Old glass and new polythene greenhouses

Sixthly, the respondents were asked if they are renting any agricultural equipment and other land or greenhouse. 17 respondents said that they rent tractor for ploughing, 2 respondents said that they rent land for agricultural production from other agricultural regions of Antalya and 1 respondent said that they rent a greenhouse. No respondents indicate that they have agricultural equipment for renting.

Seventhly, the respondents are asked the number of harvest annually and the amount of their products. Answers are illustrated in **Table 32** and **Table 33.**

Photograph 18: A view from greenhouse production areas

Table 32: Numbers of harvest annually in the case study area

NUMBER OF PRODUCER FAMILY	NUMBER OF HARVEST (Annual)
4	1
8	2
15	3
3	4
5	5
3	6
2	7
1	10
Total: 41	**Total: 144**

Table 33: Types and amounts of the agricultural products producing in the case study area

TYPE OF PRODUCT	AMOUNT OF PRODUCTS
Eggplant	73 ton
Tomato	43 ton
Marrow	25 ton
Melon- Water melon	10 ton
Cucumber	250 kg
Faba bean	200 kg
Spinach	50 kg
Lettuce	496 700 unit
Greens	1 410 000 unit
Shrubby plants	10 000 unit

Eighthly, the respondents are asked how they are marketing their products. More than half of the total products (51%) are bought by the wholesalers. Farmers who have vehicles for carrying their products prefer to sell the products in the wholesale market. Data also shows that the area is still preferable by the whole-selling traders. Answers are illustrated in **Table 34.**

Ninthly, the respondents were asked where they send their products. The answers show that Kırcami Area is still an agricultural production area that its products are marketed in different markets of not only in Antalya but also other places. Respondents declared that the products are selling in the wholesale markets of mainly İstanbul, Ankara, Konya, Bursa, İzmir and some others cities of Turkey. And also one farmer asserted that his products are selling in export market. Answers are illustrated in **Table 35**.

Table 34: Ways of the marketing of the agricultural products

TYPE OF MARKETING	NUMBER OF PERSON	PERCENTAGE (%)
Through wholesaling to traders coming from wholesaling-market	25	51
Through wholesaling in wholesaling-market by the farmer	14	28.57
Through retailing in wholesaling-market by the farmer	4	8.1
Through wholesaling to some big markets' customers coming from Antalya and other cities	4	8.1
Through sending to hotels in Antalya and other cities' traders	2	4.05
TOTAL	**49**	**100**

Table 35: In where the products are selling

IN WHERE PRODUCTS SELLING	PERSON
In Antalya (I.A.)	10
Out of Antalya (O.A.)	10
I.A. + O.A.	20
Exportation	1
Unknown	1
Big Markets	1

As lastly, the respondents were asked the problems that they have related in agricultural production. Respondents were mainly mentioned about the cost of expenditures and the irrigating and marketing problems. Generally respondents indicated that traders earn much money than the producer. They indicate that they want to sell their products personally. The answers are illustrated in the **Table 36**.

Table 36: The problems of the farmers related with agricultural production in the case study area

PROBLEMS OF AGRICULTURAL PRODUCTION	PERSON
Cost of Expenditures (chemicals, maintenance of greenhouses)	32
Irrigating problems	13
Marketing problems	11
Infertility of soil	9
Negative effects of high construction surrounding the greenhouses	5
Agricultural diseases	2
No problem	2
Air pollution	1

5.4.4. ANALYSES OF ECONOMIC PROFILE

Initially, the respondents were asked their annual income from agricultural production for having a general opinion related about economic situation of the Kırcami inhabitants. **Table 37** illustrates the income groups.

Secondly, the respondents were asked if the households have any jobs apart from agricultural work. It is seen that only 17 people have other jobs. However, as it is seen in the table, they generally work as unqualified workers due to the low education level as it is mentioned in the demographic profile section above. Only 1 of 17 people who is a female teacher. The jobs and the numbers of people are illustrated on **Table 38.**

Table 37: Annual income amounts of inhabitants in the case study area

ANNUAL INCOME (Turkish Lira)	NUMBER OF FAMILY
2500 - 5000	1
5000 - 10000	2
10000 -15000	12
15000 -20000	8
30000 - 40000	10
40000 - 50000	1
50000 - 60000	-
60000 - 70000	1
70000 - 80000	1
500000	1
No answer	13
TOTAL	**50**

Thirdly, the respondents were asked if they owned another property (house, land, second house) other than the one they have in Kırcami. 13 respondents (26%) said that they have houses other than their houses in Kırcami. 7 people of 50 respondents (%14) indicated that they have totally 14 houses in Antalya, 6 respondents (%12) indicate that they have totally 6 summer-village houses in Korkuteli. 37 respondents indicate that they do not have any house except their houses in Kırcami Area.

Table 38: Other Job/Employment/Gender situation of Kırcami inhabitants

JOBS	NUMBER (Person)	GENDER	
		FEMALE	MALE
Teacher	1	1	-
Hair-dresser	1	-	1
Worker	9	-	9
Trade	2	-	2
Driver	2	-	2
Secretary	1	-	1
Mukhtar	1	-	1
TOTAL	**17**	**1**	**16**

Fourthly, the respondents were asked if they have any other income sources. 10 of 31 people said that they have worker retirement salary from Social Security Institution. 5 of 32 people indicated that they also have operating lands other than the one in Kırcami. 9 of 31 people indicated that they have minimum worker wage. Answers are listed in **Table 39.**

Lastly the respondents were asked how many and what type of motor vehicle they have as to obtain extended data about the people's economic level. It is seen that 24 families have 29 automobiles; 17 families have pickup truck for carrying the agricultural products to the market and 11 families declared that they have tractors for agricultural activities (**Table 40)**.

Table 39: Other income resources of the families

INCOME SOURCES	NUMBER OF PEOPLE
Retirement salary	10
Mukhtar salary	1
Cyprus War veteran salary	1
Another land operating	5
Rent income	3
Worker salary	9
Trade/ Marketing	2
TOTAL	**31**

Table 40: Number of vehicles the farmers possess.

TYPE OF MOTOR VEHICLE	NUMBER OF MOTOR VEHICLES	NUMBER OF PRODUCER FAMILY
Motorcycle	7	6
Pickup Truck	17	17
Automobile	29	24
Grader	1	1
Tractor	11	11
Panelvan	1	1
Service minibus	1	1
Commercial taxi	1	1
TOTAL	**68**	**62**

5.4.5. ANALYSES OF THE QUESTIONS OF GENERAL APPROACHES OF KIRCAMİ DWELLERS

In this section the respondents provided their general opinions about what they think about Kırcami Area's future and development plan. It is seen 48% of respondents are approving development. However, 4% asserted that they want development if it permits taller constructions. 38% of dwellers indicate that they absolutely do not want development. While 8% of people are ambivalent, 2% declared that they approve the partial development plans. These results indicate that in the area, generally there are two separate opinions (approving and not approving) with almost same percentages. **Table 41** illustrates the Kırcami inhabitants' opinions about development plan.

Secondly, the respondents were asked the other households' opinion about development plan for Kırcami Area. As it is seen in the observation and interviews young generation and women with total 57.2% want development. Women's main motivation for this view is the possibility of reduced labor work that they are heavily engaged in. Answers are illustrated in **Table 42.**

Table 41: General opinions of respondents about future of Kırcami Area

OPINION RELATED WITH DEVELOPMENT PLAN	NUMBER OF PEOPLE	PERCENTAGE %
Approving the dev. Plan	24	48
Approving a development plan with high construction	2	4
Not approving the development plan	19	38
Ambivalent	4	8
Approving partial development plans	1	2
TOTAL	**50**	**100**

Table 42: Other household's opinions about development plan for Kırcami Area

OPINION OF WOMEN AND CHILDREN	NUMBER OF PEOPLE	PERCENTAGE (%)
Women want	30	27.2
Women do not want	26	23
Women ambivalent	4	3.6
Children want	33	30
Children do not want	14	12.7
Children ambivalent	3	2.7
TOTAL	**110**	**100**

Thirdly, the respondents were asked what they think about the present situation and the future of agriculture in Kırcami Area. According to the answers:

- 13 respondents indicated that due to economic conditions farmers live on very little money. They express the high expenses of production and emphasize that merchants who buy and sell their products earn much more money than them.
- 9 respondents indicate that soil of Kırcami is unproductive.
- 9 respondents indicate that there is no problem for agricultural production. Present conditions are adequate for the continuation of agricultural production in Kırcami Area.
- 7 respondents indicate the inadequacy of irrigation.
- 3 respondents indicate that they want to buy agricultural land in Serik, Aksu, Kurşunlu and live and continue to agricultural production if the development plan puts in action.
- 1 respondent said that Kırcami is the only green area lasted in Antalya center so it must be protected.
- 1 respondent emphasized the decrease in the size of parcels.
- 2 respondents indicate that if they can earn money, they prefer to continue agriculture.

- 2 respondents said that the problems of Kırcami are solvable.
- 2 respondents said that there are no young people wanting to be agricultural workers after their generation.
- 1 respondent said that he is not happy under these agricultural income conditions in Kırcami Area.
- 1 respondent said that expectation of development cause decrease in agricultural production in Kırcami Area.

The last question was about the most important problem of Kırcami Area. It is obviously seen that the inhabitants of Kırcami Area are mostly complaining about the lack of municipal services. Following that, they indicate the difficulties of transportation from Kırcami Area to other sides of Antalya due to inadequate transporting possibilities. Lack of transportation problem is dominantly observed by the researcher in the area. Further answers are illustrated in **Table 43.**

Table 43: Problems of inhabitants related to Kırcami Area

PROBLEMS	NUMBER OF PERSON
No services from municipality	16
Transportation	12
Development problem	10
Lack of maintenance in irrigation channels	4
Infertility of soil	3
Being aired of greenhouses	1
High buildings around the area	1
Unprofitable agricultural products	1
Not competing with big sized farms	1
No problem	8

Photograph 19: A private hobby garden enterprise in Kırcami Area.

5.5. FINDINGS

8 main findings are obtained by the case study:

1) Findings about the Environment of Kırcami Area
2) Findings about the Physical Structure of Kırcami Area
3) Findings about the Demographic and Socio-Cultural Structure of Kırcami Area
4) Findings about the Agricultural Structure in Kırcami Area
5) Findings about the Economic Structure of Kırcami Area
6) Findings about Transportation
7) Findings about General Opinions of Kırcami Inhabitants About Kırcami Area and Development
8) Findings about the Potentials of Kırcami Area

1. Findings about Environment of Kırcami Area:

Kırcami was a part of the agricultural corridor that is constituted of Altınova, Pınarlı and Koyunlu agricultural production areas. At the northern parts of these huge agricultural corridor there is a mountainous geography surrounding Antalya. Düden River situates as the eastern border of the area and Kırcami Area locates at the southern part of the Düden River Basin. Düden River arrives to Mediterranean Sea with Karpuzkaldıran Waterfall through the cliffs that are 40m in high.

At the eastern side of the Düden River there is Antalya airport in 6 km distance. Between the Kırcami Area and airport there are greenhouse production areas and 3-storey housing constructions. At the south-eastern neighborhood of the area there is the Lara settlement area.

Along the southern, western and northern borders of case study area, urban uses such as housing and commerce completely surround the area. These urban uses are the results of the partial development plans. The urban sides and agricultural sides of the areas have distinct landscape features both urban and rural.

2. Findings about the Physical Structure of Kırcami Area:

There are two facets of the case study area as being urban and rural. Rural side is a typical model of Antalya's rural settlement. There are white colored low rural houses those require maintenance. Houses locate in the agricultural land, near the green houses. Area dominantly covered by greenhouses. Greenhouses require maintenance dramatically.

The natural areas of the case study area also need maintenance. There are irrigation channels coming from Düden River along the roads. There is no effective visual connection between Düden River and the area due to the urban uses. Düden River also seems like needing maintenance. Area has alluvial primary lands owing to its location on Düden River Basin. Lands are the parts of Antalya's agricultural lands system surrounding Antalya's environment.

Area is a natural open-green area of Antalya city that lays along Düden Waterfall Basin and it ingrates Kurşunlu Waterfall Basin and Koyunlu-Pınarlı and Altınova's arable lands at the northern and eastern neighborhoods.

Kırcami Area is a bio-diversity area that is the habitat of the agricultural land including diversified types of all living organisms and their interrelated life-cycles.

At the urban side of the area there is a dominant urban landscape with high buildings that is completely different from the rural characteristics of the case study area. Kırcami provides an open space for the urban Antalya.

3. Findings about the Demographic and Socio-Cultural Structure of Kırcami Area:

2002's rural population of Kırcami Area is 10958 people. Güzeloluk District is the most crowded district of the area. The dominant age group is the 30-50 years old. The parents of this age group dominantly have two children and it represents the highly populated households. Older parents generally have three and more children.

Case study area's population has low educational degrees. Both older and young generation is not interested in education. 15% of people never go to school. The highest educational level is primary school. University education degree is increasing a little among the younger generations; however, young people are dominantly show tendency to working in their lands as agricultural workers and/or as something else.

Adult members of the families are agricultural workers. Almost all women of farmers' families work in their lands. People mostly do not have any expertise in any job.

Rural population of the case study area adopts a traditional life-style. People are not in direct relation with urban Antalya. People enjoy to spend the most of their times in the gardens of their houses. Especially women wear traditional garment of *şalvar. Gözleme, bazlama* and *ayran* are the frequent traditional foods consumed in the area.

4. Findings about the Agricultural Structure in Kırcami Area:

In Kırcami Area, mostly greenhouse production is done. There are also vegetable open-fields and little amount of orange-production fields. Total greenhouse areas of Kırcami Area constitute the 7% of Antalya city's total greenhouse production areas. Kırcami people know greenhouse agriculture for nearly 50 years. Agriculture production is the dominant sector in the area with very little floriculture production, animal-husbandry, bee-keeping and horse farming.

Area is still productive; agricultural production is done by almost each family, and area is irrigated. However, especially in the parts of the areas those are close and/or next to urban sides of Kırcami Area there are non-operating green houses and those areas have deficiencies in irrigation. Generally the greenhouses need maintenance; most of them are constructed in 1990s.

21 types of vegetables and fruits that are produced in the area are determined such as *parsley, rucola, cress, lettuce, spinach, faba bean, radish, cucumber, melon, water melon, tomato, green pepper, dill, chili pepper, eggplant, artichoke plant, mandarin, orange, medlar and pomegranate*. Small green vegetables of the area are lettuce, parsley, rucola, dill, cress, spinach and tomato, cucumber, green pepper chili pepper and eggplant. It is observed that diversity in the type of agricultural products has decreased. While in 1980s, farmers prefered to produce mostly vegetables eggplant, tomato, today they prefer greens due to easy production and marketing, low cost, few harvest opportunity during the year and their less demanding nature.

In the area few farmers have their own tractors. The farmers who have large lands both in Kırcami Area and in the other agricultural areas of Antalya have their own tractors. However, the farmers who have smaller lands do not have tractors; they prefer renting a tractor of their neighbors once every year. Farmers indicate that almost all of them use fertilizer and disinfection chemicals. Also almost all of the farmers irrigate their lands by the irrigating channel of Düden River. Area is an intercity production area.

The products of Kırcami Area are marketed not only to Antalya but also to the big cities of Turkey and yet very little amount is exported. Products are mostly bought by traders coming from both Antalya Hal and big traders of hypermarkets of big cities. Very few farmers prefer to sell their products in the *hal* by themselves. The commercial agreement between the farmers and the traders determine the type of the products.

Moreover, it is observed that agricultural worker numbers among young generation is decreasing; soil has been heavily cultivated for years and needs resting; and small producers need financial support.

5. Findings about the Economic Structure of Kırcami Area:

The economy of the area is depended on agricultural production. In the area almost all the families are in agriculture sector and almost all adult members of the families work in agriculture sector. Especially women are the main actors of agricultural production.

There is not any facility for adding value for the products. At the same time there are not any multiple agriculture initiatives that are verifying the agricultural activities for having alternative income sources.

Farmers do not want to give certain amount of income information. The reasons of their avoidances are related with the ambiguous development process that effect people through concealing the real information from researches who come to the area often. However, information obtained from the interested respondents with the interviews indicated that '*A farmer who have a productive, well-maintained 1000 m2 greenhouse, under the optimum production conditions, maye have 6-10 green vegetable harvest annually and it is also possible to earn 5 000 to 10 000 Turkish Liras by just one harvest. Total income may be 30000 to 100000 Turkish Liras. This amount may be increase or decrease according to the changeable conditions such as number of harvest, climatic conditions, general economy of Turkey and demands'*. Under this information, it is seen that the answers of the survey illustrates the 30000-50000 Turkish Liras income amount as the mostly given answers. However, there are

also answers changing from 2500 to 500000 Turkish Liras. Also, a little amount of respondents indicated that they have retirement salary or work as workers with minimum wage or have other operated agricultural lands in other agricultural areas of Antalya. Almost all families have minimum one any type of motor vehicle.

In the area almost all families have their own houses in their lands with maximum 2 storeys. Also a few families indicated that they have any other houses in Antalya.

6. Findings about Transportation

Case study area is surrounded by main roads that connect eastern-western and southern-northern Antalya. Area locates between the Antalya Airport and Kırcami Area. Especially the Aspendos and Perge Avenues have high amounts of traffics.

People use the narrow Streets of Kırcami Area for arriving to airport sooner. Especially the 1830 numbered street is the mostly used road by the urban drivers. Also there is lack of public transportation services from Kırcami Area to the other parts (especially to the city center) of Antalya.

7. Findings about General Opinions of Kırcami Inhabitants about Kırcami Area and Development

It is observed that development problem causes to decreasing in agricultural production in the area. Especially landowners, whose lands are on the borders of urban sides of the area, have tendency to sell their lands and they do not prefer continuing farming in their lands. Non-operating farms cause to visual pollution for the urban environment and this cause perception for the requirement of development on the urban dwellers; they complain about the pollution of the unproductive and old greenhouses. It is diffucult for agricultural earnings competing with the land speculative earnings from the lands of Kırcami

Development problem of the area is a political problem. It is obviously seen that, there is an effort for affecting people for convincing the requirement and benefits of Kırcami's development in the local media.

Kırcami dwellers are generally in a disgusted manner due to the development issue. Generally they do not want to answer the survey questions because of both do not want to be known their thoughts about development because of development issue causes controversy among neighbors and they are implemented a few numbers of surveys in the previous period; surveys are loss of time for them.

For Kırcami dwellers, living in Kırcami Area are just based on agricultural production. In other words, agricultural production is the only factor that connects people to the area; it is obviously seen that they are not interested with the natural or agricultural value of the area and they do not have sensitive approaches about their living area when they are asked about development. They indicate that, if development realizes, they should buy land from other agricultural producing areas of Antalya and live and continue producing there.

It is also observed that, some dwellers do not want to say their agricultural and other income conditions. Some of the respondents did not give the right answers about their land size and income amounts, however some answers were obtained from indirect ways such as neighbors and some additional observations.

The numbers of people supporting the development and the not supporting the development is almost equal. Mostly the women demand development for having modern houses and not working in agriculture anymore. People who have small lands do not support development.

The most problems those the people indicate are related with the lack of municipal services and agricultural incomes due to the agricultural sector.

8. Findings about the Potential of Kırcami Area

Kırcami Area is known as Kır Camii was agricultural recreation and picnic area by Antalya people in the past. Kırcami has significant potential that could improve the farmers' economic sustainability. First of all, farming capacities should be strengthened. Farms should have additional income sources (diversification of on-farm activities) such as agri-tourism, hobby gardens, adding value enterprises and so

on. These activities are the types of multi-functional farming that provides farmers 'new marketing opportunities, adding value to agricultural production and diversifying and bolstering income sources' (Topcu, 2007). Area has both natural and recreational potentials that should be evaluated for alternative tourism such as agri-tourism. 'Agri-tourism refers to an enterprise at a working farm, ranch or agricultural plant conducted for the enjoyment of visitors that generates income for the owner. Agricultural tourism refers to the act of visiting a working farm or any horticultural or agricultural operation for the purpose of enjoyment, education, or active involvement in the activities of the farm or operation that also adds to economic viability of the site' (American Farm Bureau Federation 2004, Topcu 2007). Recreation and tourism activities should be diversified as hobby gardens, tree renting, outdoor camping and agricultural education area.

Urban agriculture should be another way of providing the connection of the area with Antalya. Because Kırcami Area locates in the city, by the way of urban agriculture, Kırcami Area should have alternative marketing opportunities that provide local and fresh food for Antalya people. Urban agriculture also should provide income sources for urban poor by farming activities. Agricultural products generally sell in other cities of Turkey and send to exportation. However, agricultural production does not have an urban character; do not provide the main requirements of the city although it is locating in the city. Although the farmers are grumbling about the traders earn more, farmers do not have any initiative for selling their products to urban inhabitants. Also farmers should have alternative marketing and/or income sources due to the advantages of the location and potentials of the area.

Agricultural production is dominantly continuing in the area. Not only producing there are also animal husbandry, horse farm, beekeeping and flower production in the area. Also agricultural living culture and rural settlement's features have a distinct and unique character in the urban Antalya as a significant value.

Organic farming is another way of increasing agriculture income. There is no farmers' union or cooperative among the Kırcami inhabitants. By establishing a producer union, farmers should gain more and they can have a diversified

agricultural status in Antalya. Also location of the area (area is close to city center, airport and wholesaling market) can have advantageous conditions for creating alternative local marketing opportunities.

Area provides recreational opportunities for city dwellers. Düden River and the basin it is located in is the most vital and attractive element of the landscape that has recreational potential. Branches of the river circulate in the Kırcami Area; in some larger parts of the river children enjoy playing in the water. By landscape improving projects such as renting the farms seasonally or using them as agricultural training area, this potential should be turned into interesting landscape and recreation opportunities.

Photograph 20: Children enjoy playing in the channels of Düden River

5.6. CONCLUSION

It is observed that through its local-rural structure, Kırcami Area seems an ‘urban village’ at the heart of Antalya. While the area was attractive for people being an open-green agricultural area in the past, today Antalya’s people have indirect relationship with the area by just using the roads that circulate around or through it. Visual appearance of greenhouses in the middle of this open-green area may have negatively affected the views of its habitan. At the same time, surrounding high constructions damages the visual cohesion between the city and the area.

This case study is done for obtaining the answers for the following research question of this thesis: ‘Is Kırcami Region a void in the macro form of Antalya city or a value in the socio-economic, ecological and agricultural structure of it?. This study exposed the Kırcami Area’s active agricultural structure and its natural as well as cultural value for Antalya city. Case study demonstrated the agricultural and natural value of Kırcami area both for Antalya’s past and future. By doing so, it has confirmed the hypothesis of this thesis that there is no rational reason for urban development in Kırcami Area.

CHAPTER 6

LEGAL AND INSTITUTIONAL DIMENSION OF AGRICULTURAL LAND LOSS PROBLEM IN TURKEY

6.1. INTRODUCTION

Food requirements, need for productivity cause to of optimal use of lands due to the limited sources of agricultural lands in Turkey. Relationhip between land and increasing demand of agricultural products not only effects on agricultural production but also cause to wrong management of lands, environmental vanishing, migration and political unsteadiness (Aksoy and Özsoy, 2013)

Today in Turkey is at the limits of its arable lands and problematic of land protection is not only the vital issue of food security but also ecological threats and sustainable development.

The current Turkish political and legal approach of land-use is not appropriate for the protection of capabilities and potentials of agricultural lands. Deterioration of soil directly means the deterioration of value of lands. Non-agricultural use of arable lands mean directly vanishing of arable lands from the earth surface. The actual agenda of Turkey is also full of non- agricultural and anti-environmental implementation practices those cause to some of public protestations today. As an actual example, development decision of Historical Yedi Kule Bostans in İstanbul permits to vanish of both cultural and natural values of the area. Area that was accepted as the 'Renovation Area' in 2006, decided to develop through the law of *5366 Numbered of 'Yıpranan Tarihi ve Kültürel Taşınmaz Varlıkların Yenilerek Korunması ve Yaşatılarak Kullanılması'.* It is a certainty that the meaning of deterioration of historical and cultural beings should be criticized through the appropriation of the decision, related law and public interest context as another study

issue. However, the example shows the prensentation of the problem of this thesis in several valuable areas in Turkey.

When reviewing the past legislative experiences of Turkish Republic, it is obviously seen that today the state is far away from its initial targets for farming. Especially it is seen that since 1980s, very strong changes were realized in legal and implemental area related with agricultural lands due to the non-agricultural uses. Agricultural land destruction is permitted under the justification of ‘public interest’ and ‘development’ concepts.

Photograph 21: Historical Yedikule Bostans is valuable with its cultural and natural value

Data source: http://www.hurriyet.com.tr/gundem/27612614.asp

Essentially, non- agricultural land-use problem is depended to the legislative deficiency of sustainable management of all natural resources that directly effects on sustainable development. Aksoy and Özsoy (2013), describes this relationship between sustainable development and sustainable soil management in **Figure 10**.

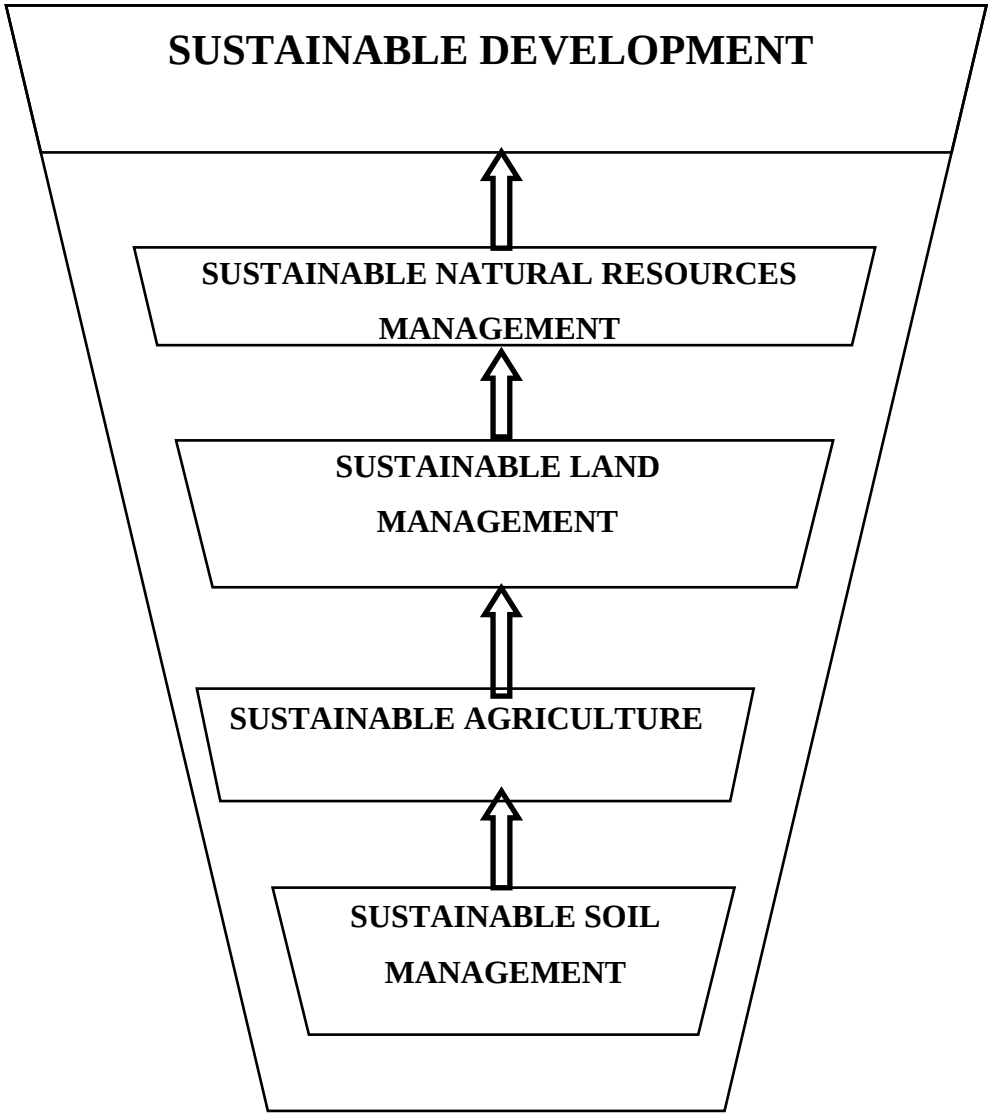


Figure 10: Figure illustrates the relationship between sustainable land management and sustainable development

Data Source: Aksoy and Özsoy, (2013)

6.2. ANALYZING THE LEGAL PROCESSES OF AGRICULTURAL LAND LOSS PROBLEM

6.2.1. 1937- PROPOSAL FOR AGRICULTURAL IMPROVEMENTS LAW

This proposal of law is submitted as a suggestion by Mustafa Kemal Atatürk in the opening meeting of Grand National Assembly of Turkey in 1936. His suggestions about improvements in agricultural sector was submitted as being proposal of law in 1937. Proposal law was suggested:

- Each farmer will have his own land
- Agricultural lands will never be divided because of any reasons
- The amount of big families' and farmers' lands those they have will be determined according to both population density of the region that the land locates in and the productivity level of the soil

This proposal of law may be evaluated as the result of conservative-statist approach of the state that was dominant in the years of 1930s in Turkey. Proposal never realized as a law according to the developments related with the political situations due to the II. World War.

6.2.2. 1945-LAW OF PROVIDING LAND FOR FARMERS

Balta (2002) evaluates this law as one of the first attempts of giving up the state's conservative-statist approach. She does not interpret this law as a reform. She says: 'Law did not allow a judicious allocation of the agricultural lands for the farmers who do not have land or have little amounts of lands. Law just provided the development of middle size enterprises by the way of increasing the small meta production through the aim of increasing the agricultural production.

Law has the aim of operating all lands by the way of acquiring lands to the small farmers. Another proposal of this law was the expropriation of lands that are larger than 5000000m^2. This was the most criticized proposal in the parliament by the landowners who has large amounts of lands.

Law is never had the targeted success. However, it is important because of providing radical transformations about land ownership status in Turkey.

6.2.3. 52 NUMBERED ARTICLE OF 1961 CONSTITUTION

'Legal process of land-use and land conservation begins with 52 numbered article of 1962 Constitution. This article of the constitution defines the role of state as: 'State takes precautions on society's nutrition, increasing of agricultural production as it is being appropriate to the public interest, preventing the loss of land and bringing added value for the agricultural products and the labor of workers' (Aksoy and Özsoy, 2013).

6.2.4. 44 AND 45 NUMBERED ARTICLES OF 1982 CONSTITUTION

In the 1982 Constitution, 44th and 45th articles indicate the role of the state on the issues related with agricultural production and animal husbandry and conservation of land. In the 45 numbered article, the speech of '*according to the principles of agricultural production planning'* is used for the first time in the legal process of land-use and agricultural production.

According to Aksoy and Özsoy (2013), 'this legal process should be categorized in two as being before and after 1989 due to the beginning of the periods of regulations in 1989 as *Regulations Period* and *Laws Period* after 2001. Essentially the period of the years after 1989 should be termed as *Period of non-agricultural use of arable lands'.*

6.2.5. 11. 03. 1989- REGULATION ABOUT NON-AGRICULTURAL USE OF AGRICULTURAL LANDS

This regulation should be evaluated as being the law of legaislative permissions for the usage of arable lands through non-agricultural purposes. From 1989 to 2001, additional regulative orders are added to 11.03.1989 regulation.

6.2.5.1. 23. 02. 1990 REGULATION

According to the aim of this regulation that refers to producing and marketing products for exportation, some opportunities were provided for firms and cooperatives to construct industrial and commercial center constructions on 1st, 2nd, 3rd and 4th land capability level of irrigating agricultural lands.

6.2.5.2. 2.10. 1991 REGULATION

1991 Regulation allows the industrial constructions on 1st, 2nd, 3rd and 4th level of irrigated agricultural lands for the investments of production of plane, ship and automobile industry.

6.2.5.3. 11. 07. 1994 REGULATION

1994 Regulation allowed the land-use for purposes other than agricultural production on all capability level of irrigated agricultural lands through the aim of roads and energy production facilities such as barrages and energy centrals.

6.2.5.4. AUGUST 1999 REGULATION

1999 Regulation provided the usage of arable lands for the high technology investments that are supported by foreign capital.

6.2.5.5. 10.08.2001 REGULATION CONCERNING CONSERVATION LAND USE OF AGRICULTURAL LANDS

2001 Regulation determined the role of Ministry of Agriculture as 'Under the conditions of lack of an alternative area, Turkish Ministry of Agriculture may give permission for land-use through the purposes other than agricultural land-use towards to non-requirement for land survey analyses. In Turkish legislative area, the speech of '*conservation of agricultural land'* is used in this regulation for the first time.However, although the law was emphasized about land conservation issue, it was already given the authority to the related ministry for non-agricultural uses without land survey analyses.

6.2.6. 5403 NUMBERED LAND CONSERVATION AND LAND–USE LAW

The law was approved in 03.07.2005. The aim of the law is defined as: ‘Conservation of agricultural lands against destruction due to natural and unnatural reasons and preventing the destruction of qualities of soil and providing preservation and development of lands and also due to the sustainable development principles, determining the essentials of land-use planning. Law also determines the terms and roles of the governmental levels from top to bottom.

The contents of the law should be summary as:

1. Conservation of agricultural lands and plains that have high qualities of lands
2. Establishment of the Land Conservation Committee
3. Determining the areas that are under the risks of erosion
4. Land consolidation areas and distribution rules for these areas
5. Agricultural supports
6. Criteria of trade of agricultural lands towards the aim of industrial constructions
7. Land classification and land capability levels
8. Criteria of parcelling sizes of agricultural lands

It is seen that the ‘land classification according to the land capabilities’ issue is determined in the first *definitions* section of the law. However, law does not interpret the context of agricultural land-use according to the land capability classification and thus the protection of primary and secondary lands does not be explained.

In May 2014 an additional regulation (**6537 numbered Regulation**), of the law was approved that submits additional regulations for land-division and land consolidation. According to this additional regulation minimum size of agricultural lands will be designated by the ministry and the regional, societal, ecological and technical properties of the regions will be the determinative factors of this designation. Regulation is designated the amount of the minimum land parcels for

primary lands, marginal lands and special product lands as 2 hectare, for cultivated lands as 0,5 hectare and for greenhouses as 0,3 hectare.

6.3. CONCLUSION: AN EVALUATION AND CRITICS OF THE LEGAL AND IMPLEMENTAL STATUS IN TURKEY

Today Turkey is far away from the sensibility of the early years of the republic's approach on agricultural productions and farmers. It should be apperantly said that, the current Turkish legislation related with land-use and land protection issues provides the legal ways of using the arable lands through the non-agricultural purposes. It is ironic that while the regulations before 2005 giving permission for non-agricultural purposes directly, 5403 numbered law both directly and indirectly submits the ways of using the agricultural lands by non-agricultural purposes.

Law also submits *Land Conservation Committee* as the decision mechanism of land conservation and identifies its tasks and authority. However, because of presence of contradictions between the second and fourth sections, law acts as an instrument for identifying the authority of the committee that explains when and how it may allow the non-agricultural usages of arable lands. Most important deficiency of the 5403 numbered law may be evaluate as the lack of the definitions and identifications of requirements and regulative-conservative mechanism of land conservation issue in Turkey. Hereafter, Turkish legislative mechanism needs a law that has to provide the certainty of conservation of primary lands.

CHAPTER 7

CONCLUSION

7.1. DISCUSSIONS AND SUGGESTIONS

Today, using urban open green areas through the purposes other than essential purposes is still continuing in spite of the debates, objections and legal regulations in the enlarging cities of Turkey. This thesis is written in the days of approvement of the recent development plan of Kırcami Area that was approved by A.M.M. in January of 2014. By the plan 1600 ha of open green areas of Antalya city decided to transform to urban settlement area.

Conserving agricultural areas is already known as a significant issue for the sustainability of life. However, the answers of the question that asks 'Why the agricultural lands have to be protected?' are generally constricted and/or cliché in respect to clarifying the 'value' of an agricultural area for the world's future. The concept of *'value of urban agricultural areas'* is a subject that was not reviewed comprehensively at all in the Turkish academic literature. This thesis is prepared for reviewing the values of agricultural lands that locating in or at the fringe of the cities.

According to the explanation of Tepe (2008) that says 'Nothing has any value if nobody tells about its meaning' and 'value and meaning might be the same things if the things/ phenomenon are criticized through their gaining for humanity and world', this study evaluate the gaining of Kırcami Area's urban agricultural lands as the *value* for Antalya city. Value of an urban agricultural land that is *beyond its agricultural functions but with its agricultural functions* is reviewed.

Through this aim, in the preparing process of theoretical framework that aims determining the valuable elements of an urban agricultural area, acceptation of

agricultural areas as being the parts of urban open-green systems has the initial role. According to this acceptance, urban agricultural lands are exposed as:

- Being the element of urban life quality
- Being the element of urban landscape
- Being the element of urban sprawl prevention practices
- Being the essential element of urban agriculture phenomenon
- Being the element of urban social, cultural and economic structure
- Being one of the components of natural resources

These valuable elements of urban agricultural lands are grouped in two categorizes these are ***agricultural values*** with agricultural economics, agricultural settlement and agricultural living culture and potentials of agricultural land and the ***natural values*** with the elements of geographic and geological elements, agricultural landscape, biodiversity, environmental impacts and conservational impacts.

These results directed the research question as asking if the urban agricultural lands of Kırcami Area is a meaningless void in the urban land-use form of Antalya city or a value in the socio-economic, ecological and agricultural structure of the city?

The definitions those are about urban and rurality subjects are redefined over again according to the reality of both the conditions of enlargement of the cities and the necessity of providing the sustainability of the natural resources in the world. Rural areas at the edge of the cities and accordingly the rural functions are accepted as the elements of urban areas according to these approaches.

'In the formation and diversifying processes of cities socio-cultural and economic identity, settlement area that the cities are located in and the natural elements of its environment plays determinative roles' (Karadağ and Koçman, 2007). Under the theoretical context of the study that is summarized above, agricultural and natural components of Antalya city and Kırcami agricultural settlement and production area are reviewed for proving the hypothesis of the study that asserts there is no rational reason for urban development in Kırcami Area.

Through the researches it is obviously seen that, Kırcami Area is one of the geographical components of Antalya city and at the same time due to its typical rural living and settlement characteristics and agricultural production, Kırcami Area is a unique settlement area that lasts in Antalya city borders.

In **Chapter 2**, three land conservation approaches were reviewed to determine the role of agriculture through land conservation context. *Greenbelt Approach* is reviewed as an example for preventing urban sprawl on rural areas. *Greenheart of Holland* example that was planned for providing healthy and natural areas containing dominantly agricultural production areas for Holland by the method of rehabilitation of swamp areas and *urban agriculture* approach that aims conserving the lasted agricultural lands in the cities is reviewed. These three examples all have the role of both *conserving* and *being conserved*. In other words, a conserved agricultural area also plays significant role on conserving the natural living areas, the local and rural types of livings and sustainability of economic diversity. All three examples are also examples for 'being value' for their environments that they improve, and they 'will become increasingly vital to society in light of changing global conditions such as climate change impacts, water scarcity, rising oil prices and food price inflation' (Carter and Esakin, 2010).

The recent planning and conservation approaches in the developed countries incorporate the conservation of local diversifications to the urbanization process. These approaches do not prefer eradicating the elements of natural living cycle; in contrary supports the approaches of conservation and development of essence values of natural life cycle. By reviewing examples, it is also obtained that:

1) Urban agricultural lands have both agricultural and natural values in an urban ecosystem
2) Agriculture is also an urban economic sector
3) Agricultural settlement areas have unique characters in urban areas
4) Urban agricultural lands have diversified potentials for both urban and rural society

5) Urban agricultural lands should be benefitted as natural land conservation zones
6) Urban farmlands should be interrelated the urban and rural societies

Conservation of the agricultural lands in the cities and at the edges of the cities is the issue of both urban and rural planning studies. Kırcami Area's development problem is the result of an aspect that evaluates the city according to land-use form and do not accept the urban-rural cooperation. This aspect causes to loss of arable agricultural lands in the all developing cities of Turkey. It has to be understood that, land is not the only lost element in the land loss process. By this loss all the *values* both *agricultural* and *natural* are lost, those not only dependent to the land but also the all urban and rural environment. In other words, '*conserving agricultural land*' and '*making of the agriculture in another land/opening newer agricultural production areas*' are not the same things. Conserving agricultural land means conserving the all life components of an agricultural area and its environment; do not means only conserving the agricultural production activity and soil.

In the theoretical framework chapter, it is seen that the urban life quality depended on the sustainability of the natural components of the city in an urban planning study. All the vital components of the city have to be protected unless having a rational reason that is related with public benefits and has no alternative. As it is emphasized by the *Coordination Committee of Chambers of Antalya*, conserving the quality of agricultural land has also public benefits. Benefits of agricultural areas as being the components of urban open green areas system are determined through their ecological benefits and their positive impacts on pollution control, biodiversity and nature conservation energy savings, property value, recreation and wellbeing, human health.

It is a certainty that the land conservation issue will become more vital in the future both for the world and Turkey because the urban development continues to be the most destructive threat on arable lands. Today, Turkey is at the limitation of its

arable lands'capacity. However, the controversy between urban expansion and arable lands is continuing day by day.

'As being parallel with the urbanization process of Turkey, spatial formation of Antalya city and accordingly urban identity change started in 1950s and gain acceleration in the following years. While the urban land-use area was 270 ha in 1950 and population was 25 515 people in the year of 1950, it is increased to 690 ha. land-use area and 50 908 people in the year of 1960 (Manavoğlu, 2009). Antalya city is one of the rapidest developing cities of Turkey and continuing to lose its arable lands especially since 1950s. By the Kırcami Development Plan Antalya will also lost 1600 ha primary urban agricultural lands. This lost essentially means loss of a significant part (water, soil, plants and other living organisms) of open green areas and 8% of greenhouse economy of Antalya and almost 1700 farmer families.

Antalya city has distinct geological structure of cliffs, rich water resources, large arable lands, and appropriate Mediterranean climate for both tourism and agriculture those make the city vital in the region that it locates in. Researches show that, agriculture has always taken place in this geography and city's economy is still dependended on agriculture. Antalya city as being the fifth developed city of Turkey is an important agricultural production center due to its geographical advantages in the region that it locates in. 187 types of products are produced in Antalya. Annually, 20% of fruit- vegetable exportation of Turkey is done from Antalya. 2,4 per cent of bee-keeping of Turkey takes place in Antalya. Also 'Antalya is a rich geography of aromatic and medical plants' (Olhan, 2011).

Agriculture sector was the dominant economic sector of the city since the development of tourism sector as the result of the tourism development plans in the beginning of 1980s. Due to the rapid economic development due to the tourism sector, city had an unplanned population increase because of migration. After those years tourism sector became the biggest economy of the city. Antalya city lost of its 267000 da agricultural lands in the last 10 years as the result of urbanization (A.M.E. Report, 2012).

It is a certainty that, while the city's future is planning according to its tourism potential, agriculture sector's future did not plan well. This situation is also effects on the agricultural character of the city; today Antalya city is mostly known as a tourism city.

Development problem of Kırcami Area may be reviewed in the terms of before and after 1996 UTTA plan that planned the area as an urban settlement area. According to the TUIK data, population number of Antalya was 378208 people in the year of 1990 and 603190 people in the year of 2000. Kırcami was deceided to develop as an urban area in those years due to the population projections and accordingly urban land requirement. However, according to press conference of *Coordination Committee of Chambers of Antalya* in 2012, currently there are 70 000 redundant houses in Antalya and Antalya is not in need of recent housing settlement areas until 2050 due to the redundant housing and present empty developed settlement areas.

Planning the two sides of the Aspendos and Termessos Avenues, Aşık Veysel Street and highway by the revision plan of 1/5000 scaled Master Development Plan that was approved by A.M.M. through the 304 numbered decision in 20.08.1986 that paved the way for partial development plans in Kırcami Area might be one of the factors that UTTA Plan's decision about Kırcami Area. About the development decision of Kırcami Area three is still no rational reasons that are exposed by A.M.M.

In spite of the Report of Expert Commission, objections of all chambers of jobs for many times and declaration of Coordination Committee of Chambers of Antalya's by a press conference towards the significance of protection of Kırcami Area, approve of Kırcami Development Plan realized in January 2014 once more. For obtaining the required public benefit decision and legal permission for non-agricultural uses, related ministries paved the ways for urban development politically.

Although Kırcami Area is evaluated as a meaningless void in Antalya city in the current days, area played a crucial conservative role as being a natural obstacle

against urban sprawl in the rapid urbanization process of Antalya since the beginnings of 1980s. Today Kırcami Area is the only area that has the rural socio-cultural and agricultural identity of Antalya city and protected against urban development through the civil initiatives. In the area, typical rural living conditions are observed. Parents generally in tend to live in single to 2 storeyed houses with their families of children. Houses have gardens that they enjoy to spend their time in and houses locate in their lands near the production areas. Irrigating channels may be playing areas for the children in the summer days.

As another result, area has significant role on providing the openness- compactness balance of the city. Area presents diversified landscape elements according to being agricultural landscape. Kırcami Area has also recreational opportunities for Antalya inhabitants. In the past Kırcami Area was called as *Kır Camii* that was an agricultural recreation area for the Antalya dwellers and people were enjoying having picnics near the Düden River. Today Antalya dwellers do not have recreational relationship with the area and Kırcami Area's value is also not known by them as the result of urbanization. Due to the impacts of partial development plans 1600 ha open green area's only urban side is known by them. This situation seems as a public perception that is created and supported by the local governments.

Area is vital for Antalya city according to the functions such as the aerial movement, urban climate, clean air and water resources. Kırcami Area is settled in the second level of Duraliler Conservation Area of Drinking Water Resources (**Map 9**). In this conservation area, there is Kırkgöz underground water resources at the north of the area that is feeding up the Düden Waterfall. Kırcami Area is a well-irrigated area by Düden River Irrigating Channel since 1966. This channel carries the waters of Kırkgöz Water Resources by a channel (**Map 8**) to the Yedi Arıklar Irrigating Channel (**Map 13**) that locating at the northern part of Kırcami Area. Due to the being located in the Düden River Basin, area has valuable alluvial soils. Area also has the climatic impacts of this geography and thus water and climatic conditions make the area appropriate for agricultural production.

Kırcami Area has another importance for Antalya city as being local and fresh food production area in respect to food security. Area provides an important amount of fresh vegetables of the city through the amount of 8% of Antalya city's total greenhouse production.

With regard to agriculture sector, area is a resource for economic diversity and agricultural employment. Greenhouse production is realizing in Kırcami Area and almost all families' livelihood is dependent on agriculture. It is an urban area that the agricultural economy is continuing; in other words Kırcami Area has a vital role on the diversification of urban economic sectors in Urban Antalya.

As the economic problems, case study showed that, farmer families have economic problems those are related with agricultural policies that cause to high expenditures as seed, chemicals and maintenance of greenhouses. However, they also complain about the negative impacts of high buildings surrounding the area those cause to preveting of being aired of greenhouses. Being closed to Hal and city center, area is preferable for food traders. Farmers generally have economic contracts with traders.

It is observed that the farmlands near the urban development areas of Kırcami Area are the mostly effected lands from the urbanization. However, expectancy of development causes to this situation. In the middle parts of the area agricultural production is still going on normally and the landowners who have small lands do not support the development decision.

Economic problems of the area are surmountable problems by the regulative orders of both national and local governments. Agriculture sector may be developed according to the policies those provide adding value to the agricultural products and by diversifying the agricultural activities do to the both agricultural and natural values of the area.

It is apparently seen that Kırcami people do not related with the *values* of Kırcami Area. *Value* means their livelihood for them and they are just related with their sustainability of livelihoods. It is obvious that if development may provide their livelihood the landowners who have small lands also support development. However,

they also indicate that they want to go on agricultural production in other agricultural lands of Antalya. This situation means that earning more income is the vital element for the farmers and earning more money is more valuable than sustainability of Kırcami Area for Kırcami inhabitants.

Looking to Antalya as it is a map and deciding its land-use form of future according to the land-use form of Kırcami Area have no rational basis. This kind of an approach ignores all the qualities of Kırcami Area and their environmental, social and economic impacts for its whole environment. For example, this kind of an aspect claims that all agricultural and natural values of Kırcami Area such as Düden River and its basin, being a food production area for not only Turkey and also exportation, bee-keeping, animal husbandry, hundreds of farmer families are meaningless; have no any vital impact on Antalya city. Also, demolishing 1600 ha arable lands and planning open green areas instead of it, demolishing all the natural effects of Düden River and its basin, enforcing all the local inhabitants of the area due to the development or causing to migration to another agricultural areas have no rational reason as it is explained by A.M.M. through the public interest context.

Kırcami Area resist against development for about 20 years by the objections those are based on legal conditions. For realizing the development, there were 3 obstacles that have to be overcome by A.M.M. These were *Environment Plan decision that accepted Kırcami Area as an urban area, public interest decision and 'appropriate for non-agricultural use' decision.* This process is completed and all the obstacles are overcomed by the latest legal regulation that was approved in 2014.

Rational basis of public interest decision about the non-agricultural uses of Kırcami Area's lands have to be explained to public opinion by the local governments. Public interest concept also has to be criticized according to the values of the area that Antalya will be lost by the development plan. When the local media is reviewed it is seen that almost all the writers support the development through 'public benefit' context and work for creating a positive perception for development. However, Antalya people have no awareness about the area and its vitality for Antalya. Interviews with a few numbers of Antalya people show that people have no

information about development problem; they just know Kırcami Area's urban sides, they do not interested in rural Kırcami. In the last development plan of Antalya city, it is seen that public interest decision is taken through the legal regulations. However, a rational comprehensive plan has to expose all the rational reasons of such a plan decision; if there is or there is not any alternative of the decision has to be criticized rationally.

It is an argumentative issue if these decisions are political or not. But it is obvious that it is hard to protect the arable lands against urbanization legally in Turkey. Today in Turkey, legal framework about agricultural land conservation works for determining the ways of uses of agricultural lands through non-agricultural purposes. Since 1980s, Turkey has lost serious amount of arable lands by the helps and supports of legal regulations. In other words, legal process has all the regulations for the urban-land uses. It is a certainty that for protection of urban agricultural lands there must be legal and institutional mechanisms same as with the mechanisms related with the non-agricultural uses that are provided by related ministries. Turkey needs a land conservation law independent from land-use issues. The essential problem of present *5403 numbered Land Conservation and Land-Use Law* is submitting two distinct and main issues together. Land Conservation Committee's roles and authority have to be defined over again, committee have to act for just only conservation.

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Whereas there is still chance for Kırcami Area if a liable aspect that evaluates the agricultural and natural values of the area should be developed by both national and local governments. As additional information for **Conclusion Chapter**, it is designed a framework of required land conservation approach in Turkey in **Figure 11** (page:

191). In the **Figure 11**, governmental dimension of the problem is defined in two levels as *national* and *local.* Under the title of national level of the *Land Conservation Approaches of Turkey* (L.C.A.T.), the roles of the related ministries are defined. In Turkey, *Republic of Turkey Ministry of Food, Agriculture and Livestock, Republic of Turkey Ministry of Environment and Urbanisation, Republic of Turkey Ministry of Interior, Republic of Turkey Ministry of Forestry and Water Management, Republic of Turkey Ministry of Development* are the actors at the national level those create the legal framework of the conservation approach.

As being the main actor *Republic of Turkey Ministry of Food, Agriculture and Livestock* has to define decisively the terms related with soil, land and conservation areas by the laws. 5403 numbered Land Conservation and Land-Use Law has to define the responsibilities of the governmental organizations/institutes on the process. Through the joint works of related ministries, *Republic of Turkey Ministry of Food, Agriculture and Livestock* has to define a Land Conservation Act (L.C.A.) for Turkey, which draws the framework of conservation. L.C.A. defines the conservation areas, conservation approaches and implemental essentials of the national level.

Republic of Turkey Ministry of Development plays the role of creating the related laws and regulations and preparing the framework of ecological based plans through the aim of sustainability. Ministry of Internal Affairs has the role of defining and deciding 'public interest'. At this point determining the context of 'public interest' as a result of common decision is important for providing a healthy operation for laws and L.C.A.

Republic of Turkey Ministry of Forestry has to have common roles with other ministries for determining conservation areas at the both national and regional level.

Local level of L.C.A.T. includes the implementation levels of L.C.A. In the local level, local government acts as the main actor of the implementation process for both pplanning and implementing works. Local governments also have the role of establishing the finance, monitoring and implementation mechanisms. For the planning studies, each local government determines its Land Conservation

Programme (L.C.P.) according to the land conservation area's socio-spatial properties. L.C.P is the planning and implementation programme that determines the actors and the conservation approaches according to the rules and essentials of L.C.A. Actors of the land conservation process on the local level are the local governments (provincial and municipal), producer unions such as farmers' cooperatives, non-governmental organizations, chambers of jobs and urban users.

L.C.P. should be a general approach such as greenbelt, greenway, zoning, urban agriculture or any new approach that is appropriate for the conserving area. Local governments should appoint a body/unit as the conservation governance entity for designing L.C.P and this body/unit should also provide the public contact with L.C.P. Local governments, producer/farmer unions, NGOs, chambers of jobs and public should be act together especially as being the decision mechanisms.

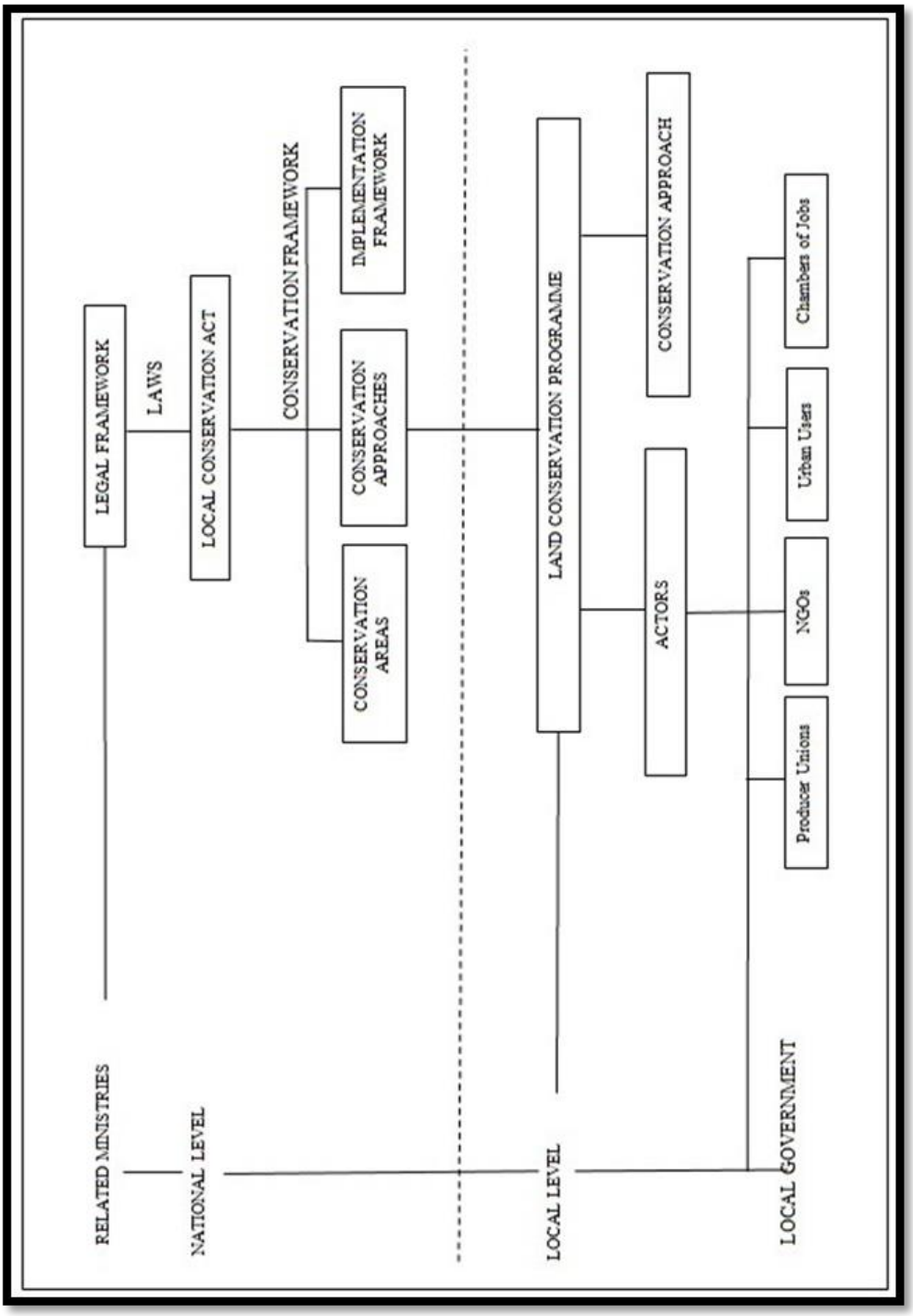

Figure 11: Organizational framework of a reqired land conservation approach in Turkey

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APPENDIX A

SURVEY QUESTIONS FORM

This survey study is done in the scope of the thesis of Elif Demirbaş Topcu who is the student of City and Regional Planning Department of Faculty of Architecture in Middle East Technical University. Data obtained by this thesis is just only used for this mentioned academic study and do not be published in any publications. Data related with the participants will be confidential by the researcher.

Date:

District Name: Street No:

Household population:

Household Demographic Profile	AGE	EDUCATION LEVEL	EDUCATION (CONTINUING)	JOB
Head of Household (H. H.)				
H.H.'s				
H.H.'s				
H.H.'s				
H.H.'s				
H.H.'s				
H.H.'s				
H.H.'s				
H.H.'s				

QUESTIONS:

1. House- Land Relation:
2. Type of housing:

Number of houses in Kırcami: ( )

Status of the house: ( ) Family use ( ) In rent

Number of storey: ( )

Number of other houses in other locations: ( )

Status of the other houses ( ) Family use ( ) In rent

Other: ( )

3. Who is the legal owner of the land? (The relationship of the respondent with the landowner)
4. What is the size of owned land?
5. What is the way of acquiring the land?
    a. Inheritance
    b. Purchasing
    c. Both inheritance and purchasing
    d. Reasons of purchasing ( ) Agricultural Production
       ( ) Second house
       ( ) Investment for the future
       ( ) Other
6. How many shareholders will share the land in the future?
7. Who is/are operating the land?
8. What is / are the types of agricultural production?
    a. ( ) Greenhouse
    b. ( ) Cultivated agriculture
    c. ( ) Organic agriculture
    d. ( ) Animal husbandry
    e. ( ) Others
9. What are the types of agricultural products and animals (if there are)?
    a. ( )Vegetable
    b. ( ) Fruit
    c. ( ) Animal husbandry
    d. ( ) Flower production
    e. ( ) Others

10. What kind of transformation is realized about the types of products in the last 10- 20 years?
    a. ( ) What are the changing products?
    b. ( ) When?
    c. ( ) Why?
11. Do you have a tractor?
12. Do you have an irrigating system?
13. Do you use chemicals and fertilizers?
14. Do you rent any agricultural equipment?
15. Do you give your agricultural equipment for rent?
16. Do you indicate amount of your annual production by the terms of ton, kilo, bağ …etc?
17. What is the number of your annual harvest?
18. What is/are the types of marketing your products?
    ( ) I sell my products in the whole-sale market
    ( ) I sell my products in the local bazaar
    ( ) Traders are coming and buying the products
    ( ) I have my specific customers, just only they take my products
    ( ) Other
19. In where your products are selling?
    ( ) In Antalya ( ) Where?
    ( ) Out of Antalya ( ) Where?
    ( ) I do not know
20. What is your annual income from agricultural production?
21. Do you and/or other members of the family have any other income source?
    ( ) Other work/ job
    ( ) Other operated land
    ( ) Retirement salary
    ( ) Rent income
    ( ) Other
22. Do you have any other house?

( ) Yes ( ) No ( ) Number

23. Do you have any other house in rent?

( ) Yes ( ) No ( ) Number ( ) Where ( ) Type of housing?

24. Do you have any motor vehicles?

( ) Yes ( ) No ( ) Number ( ) Types

25. What are the problems that you have in agricultural production?

( ) Deficiencies related with irrigation

( ) Effects of high building surrounding the area on the greenhouse production conditions

( ) Cost of maintenance of greenhouses

( ) Cost of chemicals

( ) Cost of fertilizers

( ) Problems that are related with marketing; please explain

( ) Other

26. What is/are your expectation/s about your land?

For men:

( ) Development ( ) Partial Development ( ) No development ( ) Other

For women:

( ) Development ( ) Partial Development ( ) No development ( ) Other

For the youngs of the families:

( ) Development ( ) Partial Development ( ) No development ( ) Other

27. What is the main problem of Kırcami Area for you? Please explain.

( ) Irrigation

( ) Transportation

( ) Urbanization

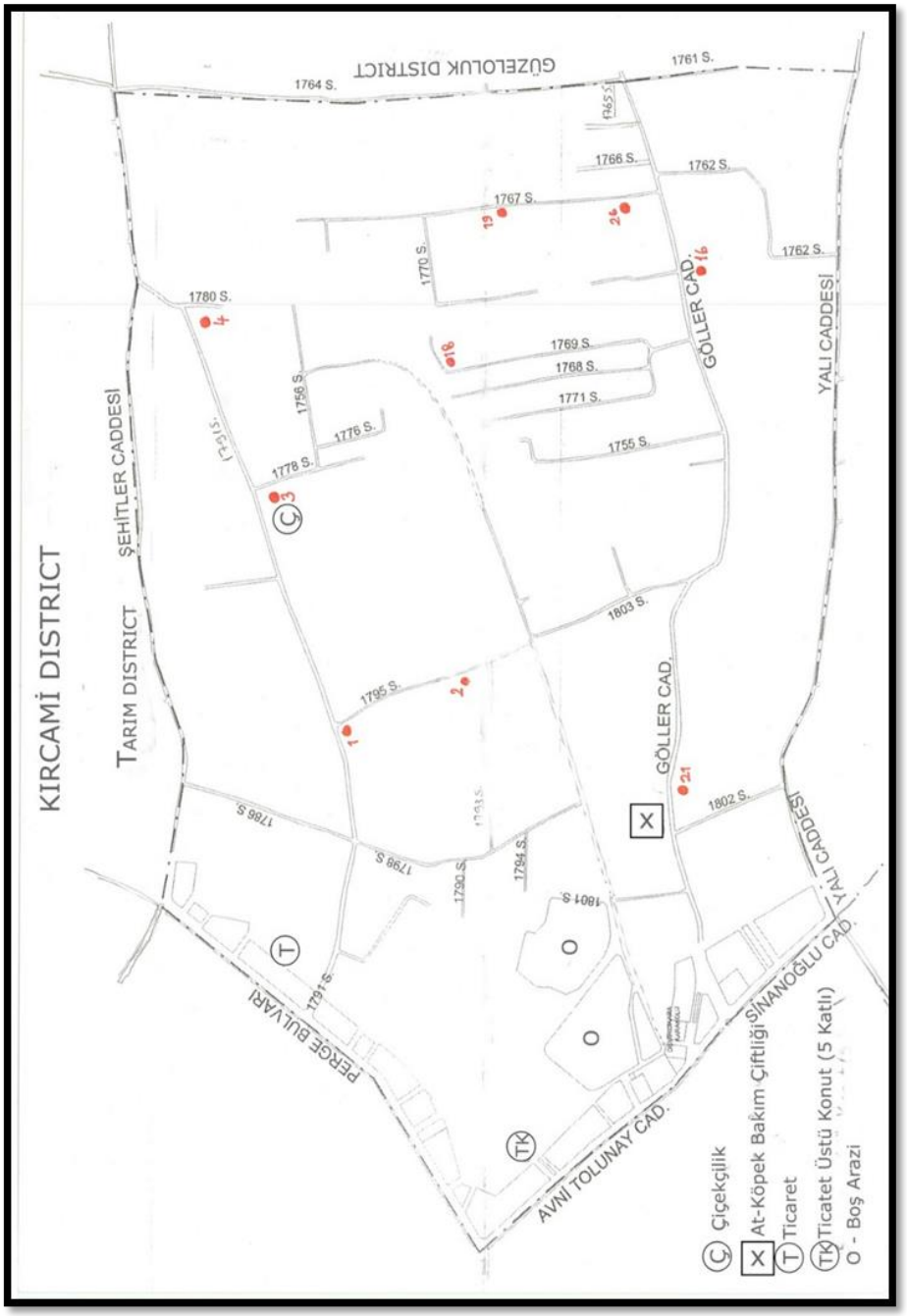
( ) Problems with agricultural production

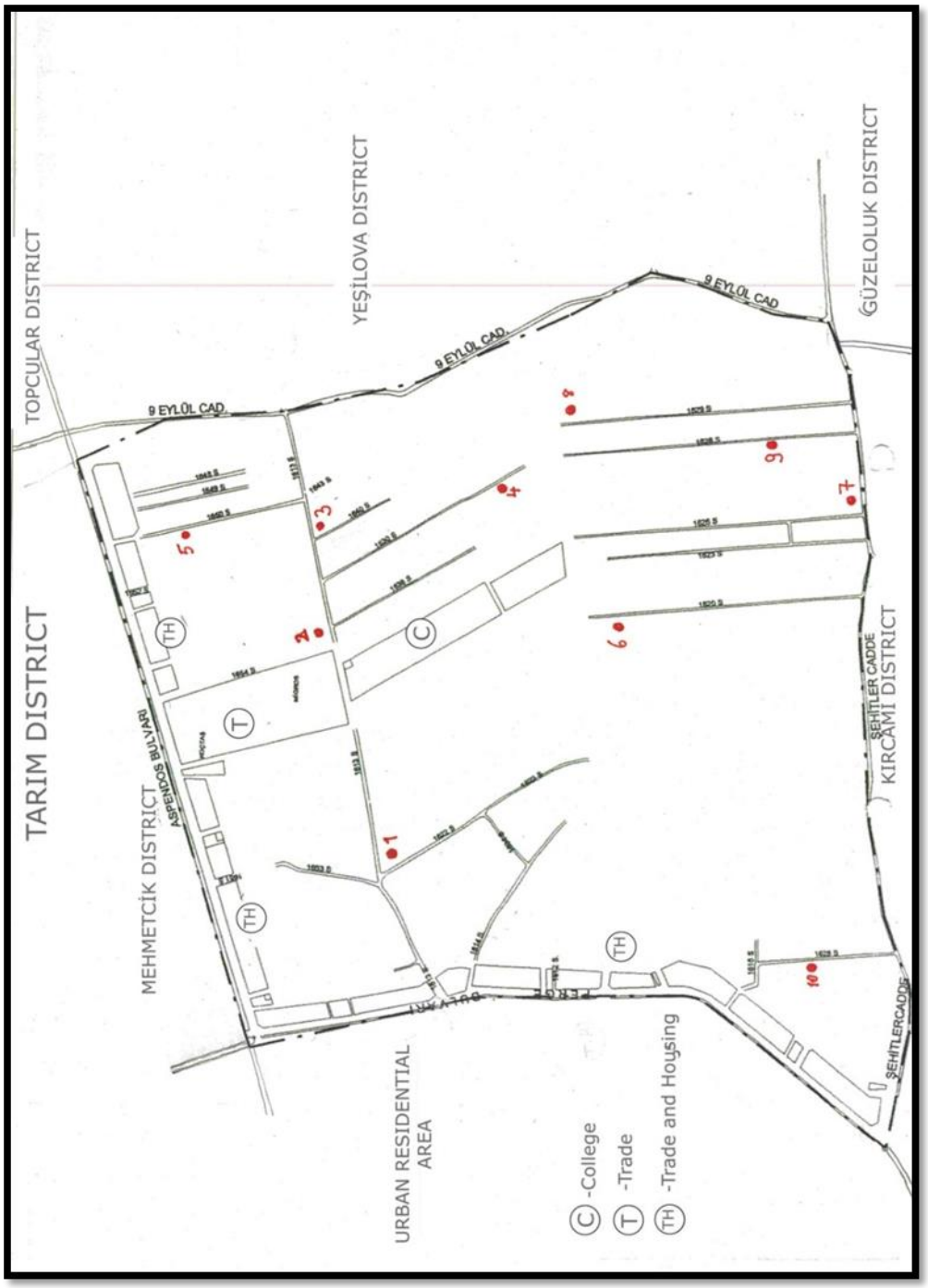
28. According to your idea, in Kırcami, is agriculture have to continue or not ?

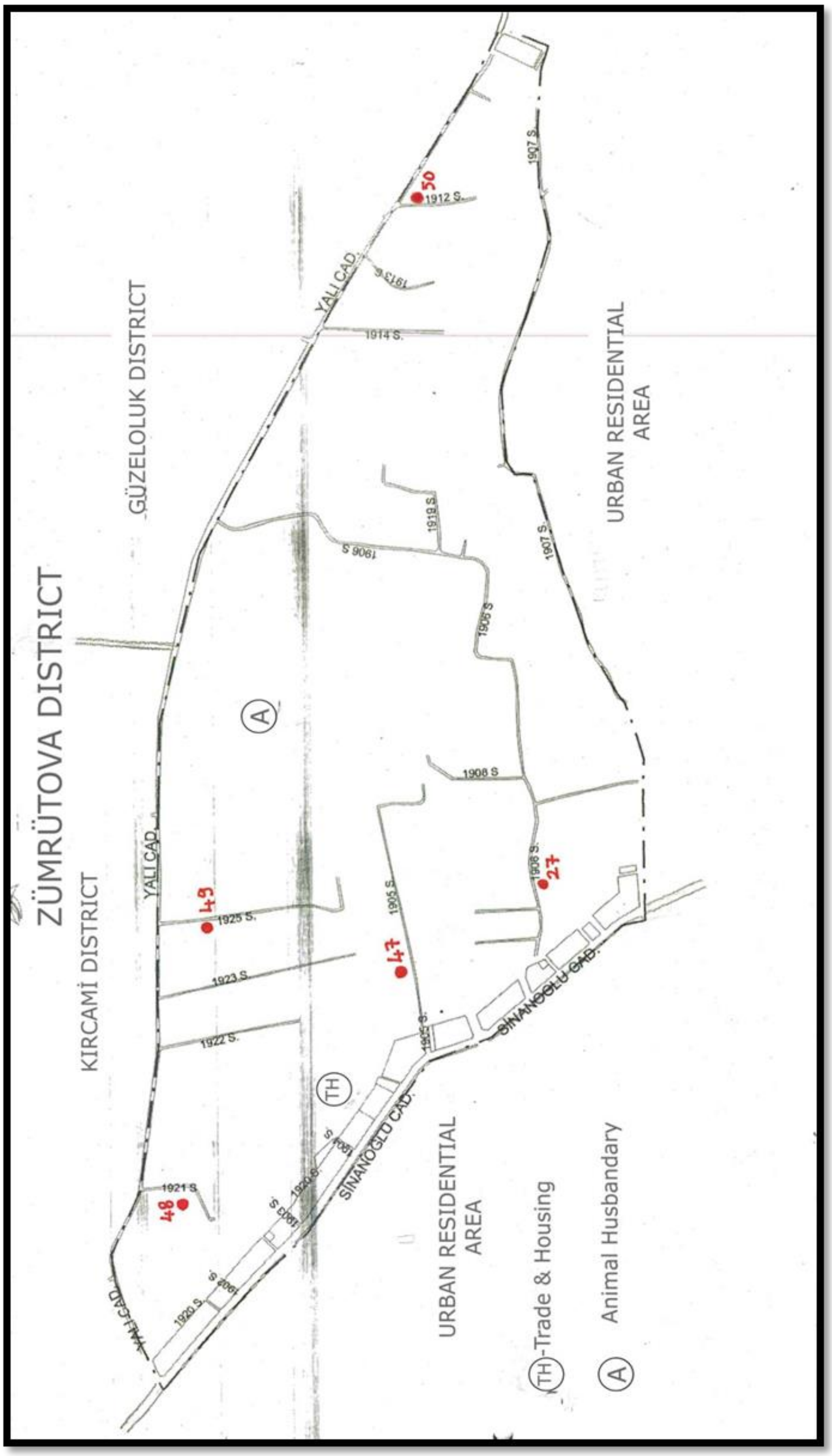
( ) Continue ( ) Not continue ( ) Reasons

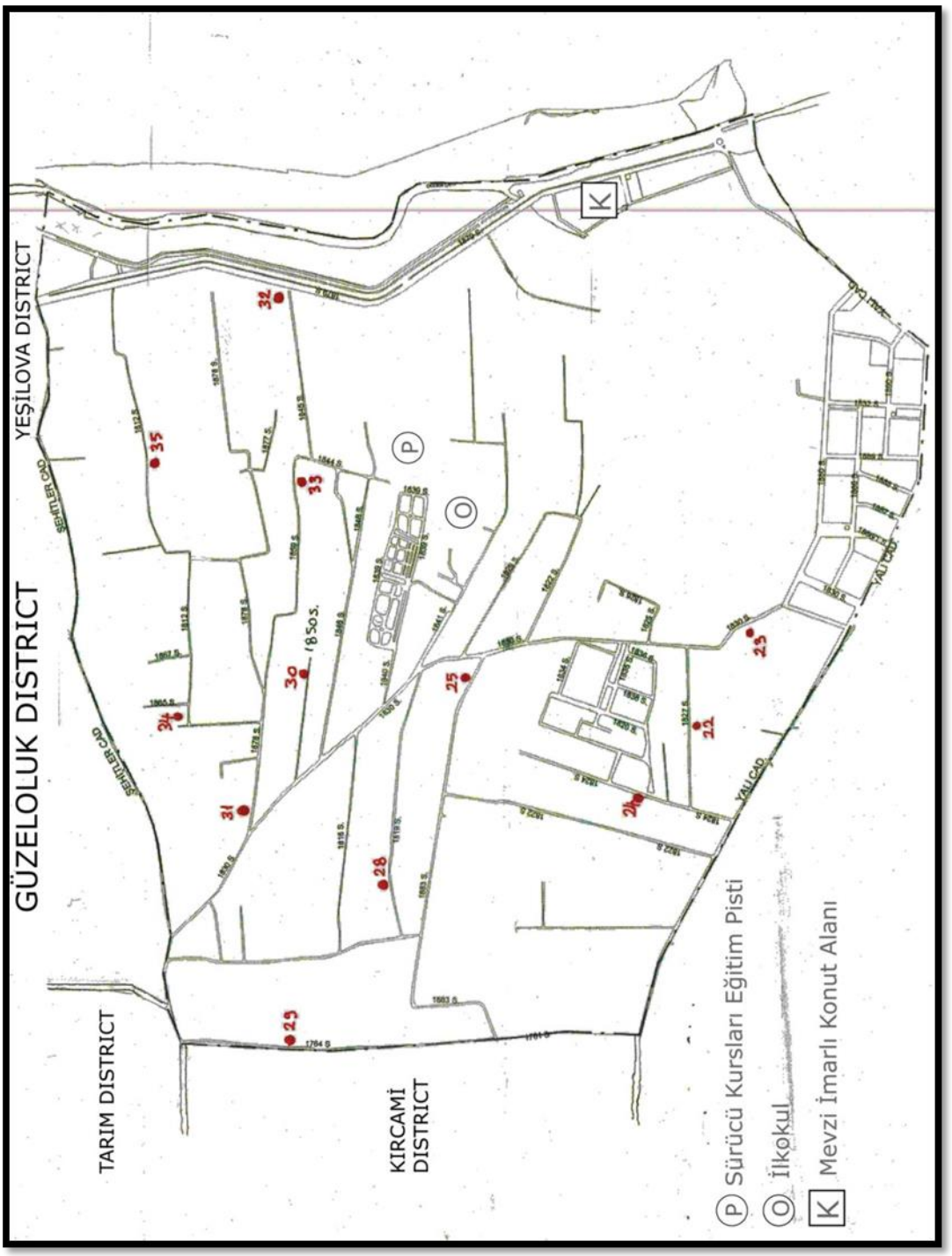
APPENDIX B

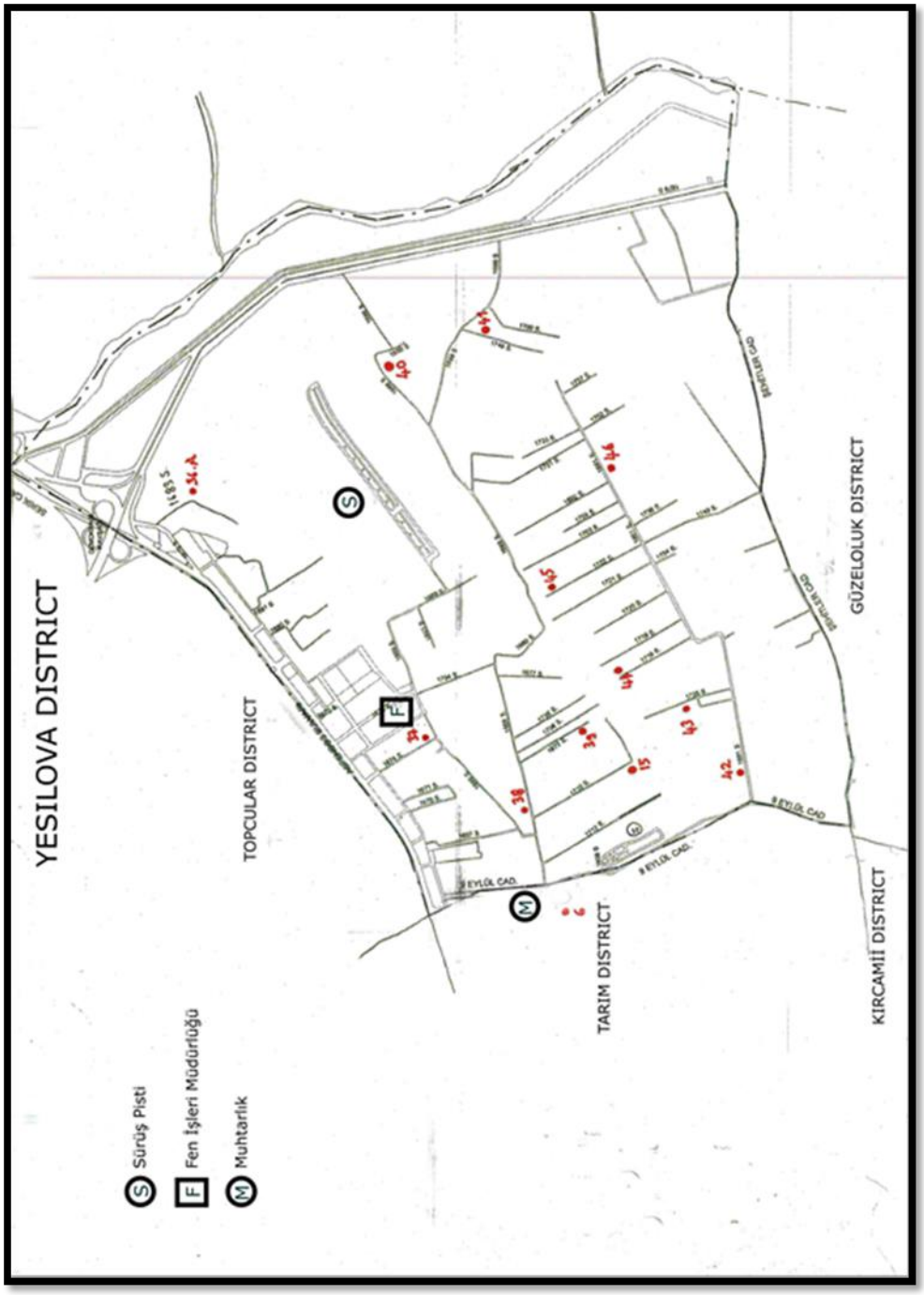
DISTRICTS' INFORMATION OF SURVEY




TARIM DISTRICT
TOPCULAR DISTRICT
YEŞİLOVA DISTRICT
GÜZELOLUK DISTRICT
KIRCAMI DISTRICT
MEHMETCİK DISTRICT
9 EYLÜL CAD.
ASPENDOS BULVARI
ŞEHİTLER CADDE
URBAN RESIDENTIAL AREA
C -College
T -Trade
TH -Trade and Housing


ZÜMRÜTOVA DISTRICT
KIRCAMİ DISTRICT
GÜZELOLUK DISTRICT
URBAN RESIDENTIAL AREA
URBAN RESIDENTIAL AREA
YALI CAD.
YALI CAD.
YALI CAD.
SİNANOĞLU CAD.
SİNANOĞLU CAD.
1912 S.
1913 S.
1914 S.
1907 S.
1907 S.
1919 S.
1906 S.
1905 S.
1908 S
1908 S.
1905 S.
1905 S.
1925 S.
1923 S.
1922 S.
1921 S.
1920 S.
50
49
47
27
48
TH -Trade & Housing
A Animal Husbandary


GÜZELOLUK DISTRICT
YEŞİLOVA DISTRICT
TARIM DISTRICT
KIRCAMİ DISTRICT
SEMİTLER CAD.
ŞEHİTLER CAD.
YALI CAD.
18 Sos.
Ⓟ Sürücü Kursları Eğitim Pisti
Ⓞ İlkokul
K Mevzi İmarlı Konut Alanı


YESILOVA DISTRICT
TOPCULAR DISTRICT
TARIM DISTRICT
GÜZELOLUK DISTRICT
KIRCAMİİ DISTRICT
9 EYLÜL CAD.
Sürüş Pisti
Fen İşleri Müdürlüğü
Muhtarlık

APPENDIX C

ANTALYA 2. İDARE MAHKEMESİ BAŞKANLIĞI BİLİRKİŞİ RAPORU

DOSYA NO: 2008/896

DAVACILAR : **An**talya Barosu Başkanlığı, Mimarlar Odası Antalya Şubesi, Makina Mühendisleri Odası Antalya Şubesi, Elektrik Mühendisleri Odası Antalya Şubesi, Ziraat Mühendisleri Odası Antalya Şubesi

DAVALILAR : Antalya Büyükşehir Belediye Başkanlığı, Antalya İl Özel İdaresi

KONU : Antalya Büyükşehir Belediyesi Meclisinin 18.1.1008 tarihli 58 sayılı kararı doğrultusunda onaylanan Antalya 1/50000 ölçekli Çevre Düzeni Planını ile bu planı onaylayan Antalya İl Genel Meclisi'nin 8.2.2008 tarih 101 sayılı kararının ve Antalya Büyükşehir Meclisi'nce 15.2.2008 tarihinde 84 sayılı kararı ile onaylanan 1/25000 lik Nazım İmar Planının iptali istemi.

KEŞİF VE BİLİRKİŞİ İNCELEMESİ:
Antalya Büyükşehir Belediye Meclisinin 18.01.2008 gün ve 58 sayılı kararı ve 08.02.2008 tarih ve 101 sayılı Antalya İl Genel Meclisi kararı ile onaylanan Antalya 1/50000 ölçekli Çevre Düzeni Planının ve Antalya Büyükşehir Belediye Meclisince 15.02.2008 gün ve 84 sayılı kararı ile onaylanan 1/25 000 ölçekli nazım imar planın iptali istemiyle Antalya Büyükşehir Belediye Başkanlığı ile Antalya İl Özel İdaresine karşı açılan davada keşif ve bilirkişi incelemesi, 8.1.2009 tarihinde naip üye Hakim Işıl Yılmaz başkanlığında gerçekleştirilmiştir. Naip üye, Bilirkişi Kurulumuzdan,
•dava ve işlem dosyalarında bulunan bilgi ve belgelerin ışığı altında taraf iddia ve savunmaları ile ihtilaf konusu bölgenin tarımsal niteliği ve "Kent İçi Tarımsal Planlama Alanı" olarak belirli bulunması hususu dikkate alınarak mahallinde yapılacak inceleme sonucunda,
•ihtilaf konusu Meclis kararı ve İl Genel Meclis kararı ile "Kentsel Gelişim Alanı" kullanım kararı getirilen alanın, yerleşim bölgesi olarak planlamasında, zorunluluk ve kamu yararı bulunup bulunmadığının,
•yerleşime açılan alanda belirlenen arazi kullanım kararlarının planlama ilkeleri, şehircilik esasları ve kamu yararı bakımından uygun olup olmadığının,
•imar Kanunu ve Plan Yapımına Ait Esaslara Dair Yönetmelik hükümlerine göre değerlendirmesi yapılarak tespiti ve açıklanmasının yapılmasını istemiştir.

DAVA DOSYASININ DÖKÜMÜ
2.6.2008

Davacılar, Antalya Barosu Başkanlığı, TMMOB Mimarlar Odası Antalya Şubesi, Makine Mühendisleri Odası Antalya Şubesi, Elektrik Mühendisleri Odası Antalya

Şubesi, Şehir Plancıları Odası Antalya Şubesi, Ziraat Mühendisleri Odası Antalya Şubesi Antalya Nöbetçi İdare Mahkemesi Başkanlığı'na yaptıkları dava başvurusunda,

• Antalya 1/50000 ölçekli Çevre Düzeni Planının, Antalya Büyükşehir Belediyesi Meclisinin
18.1.1008 tarihli 58 sayılı kararı doğrultusunda Antalya İl Genel Meclisi'nin 8.2.2008 tarih 101 sayılı kararıyla onaylanmış olduğunu, Antalya Büyükşehir Meclisi'nce 1/25000 lik Nazım İmar Planının da 15.2.2008 tarihinde 84 sayılı kararı ile onaylanarak askıya çıktığını,
•planları yapılan ve imara açılan davaya konu Kırcami Bölgesinin hala yoğun tarım yapılmakta olan bir alan olduğunu, alanın tarımsal özelliğini yitirmemiş olduğunu ve birinci sınıf tarım toprağı olduğunu,
•daha önceki planlarda tarım alanı olarak gözüken bölgeye ilişkin Toprak Koruma Kurulu'nun olumlu görüş bildirerek yerin imara açılmasına izin vermiş olduğunu,
•ancak Antalya 1. İdare Mahkemesi'nin 2007/1992 E sayılı dosyada 17/3/2008 tarihinde "5403 sayılı kanuna göre tarım arazisinin imara açılması için, kanunda sayılan kamu yararına yönelik hizmetlerin gerçekleştirilmesi için yapılması gereken faaliyetlerle ilgili olarak alternatif alan bulunması gerekirken dava konusu olayda maddede sayılan kamu yararına yönelik faaliyetlerle aynı türde ve ağırlıkta olmayan konut ihtiyacı ve şehrin planlı yapılaşmasını sağlamak için mutlak tarım alanının imara açılmak istendiği, bu amacın, 5403 sayılı kanunun genel olarak amacıyla bağdaşmadığı, tarım alanlarında amaç dışında kaçak yapılaşma varsa, bunun çözümünün oranın imara açılarak düzgün yapılaşmasını sağlamak değil, bilakis tarım alanının kaçak ve amaç dışı kullanımının engellemek olduğu, şehrin konut ihtiyacı için alternatif alan bulunmadığına ilişkin somut bilgi veya belgenin ortaya konulamadığı görülmüş olup, bu sebeple dava konusu işlemde mevzuata ve kamu yararına uygunluk bulunmamaktadır" denilerek yürütmeyi durdurma kararı verildiğini,
•Toprak Koruma Kurulu kararının yürürlüğünün durdurulmuş olması nedeniyle, söz konusu planların yasal dayanağını kaybettiğini,
•Antalya Büyükşehir Belediyesi'nce hazırlanan alt ölçekli planlar ile 1/8/2007 tarihinde Çevre ve Orman Bakanlığı'nca onaylanan Burdur-Antalya 1/100.000 ölçekli Çevre Düzeni Planı arasında uyumsuzluk bulunduğunu, Çevre ve Orman Bakanlığı'nın planlar arasındaki uyumsuzluğun giderilmesi amacı ile yazı yazmış olduğunu, ancak bu işlemlerin plan paftaları üzerine işlenmediğini,
•Bakanlık yazısında, üst ölçek plan uyumsuzluğu olduğu ancak bu işlemin alt ölçekli plan kararlarının aynen kabul edilmek suretiyle giderildiği ifade edildiğini, oysa alt ölçekli planların üst ölçekli planlara tabi olduğunu ve ona aykırı olamayacağını, Çevre ve Orman Bakanlığı'nın üst ölçekli plan üzerinde hiçbir değişiklik yapmadan ve bir yazıyla alt ölçekli plandaki uygunsuzlukları kabul etmesinin yasal olarak mümkün olmadığını, her türlü değişikliğin üst ölçekli paftalara işlenmesi ve ilgili makamlarca onaylanması gerektiğini,
•1/100 000 ölçekli planda Kırcami bölgesinin mutlak tarım alanı olarak belirlendiğini, bu planın Genel Hükümler başlıklı 6.11. Maddesinde; plan hedeflerine, kararlarına aykırı olarak hiçbir ölçekte, imar planı, plan değişikliği, revizyonu ve ilavesi yapılamaz." notunun bulunduğunu,

•6.14 maddesinde; mutlak tarım arazileri (tarımsal niteliği korunacak alanlar) ile özel ürün arazilerinin (tarımsal niteliği korunacak özel mahsul alanları) korunacağı hükmünün yer aldığını, bu planda tüm tarım alanlarında, tarım dışı amaçla kullanılmasına dair taleplerde İl Toprak Koruma Kurulu'nun uygun görüşünün alınması gerektiğini, mutlak tarım alanları, özel ürün alanları, ekili tarım alanları ile sulu tarım alanlarının, tarımsal üretim dışında kullanılamayacağı hükümlerinin bulunduğunu, ¬Kırcami bölgesinin bu hükümlere aykırı olarak imara açıldığını,
•Antalya Ulaşım Master Planında, Antalya'nın 2020 yılında nüfus kestiriminin 2 500 000 kişi olarak belirtildiğini, 1/50000 Ölçekli Çevre Düzeni Planında ise, 2020 projeksiyonunun 2 308 000 kişi olduğunu, 2020 yılı nüfus projeksiyonunun 2 308 000 kişi hedefinin tutturulabilmesi için Uygulama İmar Planları ve imar uygulamaları yapılarak Tapuya tescili yapılan Varsak Döşemealtı, Pınarlı ve Çalkaya ilk kademe belediye sınırları içerisinde bir çok alanın planının iptal edildiğini, aynı belediye sınırları içerisinde bazı bölgelerde yoğunluk azaltılmasına gidildiğini,
•buna karşın, Kırcami bölgesinde 1500 hektar mutlak tarım arazilerinin (1. sınıf tarım toprakları) imara açıldığını, bunun bir çelişki olduğunu,
•bir bölgede imarlı alanların imarını iptal ederek o bölgedeki insanların haklarının elinden alınıp veya yoğunluk azaltmak suretiyle yine kazanılmış haklarının ellerinden alınıp Kırcami Bölgesinde birinci sınıf tarım topraklarını rant amacıyla imara açılmasının bir çelişki ve hukuksuz olduğunu,
•ayrıca mevcut planlı alanlardaki nüfus projeksiyonlarının çok sağlıklı olmadığını, nüfus projeksiyonu hesaplanırken yasa ve yönetmeliklere aykırı olarak belediye meclis kararı ile getirilen plan notları ve Antalya Büyükşehir Belediyesi İmar Yönetmeliği ile getirilen yoğunluk artırıcı kararlar dikkate alınmadan nüfus projeksiyonu yapıldığını, mevcut planlı alanların barındıracağı nüfusun yaklaşık 3 500 000 kişiyi bulduğunu, bunun hedef projeksiyon nüfusun çok üzerinde olduğunu, bu nedenle 1. sınıf tarım topraklarının imara açılmasında zorunluluk ve kamu yararı bulunmadığını, bu yoğunluğun devam etmesi durumunda, aynı yoğunluk rakamı uygulandığında (beş yıl için %16 lık bir artış) Antalya'nın merkez nüfusunun 2020 için 1 500 000 kişi olacağını, bu yeni imar planı ile öngörülen tarım topraklarının imara açılması ile getirilen iskan kararının, hem doğal çevrenin, hem de kullanılacak kıt kaynakların boş yere israfı olacağını,
•Özellikle imara açılmış bölgelerde plan iptalleriyle nüfus azaltılması yoluna gidilirken (Varsak, Döşemealtı, Çalkaya örneklerinde olduğu gibi) tarımsal bir alanın imara açılmasının anlaşılır bir tutum olmadığını,
•ayrıca bu nüfusun ihtiyacı olan sektörlerin belirlenmesi, sektörlerin alana dağılması ve ulaşım bağlantılarının kurulması gerekirken, planda bu yaklaşımın izlenmediğini,
•Kırcami Bölgesinin, Mehmetçik, Yeşilova, Güzeloluk vb. mahallelerin yer aldığı, tarımsal nitelikleriyle öne çıkan, bir bölgenin parçası durumunda olduğunu, planlama çalışmalarında eskiden beri bölgenin bu konumunun göz önüne alındığını, 1978 planlarında "tarımsal kullanım" kararı, önceki 1/50 000 ölçekli planda tarımsal niteliği korunacak özel mahsul alanı ve "irdelenecek alanlar" olarak bırakıldığını, daha önce onaylanmış olan Çevre Düzeni Planında, Akdeniz Üniversitesi'nce hazırlanan Tarım Raporu doğrultusunda tarım alanlarının sınıflandırılması ve bu kapsamda Kırcami bölgesindeki yapılaşma kararlarının Toprak Kurulu kararları sonrası hazırlanacak planlara bırakıldığını, Toprak Koruma Kurulu'nun tartışmalı bir kararla 0,50 emsali aşmamak kaydıyla bölgede 1503 hektarlık bir alanın imara

açılmasına izin verdiğini, tarımsal faaliyete son verilerek alanın konuta dönüştürülmesi sürecinde nüfus yönünde bir dayanak ise 2020 yılında projeksiyon sonuçlarına göre kent merkezindeki ticari ihtiyacın artması ile 190 hektarlık alanın "iş merkezi alanına" dönüşmesi ile artacak 90 000 kişilik nüfusun desantralizasyonu ve nüfusun ihtiyacı olan yerleşim alanı ihtiyacının Kırcami bölgesinden karşılanacağının gösterildiğini,

•Toprak Koruma Kurulu kararı aleyhine açılan davada Antalya 1. İdare Mahkemesi'nin 2007/1992 E sayılı dosyada 17/3/2008 tarihinde yürütmeyi durdurma kararı verdiğini, böylece anılan alanın tarım arazisi olduğu Mahkeme tarafından kabul edildiğini, bölgeye 0.50 yoğunluk verilerek tarımsal bütünselliğin korunmasının imkansız olduğunu, böyle bir alanın yerleşime açılarak 90-100.000 kişinin daha ilave edilmesinin kamu aleyhine sonuçlar doğuracağını,

•bölgenin, plan açıklama raporunda ve analiz çalışmalarında "mutlak koruma alanı" olarak gösterildiğini,

•Planlama hedefleri olarak mevcut imarlı alanlarda nüfus azaltmasına gidilmesine karşın, Kırcami gibi bir önceki planda tarımsal niteliği korunacak özel mahsul alanı olarak belirlenmiş bir bölgenin imara açılmasının anlaşılır olmadığını,

•Bölge için geçmişte 1/5000 Ölçekli Nazım İmar Planının iptali istemiyle Meslek Odalarınca açılan davada Antalya İdare Mahkemesi'nin14.05.1998 tarih ve E.1997/523 ve K. 1998/463 karar sayılı kararı ile planın iptal edildiğini,

•Plan için belirlenen yılın 2020 olması, onaylı 1/100 000 lik planın hedef yılının 2025 olması nedeniyle hangi kıstaslara göre 2020 yılının seçildiğinin belli olmadığını, Ulaşım Master Planının 2020 için yapılmış olmasının ya da 1. Etap Nazım İmar Planın ile uyumlu olması için bu hedef yılının seçilmiş olmasının gerçekçi gözükmediğini,

•Antalya bir turizm kenti olmakla birlikte, turizm şirketlerinin merkezlerinin Ankara, İstanbul gibi büyük kentlerde olduğundan ekonomik anlamdaki girdilerin daha çok bu merkezlere gittiğini, oysa tarım sektörünün turizmin arından ikinci sektör olmasının yanında ekonomik girdisi olarak kente katkısının zaman zaman turizmden çok daha büyük olduğunu, mevcut ekonomik girdilere ilişkin veriler açısından Antalya'nın tarım sektörüne en az turizm sektörü kadar önem verilmesi gerektiğini,

•bu nedenle kentle ilgili politikaların bir bölge planı mantığı çerçevesinde hazırlanması ve söz konusu özelliklerin de 1/100 000 ölçekli Antalya-Burdur Çevre Düzeni Planında düzenlenerek Nazım İmar Planların da buna göre şekillendirilmesi gerektiğini,

•Plan açıklama raporlarında ve hedeflerinde Antalya kentinin bir turizm kenti olduğu özellikle vurgulandığını, buna karşın kent merkezinde Turizm ve Kültür Bakanlığı'nca ilan edilen turizm merkezleri ve ekolojik tarım alanları ile yaylalarda verilen turistik tesis izni dışında turizme yönelik getirilen kararların, gerek plan paftasında gerekse de plan hükümlerinde açıklıkla görülmediğini,

•Antalya'nın yeni iskana açılacak alan ihtiyacının olmaması, mevcut iskan yerlerinin 2020 kestirim nüfusundan dahi fazla olması nedeniyle dava konusu planlama kararında kamu yararı olmadığı, planlanan yerin tarım toprağı olması nedeniyle imara açılmasının 5403 sayılı Toprak Koruma ve Arazı Kullanımı Kanuna aykırılıklar oluşturduğunu,

•1/100.000 ölçekli planla uyumsuzluklar oluşturduğunu, turizmin gelişmesine yönelik planlama hedefleri açısından eksiklikler bulunduğunu belirtmekte ve

•Antalya Büyükşehir Belediyesi Meclisi 58 sayılı Kararı ile 18/1/2008 tarihinde ve 8/2/2008 tarih 101 sayılı Antalya İl Genel Meclisi kararıyla onaylanan Antalya 1/50000'lik çevre düzeni planı ile Antalya Büyükşehir Meclisince 15/2/2008 tarihinde 84 sayılı karar ile onaylanan 1/25000'lik Nazım İmar Planının yürütmesinin durdurularak iptalini istemektedir.

12.6.2008

Antalya İkinci İdare Mahkemesi, ara kararında, yürütmeyi durdurma isteminin karara bağlanabilmesi için; davalı Antalya Büyükşehir Belediye Başkanlığı ile Antalya İl Özel İdaresi'nden, ihtilaf konusu 1/50 000 ve 1/25 000 ölçekli imar plan pafta örnekleri ile degişiklik öncesi uygulanmakta olan aynı ölçekteki plan pafta örneklerinin, plan onama sınırlarını belirtmek suretiyle istenilmesine, plan değişikliğine ait ilan askı tutanağının, değişikliğe konu 1/50 000 ölçekli ve 1/25 000 ölçekli planlara ait plan lejant hükümlerinin ve plan notunun istenilmesine, plan müellifi yeterlik belgesi ile plan müellif raporunun istenilmesine, bölgede üst ölçekli plan bulunuyor ise ihtilaf konusu planlar ile planlaması yapılan alanların işaretli olarak gösterildiği üst ölçekli plan pafta örneğinin istenilmesine, ara kararında belirtilen hususların yerine getirildikten ve savunmalar alındıktan sonra yürütmenin durdurulması isteminin görüşülmesine karar vermiştir.

28.7.2008

Antalya İl Özel İdaresi Mahkeme Başkanlığına yanıtında,

Antalya Büyükşehir Belediyesi Meclisinin 58 sayılı Kararı ile 18/1/2008 tarihinde ve 8/2/2008 tarih 101 sayılı Antalya İl Genel Meclisi kararıyla onaylanan Antalya 1/50 000'lik Çevre Düzeni Planı ile Antalya Büyükşehir Meclisince 15/2/2008 tarihinde 84 sayılı karar ile onaylanan 1/25000'lik Nazım İmar Planının iptali için açılan davada, söz konusu planların birincil dereceden hazırlayıcı ve kontrolünü takip eden kurumun Antalya Büyükşehir Belediye Başkanlığı olduğu belirtilmekte ve davanın reddi istenmektedir.

25.7.2008

Antalya Büyükşehir Belediye Başkanlığı, Mahkeme Başkanlığına yanıtında,

•Davacılar tarafından Kırcami bölgesi ile ilgili alınmış olan Toprak Koruma Kurulu kararının yürütmesinin durdurulduğu iddia edilmekte ise de, söz konusu davada Antalya 1. İdare Mahkemesi tarafından verilen yürütmeyi durdurma kararma karşı yapılan itiraz neticesinde Antalya Bölge İdare Mahkemesi tarafından 2008/403 sayılı karar ile yürütmeyi durdurma kararının kaldırılmasına karar verildiğini,

•Muratpaşa ilk kademe belediyesi sınırları içinde bulunan, etrafı yıllardır imar planlı ve uygulaması bitmiş alanlar ve ruhsatlı yüksek katlı binalar ile çevrili şehir merkezinde kalmış Kırcami Bölgesinde yan yana fiziksel, sosyal-ekonomik ve kültürel yapı farklılığının var olması ve bu farklılığın kentleşme süreci üzerinde yapacağı olumsuz etkiler göz önüne alındığında, toplumsal eşitsizliğe neden olan bölgenin ekonomi-ekoloji dengesi içinde planlı gelişimi, kentsel yaşamın daha verimli kılınması, kentsel teknik altyapı bütünlüğünün sağlanması esaslarının gerçekleştirilebileceği şekilde kırsaldan öte kentle uyumlu bir şekilde planlanmasının kentleşme süreci dolayısıyla kamu yararı için gerekli olduğunu,

•bu amaçla yapılan başvuru sonucunda İçişleri Bakanlığınca da uygun görülerek 14.10.2007 tarihinde söz konusu bölgenin tarım dışı amaçla kullanılmasının kamu yararına olduğu hakkında karar alındığını,
•davaya konu planda 2020 yılı projeksiyon nüfusuna hizmet edecek ticari alan miktarının arttırılması, merkezin ihtisaslaştırılması, desantrilizasyonu gibi stratejik fiziki planın temel stratejileri dolayısıyla 190 ha'lık konut kullanımlı alanın "Merkezi İş Alanına" dönüştürülmesi neticesinde desantralize edilen yaklaşık 90 000 kişilik nüfusa gerekli konut alanı ihtiyacı doğduğunu, bu konut alanının kent ile bütünleştirilerek planlanmasının kamu yararı kararı alınan Kırcami bölgesinde planlandığını,
•5403 sayılı Toprak Koruma ve Arazi Kullanımı Kanununun Tarım arazilerinin amaç dışı kullanımını düzenleyen 13.maddesinde; "Mutlak tarım arazileri, özel ürün arazileri, dikili tarım arazileri ile sulu tarım arazileri tarımsal üretim amacı dışında kullanılamaz. Ancak, alternatif alan bulunmaması ve Kurulun uygun görmesi şartıyla;
•Bakanlıklarca kamu yararı kararı alınmış plan ve yatırımlar için bu arazilerin amaç dışı kullanım taleplerine, toprak koruma projelerine uyulması kaydı ile Bakanlık tarafından izin verilebileceği,
•belirtilen Yasa hükmü doğruıtusunda İçişleri Bakanının ekli kamu yararı olurlarıyla; Tarım dışı kullanma hususunda alternatif alan bulunmadığından Kırcami Bölgesinin 5403 sayılı Toprak Koruma ve Arazi Kullanımı Kanunu'nun 13. maddesinin d bendi uyarınca imar planı çalışmalarında kullanılmak üzere kamu yararı kararı verildiğini,
•Kırcami Bölgesinin de içinde bulunduğu Antalya Merkezine ait 1/5000 ölçekli Nazım İmar Planlarının 1996 yılında onaylandığını, söz konusu planların iptal edilmesine ilişkin dava açıldığını, 1998 yılında planların iptal edildiğini, 1/1000 ölçekli Uygulama İmar Planları da iptal edilen yaklaşık 1600 hektarlık bölgenin böylelikle plansız kaldığını,
•Tarım İl Müdürlüğü'nün 21.07.2003 tarih ve 11451 sayılı yazıları ile 09.08.2007 tarih ve 12447 sayılı yazılarında saha sulu tarım alanı olarak gözükmesine karşılık, DSİ 7. Bölge Müdürlüğünün 25.8.2005 tarih ve 13309 sayılı yazılarında Kırcami bölgesinde sulama sahalarının bulunmadığının belirtildiğini, aynı zamanda Köy Hizmetleri Antalya İl Müdürlüğü'nün 21.4.2004 tarih ve2730 sayılı yazılarında da bölgede sulama sahalarının bulunmadığının belirtildiğini,
•Toprak Koruma ve Arazi Kullanımı Kanununun 13/d maddesi gereği, Kırcami bölgesini de kapsayan 1503 ha'lık alanın Antalya Toprak Koruma Kurulunca belirtilen şartlara uyulması kaydıyla tarım dışı amaçla kullanılmasının uygun bulundugunun belirtildiğini,
•tarımsal bütünlük ile alternatif alanın bulunmadığının Bakanlık İl Müdürlüğünce hazırlanan etüt raporunda açıkça ifade edildiğini,
•İçişleri Bakanlığı'ndan 5403 sayılı Kanunun 13.maddesi kapsamında kamu yararı kararı alınması nedeniyle taleplerin olumlu değerlendirildiğini,
•Antalya Kentinin 1980'li yılların başına kadar normal bir gelişim eğrisi içerisinde 70- 100 bin nüfusu barındıran orta ölçekli bir kent iken özellikle 1980'li yılların ortasından itibaren ülkesel alanda değişen turizm politikalarının "odak noktası" haline gelmesi ve nitelikli ve yoğun tarımsal faaliyetlerin oluşturduğu artı değerin de meydana getirdiği beklenmedik bir büyüme ve gelişme eğilimi ile karşı karşıya kalarak 10 yılı çok da aşmayan bir süreç içerisinde nüfusu 10 katı aşarak 1 milyon

noktasına yaklaştığını ve bir metropol niteliği aldığını, kentin güneyde kıyı şeridi kuzeyde Kepezaltı platosu arasında Doğu - Batı yönünde hızlı bir büyüme gösterdiğini,
•Kırcami Bölgesinin, Kuzey-kuzeydoğu yönündeki tarımsal havzanın devamı niteliğindeki Koyunlar, Altınova, Pınarlı havzası ile fiziksel olarak koptuğunu ve kentsel alanın ortasında "kapalı" tarımsal nitelikli bir alan olarak kaldığını, Kırcami bölgesinin çevresinin kentsel yerleşim alanı olarak planlandığı ve kullanılmakta olduğunu, Kırcami Bölgesinin bugün itibariyle metropoliten kentsel alanın ortasında, planın tarımsal bütünlüğü koparılmış nitelikte bir tarım alanı olduğunu,
•bölge bütünündeki her türlü yapılaşmanın Belediyesince (Muratpaşa Belediyesi) 3194 sayılı İmar Kanunu ve Plansız Alanlar İmar Yönetmeliği hükümlerine göre denetlenmekte olduğunu, Antalya Büyükşehir Belediyesi sınırları içerisinde metropoliten alanın ortasında yer alan yaklaşık 1500 hektarlık bir alanın, ilgili yönetmeliğin kapsam kısmında bile tanımlanmayan (ek) ve 5216 sayılı Büyükşehir Belediye Kanunu ve Antalya Büyükşehir Belediyesi İmar Yönetmeliği hükümleri dışında bir yönetmelik hükümlerine göre denetlenmeye çalışıldığını,
•davaya konu Kırcami Bölgesinde 3 adet ilköğretim okulu bulunduğunu, Eğitim Tesislerinin mevcut Akdeniz Üniversitesi Güzel Sanatlar Bölümü de dahil olmak üzere 4.56 hektarlık bir alanı kapladığını, 14 adet cami, 1 adet sağlık ocağı ve 2.80 hektar aktif yeşil alan bulunduğunu, oysa mevcut nüfus hesaba katılarak 3194 sayılı İmar Kanunun 'Plan Yapımına Ait Esaslara Dair Yönetmelik' hükümlerinin 15.000 - 45.000 kişi nüfus aralığı için Kentsel Sosyal ve Teknik Altyapı standartları irdelendiğinde temel sosyal ve teknik altyapıya dönük alanlarda ciddi bir olumsuz fark olduğu gözlenebileceğini,
•alanda artan rant ve arazi fiyatlarının zirai faaliyetlerin azalmasına ve imar beklentilerinin artmasına neden olduğunu, 2003 yılı içerisinde yapılan bir araştırmanın, alanın 140 hektarlık tarla vasfında bir kısmında herhangi bir ekim dikim faaliyeti yapılmadığını ortaya koyduğunu, artan arazi fiyatlarının tarımsal faaliyetleri rantabl olmaktan çıkardığını,
•alanın mevcut durumuna ilişkin son tespitlere göre her ne kadar tarımsal alan niteliğinde görülse dahi alanın içerisinde sürücü eğitim pistleri, halı saha, gıda ve inşaat malzemeleri toptan ticaret alanları, toplu konut uygulamaları, Akdeniz Üniversitesi Güzel Sanatlar ve Mühendislik Fakültesi gibi kentsel nitelikli kullanımların bulunduğu,
•bölgenin esasen özünü oluşturan değerli tarım alanı özelliğinin yitirmekte olduğunu ve dönemler içerisinde parça parça kentsel kullanımlara dahil edildiğini ancak bu süreçte temel kentsel sosyal ve teknik aıtyapı gereksinimlerinin karşılanmadığını ortaya koyduğunu,
•Akdeniz Üniversitesi ile yapılan protokol uyarınca Ekolojik Arazi Yönetim Planı hazırlandığını, bu plan esaslarına göre yetki alanındaki tarımsal alanların, 1/25.000 ölçekli Nazım İmar Planında 5403 sayılı Toprak Koruma ve Arazi Kullanım Kanununda belirtilen toprak sınıflarına da uygun olacak şekilde 7 temel sınıfa ayrıldığını, Kırcami Bölgesinin, “kent içi tarımsal planlama alanları" olarak ayrılması, hazırlanacak olan imar planlarının öncelikle bu alanların ekolojik özellikleri ile halihazır fiziksel (kentsel-kırsal yapılaşma dağılımı) özellikleri arasındaki ve ayrıca halkın sosyo-ekonomik ve kültürel yapısı ve halkın talepleri arasındaki uyumun sağlanması ve daha sonra da gerek yöre halkı ve gerekse sivil

toplum kuruluşları tarafından artık benimsenmiş olması gereken bu imar planının uygulanabilirliğinin yasal olarak da sağlanması bakımından gerekli görüldüğünün görüşünün geliştirildiğini,
•Devlet Su işleri Genel Müdürlüğü XIII.Bölge Müdürlüğü'nün 25.08.2005 gün ve 13309 sayılı yazısı ile Kırcami ve Altınova Bölgelerinde sulama sahalarının bulunmadığının, Antalya Tarım İl Müdürlüğü'nün Kırcami Bölgesine ilişkin Tarımsal Etüt Raporunun sonuç ve öneriler kısmında, Kırcami olarak adlandırılan yaklaşık 1486 hektar alana sahip sahanın tarım dışına çıkarılmasının tarımsal bütünlüğü bozucu etkisi bulunmadığının belirtildiğini,
•ilk Kademe Belediyelerinin Büyükşehir Belediyesi sınırlarına dahil olmadan önce hazırlanmış ve onaylanmış olduğu hukuken de geçerli olmasına rağmen herhangi bir bilimsel esas ve planlama ilkesine dayanmayan imar planları bulunduğunu, söz konusu planlar ile Antalya Kentinin nüfusunu 4.5 milyon kişi mertebesine çıkaracak yapı ve nüfus yoğunlukları Antalya Büyükşehir Belediyesi tarafından 1/25.000 Nazım imar Planı ile düzenlenmiş ve 2.5 milyon kişi mertebesine çekildiğini, bu şekilde ilave herhangi bir alan konut amaçlı kullanıma açılmadığını, Büyükşehir bütününde planlama ilke ve prensiplerine uygun disipline edilmiş bir kentsel makroform oluşturulmasının esas alındığını,
•Antalya Büyükşehir Belediyesi'nin gerek İçişleri Bakanlığı'ndan kamu yararı talebi esnasında gerekse Toprak Koruma Kuruluna başvurusu esnasında konut ağırlıklı bir kentsel gelişme amacıyla bir talepte bulunmadığını, oysa davacılar tarafından Kırcami'nin 5403 sayılı yasa uyarınca alternatif gelişme alanları bulunurken imara açılmak istenmesinin yasayla uyarlılık taşımadığı ve Döşemealtı, Yeşilbayır gibi kentin kuzey kesiminin alternatif bir konut alanı olabileceği iddia edilmekte olduğunu,
•davacılar tarafından imara açılabileceği iddia edilen bölgenin toprakları çok önemli bir tarımsal havzayı oluşturan Mutlak Tarım Arazisi niteliğinde ve sulanabilir bir alanı kapsamakta olduğunu, söz konusu bölgenin Kırkgözler Su Kaynakları devamında 1. ve 2. derece yeraltı suyu kaynakları koruma alanları içerisinde kaldığını,
•Kırcami Bölgesi ise her ne kadar tarımsal alan niteliğinde görülse dahi alanın içinde kentsel nitelikli kullanımların bulunduğunu, artan rant ve arazi fiyatları ile birlikte alanın temel özelliği olan zirai faaliyetlerin azaldığını,
•ilk kademe belediyelerinin, 1980'li yıllardan Büyükşehir sınırlarına dahil oldukları dönemlere kadar onaylamış oldukları ve yasal olarak geçerli olan imar planları ile bölgeye 700.000 kişilik bir nüfus yüklediklerini, oysa Büyükşehir Belediyesince yapılan 1/25.000 ölçekli Nazım imar Planı ile bu planlar düzenlenerek planlama ilkeleri ve şehircilik esasları doğrultusunda nüfusun 300 000 kişiye çekildiğini,
•Antalya 1. İdare Mahkemesi tarafından verilen yürütmeyi durdurma kararına karşı yapılan itiraz neticesinde Antalya Bölge İdare Mahkemesi tarafından 2008/403 sayılı kararıyla yürütmeyi durdurma kararının iptal edildiğini,
•1/50 000 ölçekli Stratejik Fiziki Planın 1/100 000 üst ölçekli Antalya-Burdur Çevre Düzeni Planına uygunluğu Çevre ve Orman Bakanlığı'nın 06.02.2008 tarih ve 984 sayılı yazısı ile belirtildiğini, söz konusu yazı ve Mahalli İdareler Müdürlüğünün 21.02.2008 tarih ve 48 sayılı yazısı doğrultusunda II.Etap Çevre Düzeni Planı değişiklikleri 1/100 000 ölçekli planlara işlenmek üzere Çevre ve Orman Bakanlığı'na gönderildiğini,

•ilgili yasa ve yönetmelikler açısından planların hedef yılları ile ilgili bir zorunluluk bulunmadığını, yasa ve yönetmeliklerde yapılan sık değişikliklerde planlarda güncellemelere gidilmesi zorunluluğunun ortaya çıkabildiğini, planlama hedef yılı için iddia edilen durumun tamamen göreceli ve yasal zorunluluğu olmayan bir iddia olduğunu,
•5403 sayılı Yasanın öngördüğü üzere gerek toprak yapısı gerekse konum olarak alternatifi olmayan bir alan için tesis edilmiş olduğundan anılan kanunun 13.maddesi ile tam uyarlık gösterdiğini,
•Kırcami Bölgesinde imar izni isteminin konut alanı oluşturmak amacından çok (Toprak Koruma Kurulunun vermiş olduğu maksimum yapılanma izni ile bölgede mevcut nüfusa ilave 60.000 civarında ek nüfus gelebilecektir.) öncelikle gerek kent bütününde gerekse Kırcami Bölgesinde olmazsa olmaz ihtiyaç duyulan teknik ve sosyal altyapı alan ve hizmetlerinin planlama ilke ve esaslarıyla elde edilmesine yönelik olarak Antalya 1. İdare Mahkemesi'nin Esas No: 2007/1992 nolu kararında da ifade edildiği gibi, şehir yaşamının daha nitelikli olması, şehrin teknik altyapı bütünlüğünün kurulması amaçlı mutlak kamu yararı taşıyan bir işlem niteliği taşıdığını,
•Antalya Büyükşehir Belediyesi Muratpaşa ilk kademe Belediyesi sınırları içerisinde bulunan Kırcami bölgesinin etrafı geçmiş yıllarda imar planları onaylanmış, uygulaması bitmiş ve ruhsatlı yüksek katlı binalar ile çevrili olduğunu,
•bölgenin kentin merkezinde kalması ve imar planı bulunmaması nedeniyle gerek kentteki ulaşım ağının bu bölgede sekteye uğraması gerekse aıtyapı hizmetlerinin bu bölgede tıkanıp kalması nedeniyle bütüncül bir altyapı ağının oluşturulmasına engel teşkil ettiğini, söz konusu altyapı yatırımlarının tamamlanabilmesi için hazırlanacak bir plan kapsamında İmar Kanununa uygun olarak alınacak kesintiler ile kent bütününü ilgilendiren bahsi geçen eksikliklerin giderilmesinin sağlanabileceğini,
•5403 sayılı Toprak Koruma ve Arazi Kullanımı Kanunu uyarınca Kırcami Bölgesine ilişkin 04.03.2007 tarihinde İçişleri Bakanlığı'ndan kamu yararı kararı alınmıştır. 25.10.2007 tarihli Tarım ve Köyişleri Bakanlığı yazısında, 5403 sayılı Kanunun 13. maddesinin d bendi gereğince bölgenin Toprak Koruma Kurulunda belirtilen şartlara uyulması kaydı ile tarım dışı amaçla kullanımının uygun görüldüğünü,
•Antalya Büyükşehir Belediyesi sınırları içerisinde hazırlanan 1/25 000 ölçekli Nazım İmar Planında Akdeniz Üniversitesi'nce hazırlanan bilimsel rapor ve bölgenin mevcut kullanımı ile talepler doğrultusunda yapılan üst ölçekli planda Kırcami Bölgesinin orta yoğunluklu konut alanı olarak planlandığını,
•bu bölgenin tarım dışı amaçla kullanılmasına ilişkin alınan karar ile plansız yapılaşmanın engellenmesi, kentsel yaşamın daha verimli sağlanabilmesi ve kentsel teknik altyapı bütünlüğünün sağlanmasının hedeflendiğini belirtmiş ve davanın reddini istemiştir.

6.8.2008
Antalya 2. İdare Mahkemesi Başkanlığı, dava konusunda Hakim Işıl Yılmaz başkanlığında keşif ve bilirkişi incelemesi yapılmasına ve yürütmenin durdurulması isteminin keşif ve bilirkişi incelemesinden sonra değerlendirilmesine karar vermiştir.

19.9.2008

Davacılar, Mahkeme Başkanlığına yanıta yanıt yazılarında,
•5403 sayılı Toprak Koruma ve Arazi Kullanım Kanununa göre; mutlak tarım arazilerinin amaç dışı kullanımı, tarım dışı kullanım için alternatif arazi bulunmaması ve kamu yararı kararı bulunması ile mümkün olacağını,
•kamu yararı kararı alınırken, Kırcami bölgesinin koruma-kullanma dengesinin iyi kullanılmadığını, 1. sınıf tarım topraklarının korunması yönünde bölge halkının çıkarlarının korunmadığını, kentin yeşil dokusunun korunması ve bir tarım kenti olan Antalya'nın en büyük zenginliğini oluşturan seracılığın dikkate alınmadığını,
•alternatif yeni konut alanlarına ihtiyaç bulunmadığını, Antalya Büyükşehir Belediyesi İmar Yönetmeliğinin 3.04.04 geçici maddesi ile mevcut uygulama imar planı yapılmış ve planla getirilmiş alanlarda yapı yoğunluklarının % 70 arttırıldığını, yine mevcut planlı alanlarda, subasman kotu Belediye Meclis kararları ile +250 m.ye çıkarıldığını, birinci bodrum kat olarak adlandırılarak emsal harici iskana açıldığını, bu sayede yoğunluğun yaklaşık %100 arttırılmasının sağlandığını ve ayrıca konut alanı olarak planlanmış alanların yaklaşık % 50'sinin halen yapılaşmadığını,
•yöre halkının uzun süredir topraklarını sürmediği ve tarımla uğraşmadığı savının doğru olmadığını, alanın büyük bölümünün üstü örtülü tarım alanı, kalanının ise dikili tarım arazisi olarak kullanıldığını, tarım yapılmayan küçük bir bölüm bulunmakla birlikte bu bölümlerin, siyasilerin bu verimli toprakları imara açmak için her dönem seçim öncesi verdiği sözler nedeniyle spekülatörlerce rant amaçlı satın alınmış alanlar olduğunu,
•Bölgedeki tarım arazilerinin DSİ' nin Koyunlar (Altınova) regülatöründen beslenen Düden, Sağ sahil ana kanalı mansabına bağlı Şarampol Arkı aracığıyla sulanmakta ve bölgedeki mevcut halk sulama kanalları ile bahçeler ve seralar sulanmakta olduğunu, çiftçilerin açtıkları derin kuyular ile seralarını sulamakta olduklarını, kısacası DSİ' nin burada sulama sahasının olmamasının bölgenin sulanamadığı anlamına gelmediğini,
•Kırcami bölgesinin metropoliten kentsel alanın ortasında plansız, tarımsal bütünlüğü koparılmış nitelikte bir tarım alanıdır şeklindeki değerlendirmenin, arazi çalışması yapılmadan, toprak kalitesi belirlenmeden, halen alanın ne kadarında örtü altı ne kadarında dikili tarım yapıldığının rakamsal ve oransal ölçümü belirlenmeden, tarım yapılmayan alanların mülkiyetleri tespit edilmeden (mülkiyet gerçek sahibe mi aittir yoksa imar beklentisi içerisindeki şahıslara mı geçmiştir?) hiçbir araştırma ve bilimsel verilere dayanılmadan yapılan bir değerlendirme olduğunu,
•Davalı İdarenin geçmişte iptal edilen planların iptal gerekçeleri hakkında bilgi vermediğini, Mahkemece keşif yapılmış, keşif sonucunda bilirkişilerin, Kırcami, Mehmetçik ve Çakırlar bölgesindeki verimli tarım topraklarının imara açılmasında kamu yararı olmadığı yönünde rapor sunduklarını, Mahkemenin de bilirkişi görüşleri doğrultusunda planları iptal ettiğini,
•dava konusu tarım alanlarını imara açan planlar iptal edilmekle birlikte alanın plansız alan olduğu savının doğru olmadığını, dava konusu plandan önce yapılan ve halen yürürlükte olan Antalya Büyükşehir Belediyesince yapılan ve onanan 1/50.000 ölçekli çevre düzeni planında alanın, " Tarımsal Niteliği Korunacak Alan" olarak belirlendiğini, Çevre ve Orman Bakanlığınca onanan 1/100.000 ölçekli Çevre Düzeni Planında alanın, "Mutlak Tarım Arazisi" olarak planlandığını, dava konusu alanın plansız olmadığını, konut alanı olarak planlanmadığını, idarenin iki kavramı karıştırdığını,

•Kırcami'nin kentsel alan içerisinde sıkışmış olduğu ve bu nedenle değerli tarım alanı özelliğinin yitirilmekte olduğu ve dönemler içerisinde parça parça kentsel kullanımlara dahil edildiği, ancak bu süreçte temel kentsel sosyal ve teknik alt yapı gereksinimlerinin karşılanmadığı ileri sürülmekle birlikte, Kırcami'nin batısı ve güneyinin planlı alanlar olduğunu, kuzeyinde iddia edildiği gibi yüksek yoğunluklar bulunmadığını, bu nedenle sıkışmış bir bölge olduğu iddialarının yerinde olmadığını, kent bütününde, bu şekilde imarlı alanların arasında kalan birçok tarım alanları bulunduğunu, bu tür alanlarda tarım yapılamaz şeklinde bir düşünce ile hareket edildiği taktirde, Antalya bütününde tarım arazileri kalmayacağını,
•Davalı İdarenin alanın değerli tarım alanı olduğunu kabul ettiğini, ancak tarım alanlarını koruma yönünde tedbir almamakta olduğunu, alan içerisindeki doğal sulama kanallarının bakımını yaparak koruma yerine kanalın sulama özelliğini yitirmesine sebep olduğunu, kaçak yapılara müdahale etmeyerek parça parça imara açılmasını sağladığını, bu şekilde hem görevlerini yerine getirmeyerek alanı korumamakta, hem de yok oldu gerekçesi ile korumadığı alanı imara açmakta olduğunu,
•Büyükşehir Belediyesince 1I25000'lik Nazım İmar Planı altlığı olarak kullanılan Ekolojik Arazi Yönetim Planında Kırcami bölgesinin tarımsal yapısı irdelenirken Büyükşehir Belediyesince de ifade edilen benzer şekilde bu bölgede seralarla konutların iç içe geçtiği ve tarımsal bütünlüğün bozulduğun ifade edildiğini, bu yapının Antalya'nın yerel tarımsal işletme yapısı ve üretim biçiminden kaynaklandığını, bu yapının özellikle seracılıkta ve aile tipi işletmelerde üretimin sürdürülebilmesi için en önemli avantajlardan biri olduğunu,
•Tarım İl Müdürlüğü'nün raporlarında bölgenin sulu mutlak tarım arazisi olduğu açık ve net olarak ifade edildiğini,
•Bir tarafta mevcut imar planlarının yoğunluğu aşağı çekildiğini, diğer tarafta sanki ihtiyaç varmış gibi verimli tarım topraklarının imara açılacağını
•Davalı İdare; Akdeniz Üniversitesi ile Antalya Tarım İl Müdürlüğü gibi Akademik ve İhtisas kurumlarının hazırlamış oldukları etütlerde "adı geçen bölgede tarım arazisi yapısının aynı olması nedeniyle alternatif alan yoktur" görüşünde bulunduklarını, bütün bu unsurların Kırcami Bölgesinin doğal yapı olarak da alternatifinin olmadığını ortaya koyduğunu gösterdiğini, adı geçen bölgenin doğal yapısının alternatifi yoksa korunması gerektiğini,
•davalı idarenin hem onaylanan planın 1/100 000 Ölçekli planlara uygun olduğunu belirttiğini hem de II Etap Çevre Düzeni Planının 100 000 ölçekli planlara işlenmek üzere gönderildiğini belirttiğini,
•alanın sulu tarım alanı olduğunu ve sulama kanallarının mevcut olduğunu, dava konusu karara dayanak yapılan Toprak Koruma Kurulu kararının hatalı olduğunu, tarım topraklarını korumakla görevli kurulun aldığı 1500 hektar tarım alanının korunmaması ve amaç dışı, hem de yetkisi olmamasına rağmen E=0.50 emsalle konut amaçlı imara açılmasını uygun bulan kararında hukuka uyarlık bulunmadığını,
•tarım arazisinin,tarım dışı amaçla kullanımına yönelik alınan kamu yararı kararının yanlış olduğunu, alternatif alan bulunmadığı iddialarının gerçeği yansıtmadığını,
•nüfus projeksiyon hesabında hedef yılının ulaşım master planına göre belirlenmesinin hatalı olduğunu, dava konusu plan üst ölçekli çevre düzeni planına aykırı olduğunu belirtmekte ve dava konusu işlemlerin iptali istemini yinelemektedir.

Davacı iddiaları
Davacı, imara açılmak istenen Kırcami Bölgesinde halen yoğun tarım yapıldığını ve alanın birinci sınıf tarım toprağı olduğunu, bu araziler üzerindeki bahçe ve seraların halk sulama kanalları ile sulanmakta olduğunu, çiftçilerin açtıkları derin kuyular ile seralarını sulamakta olduğunu, bölgenin, tarımsal nitelikleriyle öne çıkan daha geniş bir bölgenin parçası durumunda olduğunu,

Geçmiş planlama çalışmalarında bölgenin bu konumunun göz önüne alındığını, 1978 planlarında "tarımsal kullanım" kararı, önceki 1/50000 ölçekli planda tarımsal niteliği korunacak özel mahsul alanı ve "irdelenecek alanlar" olarak bırakıldığını, dava konusu plandan önce yapılan ve halen yürürlükte olan 1/50 000 ölçekli Çevre Düzeni Planında, alanın, "Tarımsal Niteliği Korunacak Alan" olarak belirlendiğini, Çevre ve Orman Bakanlığı'nca onanan 1/100 000 ölçekli Çevre Düzeni Planında da "Mutlak Tarım Arazisi" olarak planlandığını,
Alanla ilgili olarak, Antalya Büyükşehir Belediyesi'nce hazırlanan alt ölçekli planlar ile 1/8/2007 tarihinde Çevre ve Orman Bakanlığı'nca onaylanan Burdur-Antalya 1/100 000 ölçekli Çevre Düzeni Planı arasında uyumsuzluk bulunduğunu,
İlk kademe belediyeleri sınırları içerisinde bir çok alanın planının iptal edilerek bazı bölgelerde yoğunluk azaltılmasına gidilmesi ve buna karşın, Kırcami bölgesinde 1500 hektar mutlak tarım arazisinin imara açılmasının bir çelişki olduğunu,

1. Sınıf tarım topraklarının imara açılmasında zorunluluk ve kamu yararı bulunmadığını, Antalya'nın yeni iskana açılacak alan ihtiyacının olmadığını, Antalya Büyükşehir Belediyesi İmar Yönetmeliğinde yapılan değişiklikle planlı alanlarda yapı yoğunluklarının arttırıldığını, birinci bodrum katların emsal harici iskana açıldığını, bu sayede yoğunluğun arttırıldığını,

Davalı yanıtları
Davalı taraf, Kırcami bölgesinin, etrafı yıllardır imar planlı ve uygulaması bitmiş alanlar ve ruhsatlı yüksek katlı binalar ile çevrili, şehir merkezinde kalmış bir bölge olmasının fiziksel, sosyal-ekonomik ve kültürel yapı farklılığına yol açtığını, bunun kentleşme süreci üzerinde olumsuz etkiler yapacağını ve toplumsal eşitsizliğe neden olacağını, bölgenin ekonomi-ekoloji dengesi içinde planlı gelişimi, kentsel yaşamın daha verimli kılınması, kentsel teknik altyapı bütünlüğünün sağlanması açısından kentle uyumlu bir şekilde planlanmasının kentleşme süreci dolayısıyla kamu yararı için gerekli olduğunu,

Tarım dışı kullanma hususunda alternatif alan bulunmadığını, Kırcami Bölgesinin, Kuzey-kuzeydoğu yönündeki tarımsal havzanın devamı niteliğindeki Koyunlar, Altınova, Pınarlı havzası ile fiziksel olarak koptuğunu ve metropoliten kentsel alanın ortasında, planın tarımsal bütünlüğü koparılmış nitelikte kapalı bir tarım alanı olduğunu, yaklaşık 1500 hektarlık bir alanın, ilgili yönetmeliğin kapsam kısmında bile tanımlanmayan (ek) ve 5216 sayılı Büyükşehir Belediye Kanunu ve Antalya Büyükşehir Belediyesi İmar Yönetmeliği hükümleri dışında bir yönetmelik hükümlerine göre denetlenmeye çalışıldığını,

Artan rant ve arazi fiyatları ile birlikte alanın temel özelliği olan zirai faaliyetlerin azaldığını ve imar beklentilerinin arttığını, tarımsal faaliyetlerin rantabl olmaktan çıktığını, bölgenin kentin merkezinde kalması ve imar planı bulunmaması nedeniyle gerek kentteki ulaşım ağının bu bölgede sekteye uğraması gerekse altyapı hizmetlerinin bu bölgede tıkanıp kalması nedeniyle bütüncül bir altyapı ağının oluşturulamadığını, plansız yapılaşmanın engellenmesi ve kentsel teknik altyapı bütünlüğünün sağlanması için alanın p**lanlı gelişmeye açıldığını ileri sürmüştür.**

DEĞERLENDİRME
Dava konusu bölgeye ilişkin planlama kararları

19.02.1980 onay tarihli 1/5000 Ölçekli Nazım İmar Planı
Bu planda Antalya kenti kıyı boyunca değil, kıyıdan iç kesimlere doğru büyümesine yönelik bir strateji benimsenmiştir. Kıyının turizm ve dinlence işlevlerine ayrılması öngörülmüştür. Kırcami Bölgesi, kuzeyde Altınova Bölgesi, Hava Limanı ve çevresi konut gelişimine açılmamakta, tarımsal yerleşme ve tarım alanı nitelikleri korunmaktadır.

10.03.1986 onaylı 1/25.000 ölçekli Nazım İmar Planı
Bu planda Hava Limanı'nın çevresindeki tarımsal kullanımlar korunmaktadır. Kırcami Bölgesi, kuzeyde yer alan Altınova ve Pınarlı Bölgeleri tarımsal kullanıma ayrılmıştır.

29.05.1997 onay tarihli 1/25.000 ölçekli Antalya Büyükşehir Belediyesi Nazım İmar Planı
29.05.1997 tarih ve 20 Sayılı Büyükşehir Belediye Meclisi kararı ile onaylanan 1/25.000 ölçekli Antalya Büyükşehir Belediyesi Nazım İmar Planı, Danıştay Altıncı Dairesi'nin 25.3.1997 günü aldığı: "3194 sayılı ve 3030 sayılı Yasa'nın hükümleri uyarınca Büyükşehir Belediyelerine 1/5000 ölçekli Nazım ve 1/1000 ölçekli Uygulama İmar Planı dışındaki bir planı yapmak ya da onaylamak yetkisi verilmemiştir" kararı uyarınca yasal olarak geçersiz hale gelmiştir. Hava Limanı ile kent merkezi arasında Kırcami Bölgesi bu planda, AKS 7 (Duyarlılığı yüksek alanlarda koruma – kullanma – yenileme aksları) olarak belirlenmiştir.

Planda temelde tarım alanı olan bu bölgede kullanma ve yenileme stratejilerinin önerildiği anlaşılmaktadır. Buna karşılık Hava Limanı ile Lara kıyı şeridinde daha önce gelişme alanı olarak planlanan bölge, tarım alanı olarak korunmaktadır.
30.07.1998 / 36 gün ve sayılı Büyükşehir Belediye Meclisi kararı ile, 1/5000 ölçekli Antalya Nazım İmar Planı, daha önce Antalya İdare Mahkemesi tarafından 14.05.1998 tarihinde iptal edilen plandaki iptale neden olan konular dışarıda bırakılarak onaylanmıştır.

Bu dönemde Hava Limanı ile kent merkezi arasında kalan Kırcami Bölgesinin tarımsal kullanımının sürdürülmesi ya da yapılaşmaya açılması yönündeki tartışmaların devam ettiği ve konunun belirsizliğini koruduğu anlaşılmaktadır.

3.03.2005 tarihinde Bayındırlık ve İskan Bakanlığı tarafından onaylanan 1/50 000 ölçekli Çevre Düzeni Planı
Bu plan Antalya Büyükşehir Belediyesi sınırları içindeki alanı kapsamaktadır. Planda Kırcami Bölgesi Tarımsal Niteliği Korunacak Alanlar olarak yer almaktadır.

17.6.2005 tarih ve 464 sayılı Büyükşehir Belediye Meclis kararı ile onaylanan Antalya Büyükşehir Belediyesi sınırları içerisinde kalan alanın 1/25 000 ölçekli Çevre Düzeni Planı
Bu planda dava konusu Kırcami Bölgesi, planlama alanı dışında kalmıştır. Bu planda bu bölgede kentsel gelişme öngörülmediği anlaşılmaktadır.
2006 Onaylı 1/50 000 ölçekli Fiziki Stratejik Plan
(Dava dosyasında yer almamaktadır)

16.4.2007 onay tarihli Burdur-Antalya Planlama Bölgesi 1/100 000 ölçekli Çevre Düzeni Planı
Bu plan Danıştay 6. Dairesi'nin 2007/10511 Esas sayılı 30.6.2008 tarihli kararıyla iptal edilmiştir.
İptal gerekçesi, bölge ve havza temelinde hazırlanacak planların yapılmasına ilişkin usul ve esasların Bakanlıkça çıkarılacak bir Yönetmelikle belirleneceği kuralına aykırılıktır.Bu planda Kırcami Bölgesi tarım alanı olarak korunmuş olduğu anlaşılmaktadır.

1.8.2007 onay tarihli 1/100 000 ölçekli Burdur-Antalya Çevre Düzeni Planı
(Bu plan dava dosyasında bulunmamaktadır).
Dava dosyasında sunulan bilgi ve belgelerden, 16.4.2007 onay tarihli Burdur-Antalya Planlama Bölgesi 1/100 000 ölçekli Çevre Düzeni Planının Danıştay 6. Dairesi'nin 2007/10511 Esas sayılı 30.6.2008 tarihli kararıyla iptal edilmesi öncesinde yargılama sürecinde hazırlanmış olduğu anlaşılmaktadır.

Bu planda dava konusu Kırcami Bölgesi'ne ilişkin "tarımsal alan" kararının korunmuş olduğu, planın bütününde ise 16.4.2007 tarihli planın kararlarının ve plan notlarının ana kapsamının korunmuştur anlaşılmaktadır.

10.9.2007 tarih ve 525 sayılı 1/25 000 ölçekli Nazım İmar Planı (askıya çıkarılan)
2006 yılında Antalya Büyükşehir Belediyesi Meclisi ve İl Genel Meclisi tarafından onaylanan 1/50000 ölçekli Fiziki Stratejik Planı sonrasında aynı planlama sınırı içerisinde 1/25000 ölçekli Nazım İmar Planı hazırlanmış ve Büyükşehir Belediye Meclisince 10.09.2007 tarihinde onaylanmıştır.

Bu planda dava konusu Kırcami bölgesi Kent içi Tarımsal Planlama Alanı olarak öngörülmüştür. Bu planda dava Konusu Kırcami Tarımsal Planlama Bölgesi, kuzey yönünde Organik Tarım Alanları, Entegre Sera İşletme Alanları ile bir bütünlük göstermektedir.

Bu plana ait Planlama Raporunda, "Kent içi Tarımsal Planlama Alanı",

i) “Ekolojik Kentsel Dönüşüm Projelerinin” hazırlanacağı alanlar, ii) 5403 sayılı Toprak Koruma ve Arazi kullanımı Kanunu kapsamına göre, Dikili Tarım Arazisi, Örtü Altı vasfındaki arazilerin yer aldığı alanlar olarak tanımlanmaktadır.

14.1.2008 tarihinde Çevre ve Orman Bakanlığı tarafından onaylanan Antalya-Burdur Planlama Bölgesi 1/100 000 ölçekli Çevre Düzeni Planı
(Danıştay 6. Dairesi’nde görülmekte olan 2008/2247 Esas sayılı davada yürütmesi durduruldu)Bu planda Kırcami Bölgesi “tarımsal nitelikli araziler” kullanımına ayrılmıştır.Planın Genel Hükümler başlıklı 5.10. Maddesinde; plan hedeflerine, kararlarına aykırı olarak hiçbir ölçekte, imar planı, plan değişikliği, revizyonu ve ilavesi yapılamaz" notu yer almaktadır. Dava konusu Kırcami Bölgesi, planda, kuzey-güney doğrultusunda sürekliliği olan, -koruma alanlarını /tarımsal ve doğal niteliği olan alanları ve ormanları, Düden Çayı Havzasını kapsayan- bir açık alanlar sisteminin parçasıdır. Hava Limanının da bu açık alanlar sistemini güçlendirdiği belirtilmelidir.

Antalya Büyükşehir Belediyesi Meclisinin 18.1.2008 tarihli 58 sayılı kararı doğrultusunda
Antalya İl Genel Meclisi'nin 8.2.2008 tarih 101 sayılı kararıyla onaylı Antalya 1/50000 ölçekli II. Etap Stratejik Fiziki Plan değişikliği
Antalya Büyükşehir Belediyesi, 1/50000 ölçekli plana yapılan itirazlar ile birlikte 1/25000 ölçekli planın hazırlanması sırasında yapılan ayrıntılı çalışmalara bağlı olarak 1/5000 ölçekli Fiziki Stratejik Planda kimi değişikliklerin yapılmasına karar vermiştir.

Dava konusu Kırcami Bölgesi bu alanlardan biridir. Söz konusu bölge, 5403 sayılı Toprak Kanunu’na tabi olmasından dolayı 1/50000 ölçekli Fiziki Stratejik Planda M2 ve M3 olarak kodlandırılmış “Tarımsal Planlama Alanı” (TPA) ve İdari Merkez olarak planlanan yaklaşık 1500 ha’lık bir alandır.

Büyükşehir Belediyesi, Antalya Büyükşehir Belediyesi sınırları içerisinde bulunan bu alanın, etrafının yıllardır imar planlı ve uygulaması bitmiş alanlar ve ruhsatlı yüksek katlı binalar ile çevrili olduğunu, şehrin merkezinde kaldığını, bu alanda yan yana fiziksel, sosyo-ekonomik ve kültürel yapı farklılığının var olmasının kentleşme süreci üzerinde olumsuz etkiler yapacağını ve söz konusu bölgenin kentle uyumlu bir şekilde planlamasının kentleşme süreci dolayısıyla kamu yaran için gerekli olduğunu işleri sürerek bu plan değişikliğine gitmiştir.

İçişleri Bakanlığı’nca 14.10.2007 tarihinde söz konusu bölgenin tarım dışı amaçla kullanılmasının kamu yararına olduğu hakkında karar alınmıştır. Kamu yararı kararı sonrasında söz konusu bölgenin Tarım ve Köyişleri Bakanlığınca 25.10.2007 tarihinde "tarım dışı amaçla kullanılması' uygun görülmüştür.

Büyükşehir Belediye Başkanlığı, bu kararların, şehir merkezinde kır-kent şeklinde gelişme göstermiş toplumsal eşitsizlik gösteren bölgenin ekonomi-ekoloji dengesi içinde planlı gelişimi, kentsel yaşamın daha verimli kılınması, kentsel altyapı

bütünlüğünün sağlanması esaslarının gerçekleştirilebileceği şekilde planlanmasını olanaklı kıldığını düşünerek söz konusu plan değişikliğini yapmıştır.

1/25 000 ölçekli Nazım İmar planında 2020 projeksiyon kent nüfusuna hizmet edecek ticari alan miktarının artırılması, merkezin ihtisaslaşması, desantrilizasyonu gibi stratejik fiziki planın temel stratejileri dolayısıyla 190 ha'lık konut kullanımlı alanın merkezi İş Alanına dönüştürülmesi neticesinde desantrilize edilen yaklaşık 90 000 kişilik nüfusa gerekli konut alanı ihtiyacı doğmuştur. Bu konut alanında .... kent ile bütünleştirilerek planlanması kamu yararına kararı alınan Kırcami bölgesine fonksiyon olarak atanması planlanmıştır. Bu nedenle söz konusu bölge Toprak Koruma Kurulu kararı doğrultusunda 0.50 emsalli orta yoğunluklu konut alanı olarak planlanmıştır ve bölgenin 2002 yılı itibariyle mevcut 16418 kişi olan nüfusu 2020 yılı projeksiyonuna göre 80 000 olarak tahmin edilmektedir. Bölge 1/25000 ve 1/5000 ölçekli Nazım İmar Planları öncelikli yapılacak alanlar olarak tespit edilmiştir.

Bu plan 2006 onay tarihli II. Etap 1/50 000 ölçekli Stratejik Fiziki Planı değiştirmektedir. Bu plan değişikliği ile dava konusu Kırcami Bölgesi kentsel gelişme alanları olarak ayrılmıştır**.**

Antalya Büyükşehir Meclisi'nce da 15.2.2008 tarihinde 84 sayılı kararı ile onaylanan1/25000 lik Nazım İmar Planı

Dava konusu Kırcami Bölgesi bu planda E: 0.41-0.80 değerleri arasında Orta Yoğunluklu Kentsel Gelişme Bölgesi olarak ayrılmıştır.

Antalya Büyükşehir Belediye Meclisi'nin 10.09.2007 gün ve 525 sayılı karan ile onaylanarak yürürlüğe giren Antalya Il. Etap 1125000 ölçekli Nazım İmar Planı Revizyonu

02.10.2007- 02.11.2007 tarihleri arasında askıya çıkarılmıştır. Kabul edilen itirazlar ve maddi hataların giderilmesi sonucu hazırlanan 1125000 ölçekli yeni plan, Antalya Büyükşehir Belediye Meclisi 'nin 15.02.2008 tarih ve 84 sayılı karan ile uygun bulunan dava konusu plandır. İtirazların büyük bir bölümü dava konusu Kırcami bölgesine ilişkindir.

Şehircilik ilkeleri ve planlama esasları açısından irdeleme

Dava konusu değişiklik sırasında ilgili planlama otoritesinin gerekçeleri şu şekilde özetlenebilir:

1.Kırcami Bölgesinin tarım alanı olması nedeniyle 1996 onaylı planın 1998 tarihinde iptal edilmesi sonrasında yaklaşık 1600 ha alan uzun yıllar plansız kalmıştır.

2.Bölge imar planlı ve uygulaması bitmiş alanlar ve ruhsatlı yüksek katlı binalarla çevrilidir.Şehir merkezinde kalmıştır. Yan yana fiziksel, sosyal-ekonomik yapı farklılığının var olması, kentleşme sürecinde olumsuz etkiler yaratmakta, eşitsizliğe yol açmaktadır.

3.Bölgenin ekonomi-ekoloji dengesi içinde planlı gelişimi, kentsel yaşamın daha verimli kılınması

ve kentsel teknik altyapı bütünlüğünün sağlanması için kentle uyumlu bir şekilde planlanması kamu yararı için gereklidir.

4.2020 yılı için kente hizmet edecek ticari alan miktarının artırılması, merkezin ihtisaslaşması ve desantrilizasyonu için 190 ha'lık konut kullanımlı alanın MİA'ya dönüştürülmesi nedeniyle yaklaşık 90 Bin kişilik nüfusa gerekli konut alanı ihtiyacı doğmuştur. Bu konut alanının kent ile bütünleştirilerek planlanması için Kırcami Bölgesi gelişmeye açılmıştır.
5.Büyükşehir Belediyesi sınırlarına dahil edilmeden önce, ilk kademe belediyelerin hazırlamış ve onaylamış oldukları imar planları bilimsel esas ve planlama ilkelerine dayanmamaktadır. Bu planlar ile Antalya kentinin nüfusunu 4.5 milyon kişiye çıkaracak bir yapı ve nüfus yoğunluğu öngörülmüştür. 1/25 000 ölçekli Nazım Plan ile bu nüfus 2.5 milyona çekilmektedir. İlave herhangi bir alan konut amaçlı kullanıma açılmamıştır. Bu şekilde Büyükşehir bütününde disipline edilmiş bir kent üst biçimin oluşturulması esas alınmıştır.
6.Büyükşehir Belediyesince planları iptal edilen bölgelerin toprakları çok önemli tarımsal havzayı oluşturan mutlak tarım arazisi niteliğinde ve sulanabilir alanları kapsadığından ve Kırcami Bölgesi içinde kentsel kullanımların bulunduğu, artan rant ve arazi fiyatları ile birlikte alanın temel özelliği olan zirai faaliyetler azalmış, dönemler içinde parça parça kentsel kullanımlara açılmıştır. Buna karşın sosyal ve teknik alt yapı gereksinmeleri karşılanmamış, imar beklentileri artmıştır.
7. Dava konusu planın 1/100 000 ölçekli plana uygunsuzluğu bulunmamaktadır. 1/50 000 ölçekli
Stratejik Fiziki Planın 1/100 000 ölçekli Antalya-Burdur Çevre Düzeni Planına uygunluğu Çevre ve Orman Bakanlığı'nın 6.2.2008 tarih ve 984 sayılı yazısı ile belirtilmiştir.

Bilirkişi Kurulumuz dava konusu planlama kararının, şehircilik ilkeleri ve planlama esasları kapsamında irdelemesini iki düzeyde yapacaktır. Bunlar; A) koruma gereklilikleri ile B) kentsel gelişme dinamikleri, büyüme eğilimleri ve kentsel üst biçim ilişkisini içermektedir. Kuşkusuz, her iki konunun, koruma-gelişme arasında sağlıklı bir ilişkinin yaratılması ve koruma-kullanma dengelerinin kurulması açısından birbirleriyle ilişkili olarak değerlendirilmesi kamusal yararlara ulaşılması açısından gereklidir. Birinci düzeydeki irdeleme, şu konuları içermektedir: i) Tarım topraklarının korunması, ii) ekolojik koridorun sürekliliği (Toroslardan gelen Düden Çayı ve çevresindeki sistemin sürekliliği) ve yakın çevredeki açık alanlar sisteminin korunması, iii) hava limanı da dahil olmak üzere bölgedeki açık alan sisteminin, kentsel riskler açısından korunması gerekliliği.

Bilirkişi Raporunda, tarımsal niteliği ve önemi, geçmiş planlama çalışmalarında kabül edilmiş olan ve halen bu niteliğini sürdüren Kırcami Bölgesinin, kentsel gelişmeye açılmasını gerektiren kamusal yararın olup olmadığı şehircilik ilkeleri açısından değerlendirilmektedir. Bu çerçevede Kurulumuz, dava konusu bölgenin kentsel gelişmeye açılmak istenmesini, bir yandan tarımsal alanın niteliği, diğer yandan şehircilik ve kentsel gelişme açısından alanın kullanımının zorunluluk sunup sunmadığı kapsamında irdelemektedir.

A) Koruma gereklilikleri

i) Tarım topraklarının korunması açısından irdeleme

Dava konusu olan arazinin 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun ilgili maddeleri ve özellikle anılan kanunun 13.maddesine göre tarım dışı amaçla kullanılmasının bu kanuna uygunluğu ortaya konulmaya çalışılacaktır. Ancak Bilirkişi Kurulumuz, dava dosyasında yer alan belgelerden bazı alıntılar yaptıktan sonra konunun irdelenmesine girmeyi uygun görmektedir.

Antalya Valiliği Tarım İl Müdürlüğü'nün Antalya Büyükşehir Belediye Başkanlığı'na 21.7.2003 tarihli yazısı:

Yazıda, Antalya Merkez ve yakın çevresine ait Nazım İmar Planı yapılması ile ilgili olarak Antalya Büyükşehir Belediyesi ve Mücavir Alanını kapsayan 44775,347 hektar yüzölçümlü sahada, arazinin tarımsal yönden değerlendirilmesi yapılmaktadır. Yazıda, yapılan incelemeler ve 13.6.2003 tarihli Tarım Arazilerinin Korunması ve Kullanılmasına Dair Yönetmelik gereği, tarımsal yönden nazım imar planı çalışmasına veri olacak 1/25 000 ölçekli, lejantlı Antalya Büyükşehir Belediyesi "Nazım İmar Planı Tarımsal ve Toprak Etüt Sonuç Onay Haritası" eklenmiştir. Bu haritada dava konusu Kırcami Bölgesi, mevcut imarlı sahalar ile köy ve mahalle yerleşik alanları lejant maddesi altında yer alan küçük bir bölüm alan dışarıda tutulduğunda tümüyle Sulu-Kuru-Dikili Tarım Alanlarında kalmaktadır.

Antalya Valiliği Tarım İl Müdürlüğü'nün 21.7.2003 tarihli yazısı eki 1/25 000 ölçekli,
Antalya Büyükşehir Belediyesi "Nazım İmar Planı Tarımsal ve Toprak Etüt Sonuç Onay Haritası"

Haritada Kırcami Bölgesi, Sulu-Kuru-Dikili Tarım Alanlarında kalmaktadır.

Antalya Valiliği Tarım İl Müdürlüğü'nün 8 Ekim 2007 tarihli yazısı:

Antalya Valiliği Tarım İl Müdürlüğü'nün 8 Ekim 2007 tarihli yazısında, Büyükşehir Belediye Başkanlığı tarafından ilave imar planı yapılmak istenen 1503,22 hektar büyüklüğündeki sahada 1/6000 ölçekli haritada yaptıkları çalışmada, 1219,90 hektarı (% 81,16) yoğun sera ile kaplı mutlak tarım alanı, 146,29 hektarı (% 9,73) mutlak tarım alanı, 120,29 hektarı dikili mutlak tarım alanı ve geri kalan 16,70 hektar (% 1,11) alan da imarlı alan olarak verilmektedir. Kısaca sahanın % 98,89'unun mutlak tarım alanı olduğu bildirilmektedir**.**

Tarım ve Köy İşleri Bakanlığı, Köy Hizmetleri Genel Müdürlüğü, Antalya Bölge Müdürlüğü'nün 21.2.2004 tarihli yazısı:

Tarım ve Köy İşleri Bakanlığı, Köy Hizmetleri Genel Müdürlüğü, Antalya Bölge Müdürlüğü'nün 21.2.2004 tarihli yazılarında,

" 1/10000 ölçekli halihazır harita üzerinde belirtilen alanlar İl Müdürlüğümüz teknik elemanları tarafından yerinde etüt edilmiş olup, söz konusu sahaların İl Müdürlüğümüz sulama sahası içerisinde kalmadığı görülmüştür." denilmektedir**.**

Enerji ve Tabii Kaynaklar Bakanlığı, Devlet Su İşleri Genel Müdürlüğü, XlII. Bölge Müdürlüğü'nün 25.8.2005 tarihli yazısı:

Enerji ve Tabii Kaynaklar Bakanlığı, Devlet Su İşleri Genel Müdürlüğü, XlII. Bölge Müdürlüğü'nün 25.8.2005 tarihli yazılarında da " ... Bu paftalar içersinde yer alan Kırcami ve Altınova'da sulama sahalarımız bulunmamaktadır" ifadesi yer almaktadır.

Bilirkişi Kurulumuzca, öncelikle Kırcami sahası için her iki kuruluşun saptaması doğru olmakla beraber, eksiktir. Konunun diğer yönleri ortaya konulmadığında yanıltıcı sonuçlar çıkarılması mümkündür. Her iki kuruluşun saptamaları alt alta konulduğunda, Kırcami Bölgesinde sulanan arazi bulunmadığı ve kuru tarım yapıldığı sonucuna ulaşmak mümkün olabilir. Bu iki ekle Bakanlıktan onay almak için başvuru yapıldığında, Tarım ve Köy İşleri Bakanlığı, Tarımsal Üretim ve Geliştirme Genel Müdürlüğü'nün Ekim 2007'de oluşturduğu, "5403 sayılı Toprak Koruma ve Arazi Kullanımı Kanunu'nun 13. maddesinin (d) bendi gereği; 1503 ha.lık alanın Antalya Toprak Koruma Kurulunca belirtilen şartlara uyulması kaydıyla tarım dışı amaçla kullanılması uygun bulunmuştur." hükmünde de uygunluk düşünülebilir. Ancak bu konuda temas edilmeyen iki önemli konu gözlerden uzak tutulmaktadır. Kurulumuz bu konuda iki saptama yapmaktadır:
Bunlardan birincisi, ülkemizde her iki kurumun dışında da sulanan alanlar bulunduğu tespitidir. Bu alanlar " Yerel Sulama Alanları " olarak adlandırılmaktadır. Kırcami bunlardan biridir. İkincisi ise, Antalya ikliminde sulanmadan seracılık yapılması ve birçok bitki, meyve ve sebze türünün yetiştirilmesi mümkün değildir.

Bilirkişi Kurulumuz, bu tespitlerden hareketle, Kırcami sahasındaki alanın tamamına yakınının sulanan, mutlak tarım alanı olduğu sonucunu çıkarmaktadır. Nitekim dosyada bu sonucu kanıtlayan belgeler bulunmaktadır. Kurulumuzun keşif sırasındaki gözlemleri ve saptamaları da bu yöndedir. Diğer yandan, sulama suyunun olmasına rağmen mutlak tarım toprağının sulanmaması, ekilip biçilmemesi, tarım yapılmayıp boş bırakılması, o toprak parçasının doğal yapısının göz ardı edilmesini gerektirmemektedir. Toprak doğal bir zenginliktir, bir kere tahrip edilip elden çıkarıldığında bir daha yerine konulması söz konusu olmamaktadır.

Bugünkü haliyle kentsel kullanma alanları ile çevrilmiş olan dava konusu Kırcami bölgesinde, yoğun olarak örtü altı sebze yetiştiriciliği (sera yetiştiriciliği) yapılmaktadır. Bu alanda sulama suyu bulunmaktadır. Alan, 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun 3. maddesinin ü) bendindeki "Sulu tarım arazisi: Tarımı yapılan bitkilerin büyüme devresinde ihtiyaç duyduğu suyun, su kaynağından alınarak yeterli miktarda ve kontrollü bir şekilde karşılandığı araziler" tanımına uyduğundan "Sulu Tarım Arazisi" niteliğindedir.

Ayrıca halihazır arazi kullanımı, toprak yapısı, meyil ve topoğrafya gibi temel özellikleri nedeniyle de; anılan "Toprak Koruma ve Arazi Kullanımı Kanunu"nun 3. maddesinin (e) bendinde tanımını bulan; " Mutlak tarım arazisi: Bitkisel üretimde; toprağın fiziksel, kimyasal ve biyolojik özelliklerinin kombinasyonu yöre ortalamasında ürün alınabilmesi için sınırlayıcı olmayan, topoğrafik sınırlamaları yok veya çok az olan; bölgesel ve yerel önemi bulunan, halihazır tarımsal üretimde kullanılan veya bu amaçla kullanıma elverişli olan arazileri" tarifi ile de, Kırcami alanındaki dava ve inceleme konusu arazi "Mutlak Tarım Arazisi" niteliğindedir. Bu nedenle söz konusu 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun

13. maddesinin "Mutlak tarım arazileri, özel ürün arazileri, dikili tarım arazileri ile sulu tarım arazileri tarımsal üretim amacı dışında kullanılamaz" amir hükmüne göre, dava konusu alanın tarım dışı amaçlarla kullanılması mümkün değildir. İleri sürüldüğü gibi 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun 13. maddesinin (d) bendinde öngörülen kamu yararı da dava konusunda saptanamamaktadır. Aksine bir uygulama ve kullanım, yasanın açık hükmünün yok sayılması anlamına gelecektir.

Sonuç olarak Kırcami sahasındaki tarım alanlarının tarım dışı amaçlarla kullanımı için gereken koşullar oluşmadığı için, amaç dışı kullanılmaması, tarım alanı olarak kullanılması gerekmektedir.

Dava konusu Kırcami Bölgesi, her ne kadar kıyıdaki kimi gelişmeler ile kesintiye uğramakla birlikte, Toroslardan gelen Düden Çayı ve çevresindeki ekolojik koridorun ve hava limanı da dahil olmak üzere bölgedeki açık alan sisteminin deniz yönünde açılan bir parçasıdır.

Kentsel kullanma alanları ile çevrilmiş olan dava konusu Kırcami bölgesinde, yoğun olarak örtü altı sebze yetiştiriciliği (sera yetiştiriciliği) yapılmaktadır.

Bu alanda sulama suyu bulunmaktadır. Alan, 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun 3. maddesinin ü) bendindeki "Sulu tarım arazisi: Tarımı yapılan bitkilerin büyüme devresinde ihtiyaç duyduğu suyun, su kaynağından alınarak yeterli miktarda ve kontrollü bir şekilde karşılandığı araziler" tanımına uyduğundan "Sulu Tarım Arazisi" niteliğindedir.
ii) Ekolojik koridorun sürekliliği (Toroslardan gelen Düden Çayı ve çevresindeki sistemin sürekliliği) ve yakın çevredeki açık alanlar sisteminin korunması

Geçmiş planlama çalışmalarından başlayarak, dava konusu planlama çalışmalarına kadar Kırcami Bölgesi ile Altınova, Pınarlı, Yeşilova Bölgelerini de kapsayan ve Düden Çayı Havzası içinde yer alan daha geniş bir bölgenin tarımsal alan-açık alan kullanımının sürdürüldüğü gözlenmektedir.

Davalı İdare, Kırcami Bölgesinin, Kuzey-kuzeydoğu yönündeki tarımsal havzanın devamı niteliğindeki Koyunlar, Altınova, Pınarlı havzası ile fiziksel olarak koptuğunu ve kentsel alanın ortasında "kapalı" tarımsal nitelikli bir alan olarak kaldığını ileri sürmüştür. Davalı İdare söz konusu savında, Kırcami Bölgesinin, Kuzey-kuzeydoğu yönündeki tarımsal havzanın devamı niteliğindeki Koyunlar, Altınova, Pınarlı havzası ile ilişkili olduğunu kabul etmektedir.

Bu bölgede tarımsal alanların yanı sıra Düden Çayı boyunca açık alan sistemlerinin sürdürülmesinin, metropoliten alan içinde açık alanlar sisteminin oluşumuna katkısı ve belirli düzeyde de ekolojik onarım ve koruma-geliştirme açısından sunacağı olanaklar yadsınamaz. Oysa bu konu dava konusu Planlama Raporunda göz ardı edilmiştir.

Dava konusu 1/25 000 ölçekli Nazım İmar Planı Raporu'nda dava konusu Kırcami Bölgesi'ne ilişkin kararları belirleyen bir Ekolojik Arazi Yönetim Planı yer almaktadır. Söz konusu Rapor, dava konusu Plan Raporuna aynen aktarılmıştır.

Akdeniz Üniversitesi Uzaktan Algılama Araştırma ve Uygulama Merkezi tarafından 2007 yılında hazırlanan bu Antalya Büyükşehir Yetki Alanının Ekolojik Arazi Yönetim Planı'nda,

•Antalya'da tarım alanları üzerindeki yapılaşmaların 1981-2000 yılları arasında 54 kat arttığı,
Antalya platosunun ve Dünyaca ünlü Terra-Rosa topraklarının milyonlarca ve Aksu-Çalkaya aluviyal arazilerin yanlış kullanım kararları nedeniyle kaybedildiğine,
•Antalya Büyükşehir Belediyesi'nin yetki alanı içerisindeki kimi arazilerin yanlış arazi kullanımları sonucunda ideal kullanım şekillerinden uzaklaştığı, eko-sistem çeşitliliğinin alan kullanım taleplerindeki değişime bağlı olarak önemli ölçüde azalma gösterdiğine,
•Varsak, Koyunlar, Topçular, Kırcami, Güzeloba ve Çalkaya gibi alanlardaki tarım arazilerinin büyük bir kısmının tarımsal niteliğini artık geri dönüşümsüz olarak kaybettiğine ve bu alanlar için bugün yapılabilecek herhangi bir müdahale şekli bulunmadığına işaret edilmektedir.

Raporda, bu alanlar için "Ekolojik Kentsel Dönüşüm Projeleri" önerilmiştir. Diğer yandan, anılan Raporda Antalya Kentinin simgelerinden olan akarsular ve düdenler Ekolojik Devinim Koruma Bandı kapsamında değerlendirilmiştir. Bu alanlarda, "biyotoplardaki biyotik ve abiyotik değerlerin bütünlüğü ve sürdürülebilirliği açısından" son derece önemli olduğu ve bu alanların bitki ve hayvanlar için yaşam ortamı ve besin kaynağı yaratılması yanı sıra biyolojik çeşitliliğin artırılmasında önemli yararlar sağlayacağına işaret edilmektedir. Kırcami Bölgesini doğu yönünde sınırlayan Düden Çayı, Ekolojik Devinim Koruma Bandı kapsamında değerlendirilmektedir.

Raporda, Kırcami Bölgesi ile ilişkili şu saptamalar yapılmaktadır:
•Antalya ülkemizin en stratejik tarımsal üretim merkezlerinden birisidir.
•Büyükşehir Belediyesi yetki alanı içindeki sahil kuşağı, özellikle subtropik ve hatta bazı tropik bahçe bitkileri ile birlikte pamuk, buğday, mısır gibi tarla bitkileri ve nihayet özellikle turfanda sebze üretiminin gerçekleştirildiği örtü altı tarımı yönünden de ülkemizin gerçek anlamda ulusal ve uluslararası kimlikli profesyonel bir tarım sektörünü bünyesinde barındırmaktadır.
•Kentte planlı/plansız olarak ve çoğunlukla da yüksek yoğunluklarla gerçekleşmiş olan yapılaşmaların aralarındaki dar ve/veya geniş mekanlardaki tarım alanları bulunmaktadır.
•Kırcami Bölgesi bunlardan biri olup kimi eski tarım alanlarının üzerleri, bu gün önemli ölçüde yapılaşmış ve bu alanların büyük bir kısmı, tarımsal niteliğini artık geri dönüşümsüz olarak kaybetmiştir.
•Ekolojik planlama adına söz konusu alanlar için bu gün yapılabilecek herhangi bir müdahale şekli bulunmamaktadır.

•Eski tarım arazilerinin üzerine kurulmuş olan şimdiki 10-15 katlı apartmanların hemen bitişiğindeki arazilerdeki eski kırsal komşular ise, hemen hemen her birisi arazisinin bir köşesine yaptığı düşük kaliteli ve kırsal nitelikli bir evle birlikte bu alanlarda halen tarımsal üretim yapmaya çalışmaktadırlar. Böyle bir uygulamanın sonunda ortaya çıkan fiziksel, sosyo-ekonomik ve kültürel tabloyu bilimsel ve teknik yaklaşımlarla tanımlayabilmek ise mümkün görülmemektedir.
•Antalya Büyükşehir planlama alanı içerisinde yan yana iki farklı fiziksel, sosyo-ekonomik ve kültürel yapı farklılığına sahip kimi alanların, önlem alınmadığı takdirde kent planlamasında ve kentin yönetiminde sosyal bir huzursuzluk kaynağı olacağı çok açık bir gerçektir.
•Kentsel yapılaşma alanları arasında kalmış bulunan alanlar için "kent içi tarımsal planlama alanları" şeklinde bir alan kullanımı kararı verilmiştir.
•Söz konusu alanların "kent içi tarımsal planlama alanları" olarak ayrılması, hazırlanacak olan imar planlarının öncelikle bu alanların ekolojik özellikleri ile halihazır fiziksel (kentsel-kırsal yapılaşma dağılımı) özellikleri arasındaki ve ayrıca halkın sosyo-ekonomik ve kültürel yapısı ve elbetteki halkın talepleri arasındaki uyumun sağlanması ve daha sonra da gerek yöre halkı ve gerekse sivil toplum kuruluşları tarafından artık benimsenmiş olması gereken bu imar planının uygulanabilirliğinin yasal olarak da sağlanması bakımından gerekli görülmektedir.
Raporda özetlenen saptamalar ışığında kent içi tarımsal planlama alanları Antalya'nın "çok ciddi sosyal sorun bölgeleri" olarak tanımlanmaktadır. Dava konusu Kırcami Bölgesi de bu bölgelerden birisi olarak gösterilmektedir. Anılan Raporda, Kırcami Bölgesinin de yer aldığı çevredeki daha geniş bir bölge için aşağıdaki saptamalar yapılmakta ve öngörülerde bulunulmaktadır:
•"Antalya Büyükşehir yetki alanı içerisinde kent içi tarımsal planlama alanları olarak tahsis edilmiş olan en önemli ve öncelikli alanlardan birisi de ... Düden çayının denize döküldüğü alanın sağ ve sol çevresindeki hatalı yapılaşmanın gerçekleşmiş olduğu alandan kuzeye ve doğuya doğru ve Düden çayının çevresindeki arazileri Altınova bölgesine bağlayan alana kadar uzanan kısımda yer alan arazilerdir"
•"....Büyük çoğunluğu T2 ve TG i /2 sınıfı topraklarla kaplı bulunan bu alanın halihazırda büyük bir bölümü, örtü altı turfanda sebze yetiştiriciliği ve kısmen de kesme çiçek üretimi amacıyla kullanılmaktadır. Az bir kısmında ise bahçe ve açık tarla tarımı yapılmaktadır. Büyük bir çoğunluğu lls yetenek sınıfında olan söz konusu alan, 5403 sayılı Arazi Kullanımı ve Toprak Koruma Yasası kapsamında da Örtü-altı alanları (SA), Dikili Tarım (DT) ve Mutlak Tarım (MT) arazisi niteliğindedir.
•"... Doğu sınırı askeri ve sivil havaalanı ile neredeyse tamamen kuşatılmış olan bu alan, batısında Kırcamisi yapılaşmasının, güneyinde Antalya falezleri üzerindeki oldukça geniş bir şerit halindeki yapılaşmanın ve kuzeyinde de Antalya-Alanya çevre yolu çevresindeki yapılaşmanın baskısı altında bulunmaktadır. Dört bir tarafı tamamen kentsel unsurlarla çevrili bulunan bu alan üzerindeki yukarıda tanımlanmış olan kentsel baskı, tamamen geçmişteki hatalı ve yanlış imar planları ve uygulama imar planları sonucunda oluşturulmuştur. Kentsel doku içerisinde kalmanın ötesinde, birkaç mevzi imar uygulaması ile bu alan içerisinde yapılaşmasını tamamlamış alanların varlığı yanı sıra, kentlilik ile köylülük arasına sıkıştırılmış yöre insanlarının yakın çevresinde gördüğü kentsel yaşamı, kısıtlı olanakları ile kırsala taşımaya kalkması ile ortaya çıkmış bulunan ilginç "kent-köy" yapılaşmaları sonucunda, kimliğini neredeyse tamamen yitirmiş bir bölge yaratılmış bulunmaktadır."

•Söz konusu bu sosyo-ekonomik ve kültürel karmaşa içerisindeki bu alanda yürütülmekte olan tarımsal faaliyetler, kesinlikle ekonomik optimumlardan yoksun işletmelerde, çoğunlukla bilinçsiz gübreleme, ilaçlama ve sulama faaliyetlerine dayalı bir üretim süreci neticesinde özelliklerini önemli ölçüde yitirmiş olan topraklarda ve nihayet komşusunun arazisinde inşa edilmiş çok katlı binaların arasında ve hepsinden önemlisi, yöre halkının büyük bir tarımsal üretim isteksizliği ile yürütülmektedir...”
•“... Kent bileşenlerinin büyük bir karmaşa ve düzensizlik içerisinde bir arada bulunduğu, tanımlanması bilimsel olarak mümkün olmayan ilişkilerin yaşandığı ve oldukça da geniş bir alansal dağılıma sahip olan bu yöre için, alan kullanımı ile ilgili çok acil ve uygulanabilir bir çözüm üretilmesi zorunluluğu bulunmaktadır. Söz konusu bu alan kullanımı ile ilgili sorunun çözümüne katkı sağlaması amacıyla; bu ekolojik planlama çalışması kapsamında kullanılan bilimsel, teknik ve yasal argümanların yanı sıra bu alanın sahip olduğu ve yukarıda ifade edilmiş olan halihazır fiziksel, sosyo-ekonomik ve kültürel yapı da dikkate alınarak söz konusu bu alanın "kent içi tarımsal planlama alanı" olarak ayırt edilmesi gerektiğine karar verilmiştir...”
•“... Bu alan ile ilgili olarak yerel yönetimlerce hazırlanması muhtemel bir imar planında, alanın yukarıda tanımlanmış olan sosyo-ekonomik ve kültürel yapısı ve yöre halkının beklentileri yanı sıra, ilgili yasa ve yönetmelik esasları da dikkate alınarak, modern ve çağdaş yeni bir kentsel tarımsal alan kullanımı tanımı yapılmalı ve bu alandaki tarımsal arazi kullanımının şekli ve boyutuna bu yeni yaklaşım çerçevesinde karar verilmelidir...”

Yapılaşmaya açılmak istenen dava konusu Kırcami Bölgesinin tarımsal niteliğinin geri dönüşümsüz olarak kaybettiği görüşüne Kurulumuz katılmamaktadır. Kurulumuzun, bölgenin tarımsal niteliğine ilişkin değerlendirmeleri Bilirkişi Raporunun önceki sayfalarında yapılmıştır. Yukarıda özetlenen ve dava konusu Planlama Raporuna aynen aktarılan raporda dile getirilen Ekolojik Kentsel Dönüşüm Bölgesi kavramının dava konusu Kentsel Tarımsal Planlama Alanı olarak belirlenmiş alan ile ilişkisi kurulamamıştır.

Anılan Planlama Raporunda, Ekolojik Devinim Koruma Bandı ile doğrudan ilişkili olan Kırcami Bölgesinin Ekolojik Kentsel Dönüşüm ile ne tür bir gelişmeye açılmak istendiği konusunda belirsizlikler vardır. Oysa, Raporda Ekolojik Devinim Koruma Bandı olarak tanımlanan Düden Çayı ve Havzasının, Kırcami Bölgesi ile bütünsel ilişkisi göz ardı edilmektedir.

Rapor, bu bölgede imar planlaması ile yönlendirilecek bir gelişme ile ne tür bir Ekolojik Dönüşümün beklendiği konusunda belirsizlikler üretmektedir.
Kurulumuzca kent içi tarım alanlarına ilişkin olarak dile getirilen sorunun çözümü, tarım kesiminin modernleştirilmesi, kentsel hizmetlerden yararlanma düzeylerinin geliştirilmesi, ve tarım kesimindeki üretim verimliliğinin artırılmasıyla, geri toplumsal ilişkilerin terk edilmesiyle ve de teknolojik gelişmenin sağlanmasıyla ilişkili olup tam da Tarımsal Planlama Alanı kavramına denk düşmektedir. Bu nedenle, Kurulumuz Raporda dile getirilen ve hatta “önlem alınmadığı takdirde kent planlamasında ve yönetiminde sosyal bir huzursuzluk kaynağı olacağı ileri sürülen,

iki farklı toplumsal ve kültürel bünyenin varlığı sorununun, tarımsal alanların korunması yaklaşımından farklı bir şey olduğu ve tarımsal alanların yapılaşmaya açılması için gerekçe yapılamayacağı görüşüne sahiptir.

Raporda Havaalanının "sağı" [Doğusu] "Ender Tarım Alanları" kapsamında değerlendirilirken benzer özellikleri sürdüren ve Düden Çayı Havzası içinde yer alan ve Düden Çayı ile beslenen Hava Limanı batısındaki Kırcami Bölgesinin, Ender Tarım Alanları dışında tutulması, Kurulumuzca, Raporun soru işaretleri içeren bir yanı olarak değerlendirilmiştir.

Kurulumuz, ayrıca hatalı kullanım sonucu ideal kullanım şeklinden uzaklaşmış alanlar sorununu ve Ekolojik Onarım kavramını dile getiren Raporun, Kurulumuzca, tarımsal özelliklerinin ve toprak niteliklerinin hala sürdüğünü saptadığı, Kırcami Bölgesi ile ilgili olarak "geri dönüşümsüzlük" tespitlerine katılmamaktadır.

Kurulumuza göre, üzerindeki tarımsal üretim nedeniyle yapılaşmamış olan Kırcami Bölgesinin, Akdeniz'e doğru ekolojik sürekliliği ve bütünlüğü bulunan Düden Çayı Havzasının sürekliliğine katkıda bulunduğu ve onun önemli bir parçası olduğu kanısına sahiptir.

Özetle, Bilirkişi Kurulumuz, davalı idare tarafından ileri sürülen başka yerdeki nitelikli tarım topraklarının ve diğer öncelikli alanların korunması için Kırcami Bölgesi'nin gelişmeye açılabileceği, bu bölgede koruma gerçekleştirilemeyeceği için bölgeyi yapılaşmaya açarak, yapılaşmayı en azından düzenlemenin yararlı olacağı şeklindeki gerekçe ve savları doğru bulmamaktadır.

Planlama Raporunda dava konusu Kırcami Bölgesi, Kentsel Tarımsal Planlama Alanları olarak, hatta Ekolojik Dönüşüm Alanları olarak tanımlanmaktadır. Oysa, gerek Rapor içeriğinde gerekse dava konusu planlardan Kentsel Tarımsal Planlama Alanları kavramının, kent içindeki tarımsal alanların korunması ve düzenlenmesi ve bu alanlara uygun ve akılcı hizmet sunum düzeninin belirlenmesi ve yaratılması gibi bir içeriğe sahip olmadığı anlaşılmaktadır. Tersine, bu alanlar, tarımsal gelişme ile ilişkisi kurulması olanaksız ve farklı bir gelişmenin düzenlenmesinin aracı olan imar planlaması ile düzenlemeye çalışılmaktadır.

Diğer yandan dava konusu Kırcami Bölgesi gibi 1500 ha'ın üzerindeki bir alanın ilişkili olduğu tarımsal alan sistemlerinden koptuğu ve kent içinde kapalı bir alana dönüştüğü şeklindeki sav Kurulumuzca anlamlı bulunmamıştır. Alanın büyüklüğü söz konusu savın geçerliğini ortadan kaldıracak ölçülerdedir.

Kurulumuz, plansız yapılaşmanın engellenmesi için korunması gereken alanın yapılaşmaya açılmasına razı olunması gibi bir anlayışı red etmekte, kentsel gelişmenin düzenlenmesinin aracı olan imar planlaması kavramıyla söz konusu tarımsal planlama alanlarına yaklaşmanın yanlışlığını, bu ve benzeri alanların imar planlamasının araçlarıyla ele alınmasının alanların tarımsal niteliğinin tümüyle yitirilmesini beraberinde getirecek sonuçlar doğuracağını ileri sürmektedir.

iii) Yakın çevredeki açık alan sisteminin kentsel riskler açısından korunması gerekliliği

Dava konusunda, tartışılması gereken diğer bir nokta da, dava konusu Kırcami Bölgesinin hemen doğu bitişiğinde yer alan Antalya Hava Limanıdır. Antalya Hava Limanı, kentin turizm sektöründeki yeri ve tarımsal ve diğer ürün piyasalarına açılım konusunda stratejik öneme sahiptir. Dış turizm gelişmesi öngörülen Antalya bölgesinde hava limanının stratejik öneminin giderek arttığı saptanmaktadır. Hava Limanı bugün Türkiye'nin önemli kapasiteye sahip limanlarından biridir. Kapasite kullanımı açısından İstanbul Atatürk Hava Limanı'ndan sonra ikinci sıradadır.

DLH Genel Müdürlüğü'nün verilerine göre 2008 yılında Ülkemizde hava limanı ve hava alanlarına iniş ve kalkış yapan uçak sayısı 688 189'dur. Antalya Hava Limanı inen ve kalkan uçak sayısı açısından Atatürk Hava Limanından sonra ikinci sıradadır.

2001 verileri ile 2008 verileri karşılaştırıldığında, aradan geçen süre içinde Antalya'ya yıl içinde inen ve kalkan uçak sayısında % 206.2, yolcu trafiğinde % 204.9 ve yük trafiğinde ise % 290'lık bir artış olmuştur. Zirve günde inen ve kalkan uçak sayısındaki artış oranı ise % 189.3'dur.

Hava limanı kente uzaklığı açısından uygun konumdadır. Hava Limanından kente ve özellikle Doğu yönündeki oteller bölgesine erişim kolay olup erişim süresi kısadır. Uçuş güvenliği açısından yaklaşıldığında, alanın yönlenme (kuzey– güney) olanakları iyidir. Hava Limanı topografik veriler ile rüzgâr yönü açısından uygun bir alanda kurulmuştur.

Hizmete girdiği yıllarda kentin nüfusu 50 Bin civarındadır. Hava alanının kente uzaklığı o günün koşullarında da kolay erişebilirlik sınırları içindedir. O tarihlerde, Hava Limanının konumu kentsel gelişme açısından herhangi bir ikilem yaratmamaktadır. Kentin ulaştığı büyüklük Hava Limanını etkileyecek boyutlarda değildir. Buna karşın, Hava Limanının hizmete girdiği tarihlerde olmasa bile, bugün kent üzerindeki hava trafiğinin önemli bir risk etkeni oluşturduğu belirtilmelidir. 2008 Verilerine göre, Hava Limanına zirve günde inen ve kalkan uçak sayısı 746'dır. Yıl içinde Hava Limanına inen ve kalkan uçak sayısı günlük ortalaması 350 civarındadır. Bu önemli bir sayıdır. Zirve gün içinde yaklaşık 2 dakikada, ortalama gün içinde ise 4 dakikada bir uçak iniş ve kalkışı anlamına gelmektedir. Hava Limanın stratejik önemindeki ve taşıdığı yükteki artış risk etkenini giderek güçlendirmektedir. Diğer yandan, bu sayısal değerlere askeri hava alanına ilişkin bilgilerin dahil edilmediği dikkate alındığında Kırcami Bölgesi bitişiğindeki Hava Limanı bölgesinin önemli bir hava trafiği merkezi olduğu sonucu çıkarılmalıdır. Hava Koridoru Koruma Kuşağı içinde zirve günde 746, ortalama olarak da gün içinde 350 civarında uçağın sürekli hareket halinde olduğu belirtilmelidir. Dile getirilen riskler yalnızca uçak ve yolcularıyla sınırlı değildir. İniş ve kalkış güvenliği konusundaki tehlikeler, olası bir kazanın yerdeki sonuçlarını da içermektedir.

Antalya Bölgesinde turizm sektörünün giderek büyümesine bağlı olarak zaman içinde dile getirilen risk etkeninin boyutlarının daha da artması beklenmelidir. Bu veri kabul edildiğinde risklerin azaltılması konusu bugünkünden çok daha önemli bir

soruna dönüşecektir. Şüphesiz, yapı ve insan yoğunluğunun göreli olarak daha az olduğu tarımsal kullanımlar, veya farklı durumlarda diğer açık alan kullanımları söz konusu risklerin azaltılması açısından yeğlenmesi gereken plan kararları olacaktır.

Diğer yandan, öngörülen yapılaşma gerçekleştiği koşulda, zaman içinde, dile getirlen risk etkenlerinin ava Limanının konumunu tartışmalı hale getirmesi olasıdır. Bu durumda Antalya gibi değerli tarım topraklarına sahip bir bölgede yeni bir hava alanı yeri seçeneğinin yaratılması ya da risk etkenlerinin azaltılmasına yönelik diğer araçların devreye sokulmasının ekonomik maliyetlerini düşünme gereği vardır.

Kuşkusuz, bu risk etkeni Hava Limanının ilk kuruluş yıllarındaki yer seçiminden kaynaklanmamaktadır. Bunun nedenleri, zaman içinde hızlı kentsel gelişmenin yönlendirilmesinde, Hava Limanının konumunun dikkate alınmamış olmasında aranmalıdır. Hava Limanında uçuş koridorunun içinde ve çevresinde zaman içinde spekülatif konut bölgelerinin oluşturulduğu bilinmektedir. Geçmiş yanlışların yinelenmemesi açısından Hava Limanı çevresindeki gelişmeler konusunda titiz davranılması gerektiği açıktır. Antalya Hava Limanı'nın kurulduğu dönemde çevresinde herhangi bir yerleşim bulunmamaktadır. Bu hava alanlarının ve limanlarının planlanması ve tasarımı ilkeleri ve ölçütleri açısından son derece önemlidir. Antalya Havalimanının kuruluşundan bu yana olumlu bir özelliği olarak var olan bu özelliğinin korunması açısından Kırcami Bölgesi de dahil olmak üzere havalimanının çevresinde yapılaşma kararları üzerinde dikkatle durulmalı ve bu ve benzeri kararlardan özellikle kaçınılmalıdır.

Antalya 1. İdare Mahkemesi'nde görülmüş olan 2000/710 Esas sayılı Bilirkişi Raporunda, Bilirkişi Kurulunca Hava Limanı'nın kentsel gelişmeyi yönlendirmede doğru kullanılmadığı, zaman içinde uçuş konileri ve güvenlik önlemleri konusunda titiz davranılmadığı saptanmaktadır. Bilirkişi Kurulumuz, söz konusu Bilirkişi Raporunda dile getirilen görüşlerin ışığı altında, dava örneğimizdeki, Kırcami Bölgesindeki yapılaşma öngörüsünün de benzer sonuçlar yaratabilecek bir yapılaşma kararı olacağını saptamaktadır.

1/50 000 ölçekli II. Etap Stratejik Fiziki Plan Değişikliği paftası üzerine işlenmiş olan Havaalanı Hava Koridoru Koruma Kuşağı

Devlet Hava Meydanları İşletmesi Genel Müdürlüğü Hava Alanları Mania Kontrol Yönergesinde 7. Maddede, "Kısıtlama Uygulanan Sahalar ve Kısıtlamalar" belirlenmiştir.

"Madde 7 : ICAO EK-14 (Hava Alanları) dokümanı çerçevesinde, genel ifadesiyle, pist orta noktası merkez alınmak üzere 6 000 metre (6km) yarıçaplı bir daireyle, pist uzantılarında 15 000 metrelik bir sahada belirlenmiş ölçütler doğrultusunda yapılaşma kısıtlamaları uygulanması gerekmektedir."

Devlet Hava Meydanları İşletmesi Genel Müdürlüğü Hava Alanları Mania Kontrol Yönergesi'nde öngörülen ölçü ve kısıtlamalardan hareketle Bilirkişi Kurulumuzca elde edilen Risk Kuşaklarına göre,

Yapılaşmaya açılmak istenen dava konusu Kırcami Bölgesinin büyük bir bölümü II. Risk Kuşağında, diğer bölümü de III. Risk Kuşağında yer almaktadır.

Riskler Açısından Değerlendirme

Bilirkişi Kurulumuz, söz konusu ölçülerle oluşturulan Hava Koridoru Koruma Kuşağını Risk Etkeni çerçevesinde değerlendirmektedir. Yönergede belirtilen Şerit Saha, Geçiş Yüzeyi, Yaklaşma Yüzeyi, Tırmanma Yüzeyi, İç Yatay Düzlem ve Konik Yüzey olarak tanımlanan saha ve sınırları uçuş güvenliği yanı sıra yerdekilerin can güvenliği açısından değerlendirmiş ve Risk Düzeyleri belirlemeye çalışmıştır:

I. Risk Kuşağı:

Şerit Saha :

Pist boyunca, pist merkez hattından her iki tarafa 75 veya 150'şer metre genişliğinde ve pist sonunda pist referans koduna uygun uzunlukta "Durma Uzantısı"(Stopway) uzunlukları da dahil olmak üzere dikdörtgen şeklinde bir sahadır.

Geçiş Yüzeyi :

Pistin yan yüzeyinde, şerit sahadan itibaren 315 metre genişliğindeki sahadır. Geçiş yüzeyi, şerit sahadan itibaren 315. metreye çizilen paralel çizginin iniş ve kalkış konisini kestiği yerde biter.

Yaklaşma Yüzeyi:

Şerit Sahanın bittiği yerde, köşe noktalardan her 100 metrede 15 metre yanlara açılmak kaydı ile uzunluğu 15 km'yi bulan sahadır. Bu yüzeyde eğim %2'dir. Eğer pist her iki tarafından da kullanılıyor ise hem yaklaşma yüzeyi hem de tırmanma yüzeyi 15 000 metre boyunca %2 eğimle yükselir

Tırmanma Yüzeyi:

Şerit Sahanın bittiği yerde, köşe noktalardan her 100 metrede 15 metre yanlara açılmak kaydı ile uzunluğu 15 km'yi bulan sahadır. Bu sahada durma uzantısından itibaren ilk 3000 metrede eğim (yukarıya doğru) %2, kalan 12 000 metrede ise eğim %2.5'dir

II.Risk Kuşağı:

İç Yatay Düzlem

Pist referans noktası merkez olmak üzere, 4 000 metre yarı çaplı dairenin oluşturduğu, şerit saha, geçiş yüzeyi, yaklaşma-tırmanma yüzeyi dışında kalan sahadır. Söz konusu 4 000 metre yarıçaplı daire içerisinde, geçiş ve yaklaşma-tırmanma yüzeyi dışında kalan sahada, pist referans noktası yüksekliği 0 metre olarak kabul edildiğinde yükseklik 45 metredir

III.Risk Kuşağı

Konik Yüzey:

Pist referans noktası merkez olmak üzere 6 000 metre yarı çaplı dairenin oluşturduğu, iç yatay düzlemin bittiği yerden başlayan ve eğimi %5 olan 2 000 metrelik sahadır. Pist referans noktası yüksekliği 0 metre olan pistler için, iç yatay yüzeyde maksimum yükseklik 45 metre olduğundan, konik yüzey 45 metreden başlayarak %5 eğimle 145 metreye ulaşacaktır.

Tarımsal alan kullanımları, açık alan sistemlerinin korunması yaklaşımı yanı sıra bu bölgeninyapılaşmaya açılmamasının, turizm gelişmesi, insan ve mal trafiği açısından stratejik öneme sahip Havalimanında uçuş güvenliği açısından katkısı göz ardı edilemez.

Hava Limanının hizmete girdiği tarihlerde olmasa bile, bugün kent üzerindeki hava trafiğinin önemli bir risk etkeni oluşturduğu belirtilmelidir. Risk etkeninin nedenleri, zaman içinde, hızlı kentsel gelişmenin yönlendirilmesinde, Hava Limanının konumunun dikkate alınmamış olmasında aranmalıdır. Geçmiş yanlışların yinelenmemesi açısından Hava Limanı çevresindeki gelişmeler konusunda titiz davranılması gerekir. Havalimanının çevresinde yapılaşma kararları üzerinde dikkatle durulmalı ve bu ve benzeri kararlardan özellikle kaçınılmalıdır.

Geçmiş planlama çalışmalarından başlayarak, Kırcami Bölgesi'nin, Altınova, Pınarlı, Yeşilova Bölgelerini de kapsayan ve Düden Çayı Havzası içinde yer alan bölgenin tarımsal alan-açık alan kullanımının sürdürüldüğü gözlenmektedir. Tarımsal alan kullanımı ve tarımsal alanların korunması ve Düden Çayı boyunca açık alan sistemlerinin sürdürülmesi yanı sıra bu bölgenin yapılaşmaya açılmaması, Hava Limanındaki uçuş güvenliği, alana yaklaşma, iniş ve kalkış trafiği açısından önemli bir olanaktır. Bu olanağın, bölgenin yapılaşmaya açılmasıyla yitirileceği açıktır. Bunun da, giderek işlevi ve stratejik önemi artan Hava Limanını zaman içinde her yönüyle kısıtlaması beklenmelidir. Bu nedenle, Kırcami Bölgesinde öngörülen yapılaşmanın Havalimanı açısından ilişkisini göz ardı etme olanağı bulunmamaktadır.

Risk etkenlerinin yanı sıra dava konusu yapılaşma kararı ile Hava Limanının doğal olarak yarattığı ve yaratacağı çevresel kirlilikle (hava kirliliği, gürültü kirliliği vb) doğrudan karşı karşıya kalması kaçınılmaz olan bir kent çevresi yaratılacaktır. Bölgenin üzerindeki tarımsal kullanım nedeniyle düşük yoğunluğu nedeniyle dile getirilen kirlilikten toplam etkilenme düzeyi kaçınılmaz olarak daha düşüktür. Bu ise, dava konusu plan ile bölgede öngörülen 90 Bin kişilik nüfusun doğrudan kirlilikten etkilenmesi anlamına gelmektedir.

Kentsel gelişmeye karşın, kentin bu bölgesinde, Hava Limanı da dahil olmak üzere kuzey-güney ekseninde, dava konusu Kırcami Bölgesini de içine alan oldukça geniş bir açık alan sisteminin/koridorunun varlığı Hava Limanı çevresinde oluşan kirliliğin belirli noktalarda sıkışmasını ve toplanmasını engellediği belirtilmelidir. Özetle, kent ve Hava Limanı arasında kesintisiz bir kentsel gelişme bölgesi yaratılmasının, çevresel etkiler, kentsel riskler açısından sakıncalı olacağı belirtilmelidir. Bu nedenle, çevresel etkiler ve kentsel riskler açısından, dava konusu Kırcami Bölgesi'nin, tarım dışı amaçla kullanılmasında kamu yararı olmadığı belirtilmelidir.

B) Kentsel gelişme dinamikleri, büyüme eğilimleri ve kentsel üst biçim ilişkisi

1990-2000 arasında Antalya İli kentsel nüfusu yıllık % 4.4 artış göstermiştir. Aynı dönemde kırsal nüfus artış hızı ise %3.9 olarak gerçekleşmiştir. Kentin nüfus artış hızı % 4.7 olarak ölçülmektedir. 1980'li yıllardan sonra önemli nüfus gelişmesi

gösteren kent Antalya Ovası'na doğru büyümüş, giderek değer kazanan kıyı gerisi de kentsel gelişmeye açılarak kent-kır, kent-kıyı çatışmaları ön plana çıkmıştır.
II. Etap Kent Merkezi 1/50 000 ölçekli Çevre Düzeni Planı Planlama Raporundan, UTTA Planlama Grubu tarafından yapılan nüfus kestirimlerinin, metropoliten alan genelinde (Varsak, Aksu, Çalkaya, Yeşilbayır, Çakırlar ve Döşemaltı belediyelerini de kapsayan metropoliten alan) gerçekleşme düzeylerine ilişkin verilerinden, kentin planlanmasına ilişkin sorunun metropoliten alanda nüfusun büyümesinin doğru kestiriminden çok nüfusun metropoliten alan içinde dağılımı ile ilgili olduğu anlaşılmaktadır.

23.7.2004 tarih ve 25531 sayılı Resmi Gazetede yayınlanarak yürürlüğe giren 5216 sayılı Yasa ile önceden Antalya Büyükşehir Belediyesi sınırları dışında kalıp, metropoliten alan içinde yer alan beldelerde gereğinden fazla yaratılmış olan imarlı alanın yeniden düzenlenmesi ve büyükşehir sınırları içinde nüfusun gelecekteki dağılımının yeniden belirlenmesine ve düzenlenmesine izin vermiştir. Yasa ile, Antalya Büyükşehir Belediyesinin sınırları ilk kademe belediyeleri de kapsayacak şekilde tüm metropoliten alanı kapsar hale gelmiştir. Bu şekilde Büyükşehir Belediyesinin alanı 40 Bin hektardan 138 Bin hektara ulaşmıştır. Şüphesiz bu, metropoliten alan içinde gelişmenin mekansal olarak düzene sokulması, koruma önceliklerinin belirlenmesi ve koruma alanlarını dikkate alan bir gelişme sağlanması açısından önemli olanaklar sunmuştur. Bu şekilde, daha önce birbirleriyle eşgüdümü sağlanmamış biçimde, sınırsız ve abartılı imar haklarının yaratılmasına yol açan, alan kullanımları açısından tarımsal alanın niteliği ve korunması konularını göz ardı eden bir gelişmenin denetlenmesi olanağı yakalanmıştır.

Geçmiş planlama deneyimleri değerlendirildiğinde, bu gelişmeyi zaman içinde yönlendirme, düzenleme kaygılarını taşıyan planlama yaklaşımı ile eğilimlerin öne çıkarılmasına dayalı bir planlama yaklaşımının sürekli biçimde çatışmakta olduğu gözlenmektedir. Dile getirilen kır-kent, kent-kıyı çatışmalarını giderecek ve koruma ve gelişme etkinliklerini birlikte gözetecek bir planlama çerçevesinin oluşturulamaması ve bunu destekleyecek kentsel ve bölgesel gelişme siyasalarının yaratılamamış olması nedeniyle koruma alanlarını tehdit eden bir gelişme eğilimi süreklilik kazanmıştır. Bütün bunlara karşın, geçmiş planlama çalışmalarından başlayarak, Kırcami, Altınova, Pınarlı, Yeşilova bölgelerini de kapsayan ve Düden Çayı havzası içinde yer alan çok daha geniş bir bölgenin, olumsuz kimi gelişmeler olmuş olsa da tarımsal niteliğinin ve açık alan kullanımının sürdürüldüğü gözlenmektedir. Antalya kentinin kentsel üst biçiminin az çok bu açık alanlar sistemine göre oluştuğu belirtilmelidir.

Geçmiş planlama çalışmalarından başlayarak, Kırcami, Altınova, Pınarlı, Yeşilova bölgelerini de kapsayan ve Düden Çayı havzası içinde yer alan çok daha geniş bir bölgenin, tarımsal niteliği ve açık alan kullanımı sürdürülmüştür.
Antalya kentinin kentsel üst biçiminin, kimi olumsuz örnekler dışarıda tutulursa bu açık alanlar sistemine göre oluştuğu gözlenmektedir.

Konu kent üst biçimi açısından değerlendirildiğinde, metropoliten alan içinde, "derişik" (İng."compact") bir kent üst biçiminin her koşulda sürdürülebilir bir kentsel

gelişme biçimi olduğu şeklinde bir şehircilik ilkesi bulunmamaktadır. Şüphesiz, Antalya gibi önemli koruma alanlarını içeren bir metropoliten bölge içinde, farklı biçim arayışlarının olması, bu farklı biçimleri rasyonelleştiren bir kent planlama ve tasarım yaklaşımının geliştirilmesi, belediye hizmetleri sunum düzeninin ve teknik alt yapı sisteminin yaratılması ve ulaşım altyapının oluşturulması beklenir. Nitekim, dava konusu plan değişikliğinin dayandığı
1/25 000 ölçekli Nazım İmar Planı Raporunda da Bilirkişi Kurulumuzun dile getirdiği görüşü destekleyen bir yaklaşım izlenmektedir. Bu yönüyle Kurulumuz, dava konusu plan değişikliğine ilişkin gerekçeleri 1/25 000 ölçekli planın dayandığı Planlama Raporunda dile getirilen ana yaklaşım ve ilkeler ile tutarsızlığı olan gerekçeler olarak saptamaktadır. Planlama Raporunda dile getirilen "Merkeze Bağlı Alt Merkez Odaklı Kentsel Gelişim Stratejisi", dava konusu plan değişikliğine ilişkin olarak Kurulumuzun yukarıda dile getirdiği görüşleri desteklemektedir.

Davaya konu planda 2020 yılı projeksiyon kent nüfusuna hizmet edecek ticari alan miktarının arttırılması, merkezin ihtisaslaştırılması, desantrilizasyonu gibi stratejik fiziki planın temel stratejileri dolayısıyla 190 ha 'Iık konut kullanımlı alanın "Merkezi İş Alanın" alanı ihtiyacı doğduğu, bu nedenle bu konut alanının kent ile bütünleştirilerek planlanması amacıyla, kamu yararı karan alınan Kırcami bölgesinde planlanması öngörülmüştür. Davalı Büyükşehir Belediyesi planlama çalışmalarında yeraltı ve yerüstü kaynaklarının ve koruma alanlarının sürdürebilirlik ilkesi uyarınca disiplinli korunması amacıyla 5216 sayılı yasa uyarınca yetki alanına giren kısımlarda öncelikle 40 000 hektarın üzerindeki tarım alanları ile 50 000 hektarın üzerindeki orman alanlarının korunmasına yönelik tedbirleri aldığını, su kaynakları koruma alanlarının planlara işlendiğini ve kent kuzeyinde yer alan Kırkgözler, Düzlerçamı, Döşemealtı, Çığlık Belediyelerinin önemli bir kısmının su kaynakları koruma alanı olarak belirlendiğini, bunların yanı sıra ilk kademe belediyelerinin Büyükşehir Belediyesi sınırlarına dahil olmadan önce hazırlanmış olan planların, Büyükşehir bütününde planlama ilkelerine uygun olarak disipline edilmesinin ve bir kentsel üst biçim (makroform) oluşturulmasının esas alındığını belirtmektedir.

Davalı Büyükşehir Belediyesi, ilk kademe belediyelerinin birçok alanın planının iptal edilmesi ya da yoğunluk azaltımına gidilmesi yanında Kırcami 'nin imara açılmak istenmesinin çelişkili olduğu şeklindeki davacı iddialarına karşı Büyükşehir Belediyesi sınırlarının çok önemli tarımsal havzaları ve sulanabilir alanları kaplamakta olduğunu, buna karşın Kırcami bölgesinin her ne kadar tarımsal alan niteliğinde olsa dahi alanın içerisinde tarım dışı kullanım alanlarının ortaya çıktığını, imar beklentilerinin arttığı koşullarda, temel kentsel sosyal ve teknik altyapı gereksinimlerinin karşılanmadığını, alanda öngörülen gelişmenin sürdürülebilirlik anlayışı ile çelişmediğini belirtmiştir.

Kurulumuz, alanın tarımsal niteliğinin değiştiğine ilişkin gerekçeleri doğru bulmamıştır. Dava dosyasında sunulan bilgi ve belgelerden, alanın küçük bir bölümünde ortaya çıkan tarım dışı kullanımların tekil örnekler olduğu gözlenmiştir. Diğer yandan, bu konuda denetim sorumluluğu ve yetkisi olan davalı idarenin söz konusu düzensiz yapılaşma örneklerini gerekçe göstermiş olması Kurulumuzca anlamlı bulunmamaktadır. Yine dava dosyasında sunulan bilgi ve belgelerden ve

keşif sırasındaki gözlemlerden hareketle, Kırcami Bölgesinin tarımsal niteliği ve kullanma düzeninin sürdüğü, tarımsal niteliğinde bir değişikliğin olmadığı belirtilmelidir. Alana yönelik rant beklentilerinin, alanın tarımsal kullanımından vazgeçilerek kentsel gelişmeye açılmasının gerekçesi olamayacağı açıktır. Diğer yandan, bu alanı değişik zamanlarda planlama çalışmalarıyla kentsel gelişmeye açma girişimlerinin rant beklentilerini canlı tutmuş olduğu da belirtilmelidir.

Dava konusu plan, Merkez Bölgesinde yoğunlaşma öngörmektedir. Buna karşın Merkez Bölgesindeki yoğunlaşmanın, koruma-kullanma dengesi açısından, dava konusu tarımsal niteliği güçlü Kırcami Bölgesi'nin yapılaşmaya açılması örneğinde görüldüğü üzere, tarımsal alanların korunması açısından bir katkısı da bulunmamaktadır. Merkez Bölgesindeki yoğunlaşmanın bir bölüm gerekçesi, metropoliten alan içinde koruma gerekleri olarak konuluyorsa da, dile getirilen yoğunlaşma kararı, dava konusu yaklaşık Kırcami Bölgesindeki 1500 ha büyüklüğündeki bir alanın tarımsal alan olarak korunmasına yönelik sonuçlar doğurmamaktadır.

İlk kademe belediyelerin, imar planlarıyla öngörülmüş olan abartılı nüfus kabullerinin ve buna uygun imarlı alan arzı sorunu ile ilgili olarak, 1/25 000 ölçekli Nazım İmar Planında konut bölgelerinde emsal düşürerek abartılı nüfus yüklemesi sorunu giderilmeye çalışılmaktadır. Oysa Kurulumuzca, metropoliten alan içinde bu beldelerde emsal yapılaşma koşullarının düşürülmesi, toplam imara açılan alan miktarında bir düşüşe işaret etmemektedir. Bu nedenle, bu yaklaşımın tarımsal alanların korunmasına katkıda bulunduğunu söylemek zordur.

Diğer yandan, yoğunluk azaltımı imarlı alan-korunacak alanlar oranında köklü bir değişiklik anlamına gelmemektedir. Planda ana yaklaşım olarak değerlendirildiğinde, planlama alanındaki nüfus düşürülürken imara açılan alan miktarında bir düşüş öngörülmemektedir. Yeni düzenleme ile, bu kez, metropoliten alanda daha önce ilk kademe belediyelerinin planlama yetkilerinin sonucu olarak daha yaygın bir kentsel gelişme biçimi yerine Merkez Bölgesinde bir yoğunlaşma yanı sıra yeni gelişme alanları öngörülmektedir. Nüfus dağılımının ilk kademe belediyeleri ile Merkez Bölgesi arasında dağılımının yeniden düzenlenmesi dışında alan kullanımı açısından abartılı imar hakları sorunu hala çözümsüz kalmaktadır. Oysa, bu imarlı alan içinde yalnızca imara açılan alanda emsal yapılaşma koşullarının düşürülmesiyle yetinilmemesi, sorunun çözümü açısından yararlı olurdu. Söz konusu imarlı alanın korunduğu ve yalnızca üzerinde öngörülen nüfusun düşürülmesiyle yetinildiği dikkate alındığında, alan kullanımı açısından izlenen yaklaşımın tarımsal alanların korunması açısından katkısı olamamaktadır. Bu yapılamadığı koşulda, daha önce ilk kademe belediyelerince öngörülmüş olan imarlı alanın, kent içinde kalan tarımsal alanların korunması açısından bir olanak olarak değerlendirilmesi daha anlamlı olurdu.

Kuşkusuz burada Kurulumuz yerindelik ilkesine müdahale etmek niyetinde değildir. Ancak, Kurulumuz, dava konusu Kırcami Bölgesinin seçeneğinin bulunmadığı ve metropoliten alanda tarımsal nitelikli önemli bir alanın tüketilmesinde ve kentsel

gelişmeye açılmasında kamu yararı olduğu savlarına, farklı gelişme seçeneklerinin bulunabileceğini anlatmak için söz konusu değerlendirmeleri yapmaktadır.

Dava örneğinde, ne gereğinden fazla gelişmeye açılmış olan imarlı alanda bir küçülme yaratılmakta ne de bu imarlı alanın, Antalya Merkez Bölgesindeki gelişmenin "desantralize" edilebilmesi açısından sunduğu olanaklardan yararlanılmaktadır. Dile getirilen koşullar altında, Kırcami gibi tarımsal niteliği güçlü bir bölgenin, kentsel gelişmeye açılmak istenmesinin ne tür bir kamusal yarara yönelik olduğu sorusu yanıtsız kalmaktadır.

İlk Kademe Belediyeleri içinde imar planlarının dayandığı nüfus dağılımlarında yeni nüfus öngörüleri ile değişiklik yapılan belediyeler:
Kentsel rant beklentilerine karşı tarımsal rantı korumak için, koruma kararlarının tek başına yeterli olamayacağı açıktır. Buna karşın bu yeterli olmayış, tarımsal alanın kentsel gelişmeye açılmasını gerektirmemektedir. Kent içindeki tarımsal alanların korunması, bu alanlarda tarımsal verimin artırılmasına yönelik düzenleme ve planlamalarla desteklenmediğinde koruma kararlarının zaman içinde terk edilmesi gündeme gelebilmekte ve farklı gelişme beklentilerini tetikleyebilmektedir.

Kent içindeki tarımsal alanlara uygun alt yapı ve donatı olanaklarının geliştirilmesi vb konular turizm yanı sıra tarımsal yönü güçlü olan Antalya kenti için özel öneme sahiptir.
Diğer yandan, her ne kadar dava konusu yapılmamışsa da Kurulumuz, davalı idare tarafından dava konusu ile ilişkilendirilen Merkez Bölgesindeki ihtisaslaşma ve yoğunlaşma kararları ile ilgili olarak belirli düşünceler geliştirmiştir.

Dünya kentlerinde, kent merkezlerinde aşırı ihtisaslaşmanın yaratttığı sorunlara çözüm olarak kent merkezlerinde karma kullanım, çok-işlevlilik gibi çözümler üretilirken ve geliştirilirken, Antalya Metropoliten Alanda Merkez Bölgesinde 190 ha.lık bir konut bölgesini gerektirecek ve konut nüfusunun bu oranda yer değiştirmesini gerektirecek kapsamlı bir dönüşümün ve ihtisaslaşmanın tartışılması ve doğru irdelenmesi gerekir.

Diğer yandan dava konusu 1/25 000 ölçekli planda kent merkezinde yoğunlaşma getiren bir ihtisaslaşma öngörülmektedir. Bu kent merkezinde MİA olarak ayrılan bölgede dönüşüme işaret etmektedir. Bu dönüşümün sonucu gerektirdiği konut gereksinmesi Kırcami Bölgesinin tarımsal kullanımdan kentsel kullanıma dönüştürülmesiyle karşılanmaya çalışılmaktadır. Buna karşın, dava konusu plan raporunda,

• Kentteki konut stokuna, kent merkezindeki konut stokuna ilişkin herhangi bir veri yer
almamaktadır.
Bir başka deyişle, dile getirilen dönüşümün gerektirdiği yeni konut alanı gereksinmesi kentteki konut stokuna ilişkin herhangi bir incelemeye ya da veriye dayanmamaktadır.
• Kent Merkez Bölgesinde sağlanan ek imar haklarının yarattığı yapılı alan stokuna

değinilmemektedir.
Bütün bunlara ilişkin verilere dayanmaksızın bir gereksinme tariflenmesi ve bu gereksinmenin tarımsal niteliği güçlü bir bölgede sağlanmaya çalışılması Kurulumuzca kamusal yararlar açısında doğru bulunmamaktadır.
Hizmet sunumu ve teknik alt yapı sürekliliği gerekçesi Kurulumuzca anlamlı bulunmamaktadır.

Alanın büyüklüğü, Düden Çayı Havzası ve Havalimanı gibi açık alan kullanımları ve sistemiyle bütünleşen konumu ve sürekliliği dikkate alındığında, kentsel alan ile yakınlık kadar dile getirilen açık alanlar sisteminin parçası olması daha güçlü bir özellik olarak ayırt edilmektedir.
Doğru yaklaşım, kentsel gelişme alanları ile yan yana onlarla bütünleşen konumda yer alan koruma alanlarının varlığının zorunlu olarak ortaya çıkardığı kent üst biçimini akılcı (rasyonel) hale getirecek bir hizmet sunum ve teknik altyapı düzeninin yaratılması olacaktır.

Dava konusu planın 1/100 000 ölçekli Antalya-Burdur Çevre Düzeni Planına uygun olmadığı savı ile ilgili olarak davalı Büyükşehir Belediyesi, Çevre ve Orman Bakanlığı'nın 1/50 000 ölçekli Stratejik Fiziki Planın 1/100 000 ölçekli Çevre Düzeni Planına uygun olduğunu belirten 6.2.2008 tarih ve 984 sayılı yazısına gönderme yapmaktadır.

Öncelikle belirtilmelidir ki, dava konusu 8.2.2008 tarih 101 sayılı kararıyla onaylı Antalya 1/50000 ölçekli II. Etap Stratejik Fiziki Plan değişikliği ile Kırcami Bölgesi "kentsel gelişme alanı" kullanımına ayrılmıştır. Oysa, 1/100 000 ölçekli Antalya-Burdur Çevre Düzeni Planında dava konusu bölge "tarımsal alan" kullanımı ile korunmaktadır. Özetle dava konusu planın sonradan iptal edilen 1/100 000 ölçekli Çevre Düzeni Planına uygun olmadığı savı doğrudur.

Diğer yandan, 24.2.2008 tarihinde Antalya İl Özel İdaresi'nin Antalya Büyükşehir Belediye Başkanlığı'na yazısında, "İl Genel Meclisince 8.2.2008 tarih ve 101 sayılı kararı ile onaylanan II. Etap 1/50 000 ölçekli Çevre Düzeni Planının, Valilik Makamının 15.11.2007 tarihli oluru ile oluşturulan komisyon tarafından incelenmesi sonucunda II. Etap 1/50 000 ölçekte Çevre Düzeni Planında yapılan değişikliklerin 1/100 000 ölçekli Antalya-Burdur Çevre Düzeni Planına işlenmesiyle uygun bulunduğu" belirtilmiştir.

Bilirkişi Kurulumuz, anılan yazıdaki, alt ölçekli planda yapılan değişikliklerin üst ölçekli planan işlenmesiyle uygun bulunmasına anlam verememiştir. Kurulumuz, 1500 ha gibi önemli büyüklükteki bir bölgenin gelişmeye açılması konusundaki alt ve üst ölçekli planlar arasındaki tutarsızlığı, basitçe alt ve üst ölçekli planlar arasındaki uyumsuzlukların giderilmesi, geri beslemeler yapılarak planlar arasında tutarlığın sağlanması vb kapsamda görülemeyeceği görüşündedir. Diğer yandan bu bölge, korunacak tarım alanı olması yanı sıra oldukça geniş bir açık alanlar sisteminin bir parçasıdır.

SONUÇ

Antalya Büyükşehir Belediyesi Meclisinin 18.1.1008 tarihli 58 sayılı kararı doğrultusunda onaylanan Antalya 1/50000 ölçekli Çevre Düzeni Planını ile bu planı onaylayan Antalya İl Genel Meclisi'nin 8.2.2008 tarih 101 sayılı kararının ve Antalya Büyükşehir Meclisi'nce 15.2.2008 tarihinde 84 sayılı kararı ile onaylanan 1/25000 lik Nazım İmar Planının iptali istemiyle açılan davada Bilirkişi Kurulumuz aşağıdaki sonuç görüşlerine ulaşmıştır.

Dava konusu planlama kararları ile gelişmeye açılmak istenen Kırcami Bölgesiyle ilgili olarak Kurulumuz dava konusu planlama kararını, A) koruma gereklilikleri ile B) kentsel gelişme dinamikleri, büyüme eğilimleri ve kentsel üst biçim ilişkisi kapsamında değerlendirmiştir. Kurulumuz, her iki konunun, koruma-gelişme arasında sağlıklı bir ilişkinin yaratılması ve koruma-kullanma dengelerinin kurulması açısından birbirleriyle ilişkili olarak değerlendirilmesinin kamusal yararlara ulaşılması açısından gerekli olduğunu düşünmektedir.

A) Koruma gereklilikleri,

i)Tarım topraklarının korunması açısından,
•Kırcami sahasındaki alanın tamamına yakınının sulanan, mutlak tarım alanı olduğu, sulama suyunun olmasına rağmen mutlak tarım toprağının sulanmaması, ekilip biçilmemesi, tarım yapılmayıp boş bırakılması, o toprak parçasının doğal yapısının göz ardı edilmesini gerektirmeyeceğini,
•Bugünkü haliyle kentsel kullanma alanları ile çevrilmiş olan dava konusu Kırcami bölgesi, 5403 sayılı "Toprak Koruma ve Arazi Kullanımı Kanunu"nun 3. maddesine uygun olarak "Sulu Tarım Arazisi" niteliğinde olduğu,
• Kırcami alanındaki dava ve inceleme konusu arazinin "Mutlak Tarım Arazisi" niteliğinde olduğu,
Yasaya göre dava konusu alanın tarım dışı amaçlarla kullanılmasının mümkün olmadığı, burada tarım dışı amaçlarla kullanımı için gereken koşulların oluşmadığı,
•dava konusu Planlama Raporunda dile getirilen ve hatta "önlem alınmadığı takdirde kent planlamasında ve yönetiminde sosyal bir huzursuzluk kaynağı olacağı ileri sürülen, iki farklı toplumsal ve kültürel bünyenin varlığı sorununun, tarımsal alanların korunması yaklaşımından farklı bir şey olduğu ve tarımsal alanların yapılaşmaya açılması için gerekçe yapılamayacağı,

ii) Ekolojik koridorun sürekliliği ve yakın çevredeki açık alanlar sisteminin korunması açısından,
•dava konusu Kırcami Bölgesinin, her ne kadar kıyıdaki kimi gelişmeler ile kesintiye uğramış olsa bile, Toroslardan gelen Düden Çayı ve çevresindeki ekolojik koridorun ve hava limanı da dahil olmak üzere bölgedeki açık alan sisteminin deniz yönünde açılan bir parçası olduğu ve korunmasında yarar olduğu,
•bu bölgede tarımsal alanların yanı sıra Düden Çayı boyunca açık alan sistemlerinin sürdürülmesinin, metropoliten alan içinde açık alanlar sisteminin oluşumuna katkısı ve belirli düzeyde de ekolojik onarım ve koruma-geliştirme açısından sunacağı olanakların yadsınamayacağı, üzerindeki tarımsal üretim nedeniyle yapılaşmamış olan Kırcami Bölgesinin,

Akdeniz'e doğru ekolojik sürekliliği ve bütünlüğü bulunan Düden Çayı Havzasının sürekliliğine katkıda bulunduğu ve onun önemli bir parçası olduğu,

iii) Kentsel riskler açısından

•Geçmiş planlama çalışmalarından başlayarak, Kırcami Bölgesi'nin, Altınova, Pınarlı,
Yeşilova Bölgelerini de kapsayan ve Düden Çayı Havzası içinde yer alan bölgenin tarımsal alan-açık alan kullanımının sürdürüldüğü, tarımsal alan kullanımı ve tarımsal alanların korunması ve Düden Çayı boyunca açık alan sistemlerinin sürdürülmesi yanı sıra Kırcami Bölgesinin yapılaşmaya açılmamasının, Hava Limanındaki, gerek uçuş güvenliği gerekse yerdeki güvenlik açısından önemli bir olanak olduğu, bu olanağın, bölgenin yapılaşmaya açılmasıyla yitirileceği, bunun da, giderek işlevi ve stratejik önemi artan Hava Limanını zaman içinde her yönüyle kısıtlamasının beklenmesi gerektiği, bu nedenle, Kırcami Bölgesinde öngörülen yapılaşmanın Havalimanı açısından ilişkisini göz ardı etme olanağı bulunmadığı,
•risk etkenlerinin yanı sıra dava konusu yapılaşma kararı ile Hava Limanının doğal olarak yarattığı ve yaratacağı çevresel kirlilikle (hava kirliliği, gürültü kirliliği vb) doğrudan karşı karşıya kalması kaçınılmaz olan bir kent çevresinin yaratılacağı, bölgenin üzerindeki tarımsal kullanımın sonucu olarak düşük yoğunluğu nedeniyle dile getirilen kirlilikten toplam etkilenme düzeyinin kaçınılmaz olarak daha düşük olduğu, dava konusu plan ile bölgede öngörülen 90 Bin kişilik nüfusun doğrudan kirlilikten etkilenmesinin kaçınılmaz olduğu,
•dava konusu Kırcami Bölgesini de içine alan oldukça geniş bir açık alan sisteminin/koridorunun varlığı Hava Limanı çevresinde oluşan kirliliğin belirli noktalarda sıkışmasını ve toplanmasını engellediği, özetle, kent ve Hava Limanı arasında kesintisiz bir kentsel gelişme bölgesi yaratılmasının, çevresel etkiler, kentsel riskler açısından sakıncalı olacağı, çevresel etkiler ve kentsel riskler açısından, dava konusu Kırcami Bölgesi'nin, tarım dışı amaçla kullanılmasında kamu yararı olmadığı,

B) Kentsel gelişme dinamikleri, büyüme eğilimleri ve kentsel üst biçim ilişkisi açısından,

•alanın tarımsal niteliğinin değiştiğine ilişkin gerekçelerin doğru olmadığı, alanın küçük bir bölümünde ortaya çıkan tarım dışı kullanımların tekil örnekler olduğu, bu konuda denetim sorumluluğu ve yetkisi olan davalı idarenin söz konusu düzensiz yapılaşma örneklerini gerekçe göstermiş olmasının anlamlı olmadığı, Kırcami Bölgesinin tarımsal niteliği ve kullanma düzeninin sürdüğü, alana yönelik rant beklentilerinin, alanın tarımsal kullanımından vazgeçilerek kentsel gelişmeye açılmasının gerekçesi olamayacağı, bu alanı değişik zamanlarda planlama çalışmalarıyla kentsel gelişmeye açma girişimlerinin rant beklentilerini canlı tutmuş olduğu,
•dava konusu Kırcami Bölgesinin seçeneğinin bulunmadığı ve metropoliten alanda tarımsal nitelikli
önemli bir alanın tüketilmesinde ve kentsel gelişmeye açılmasında kamu yararı olduğu savlarına karşın, farklı gelişme seçeneklerinin bulunabileceğini,
•dava örneğinde, ne gereğinden fazla gelişmeye açılmış olan imarlı alanda bir küçülme yaratılmakta ne de bu imarlı alanın, Antalya Merkez Bölgesindeki

gelişmenin “desantralize” edilebilmesi açısından sunduğu olanaklardan yararlanılmakta olduğu, dile getirilen koşullar altında, Kırcami gibi tarımsal niteliği güçlü bir bölgenin, kentsel gelişmeye açılmak istenmesinin ne tür bir kamusal yarara yönelik olduğu sorusunun yanıtsız kaldığı,

•dava konusu 1/25 000 ölçekli planın kent merkezinde MİA olarak ayrılan bölgede dönüşüme işaret etmekte olduğu, bu dönüşümün sonucu gerektirdiği konut gereksinmesinin Kırcami Bölgesinin tarımsal kullanımdan kentsel kullanıma dönüştürülmesiyle karşılanmaya çalışılmakta olduğu, buna karşın, dava konusu plan raporunda, kentteki konut stokuna, kent merkezindeki konut stokuna ilişkin herhangi bir verinin yer almamasının, bir başka deyişle, dile getirilen dönüşümün gerektirdiği yeni konut alanı gereksinmesinin, kentteki konut stokuna ilişkin herhangi bir incelemeye ya da veriye dayanmamasının ve kent Merkez Bölgesinde sağlanan ek imar haklarının yarattığı yapılı alan stokuna değinilmemesinin önemli bir eksiklik olduğu, bunlar yapılmaksızın yeni konut gereksinmesi tariflenmesi ve bu gereksinmenin tarımsal niteliği güçlü bir bölgede sağlanmaya çalışılmasının kamusal yararlar açısında doğru olmadığı,

•Hizmet sunumu ve teknik alt yapı sürekliliği gerekçesi ile ilgili olarak, doğru yaklaşımın, kentsel gelişme alanları ile yan yana onlarla bütünleşen konumda yer alan koruma alanlarının varlığının zorunlu olarak ortaya çıkardığı kent üst biçimini akılcı (rasyonel) hale getirecek bir hizmet sunum ve teknik altyapı düzeninin yaratılması olacağı sonuç görüşlerine ulaşmıştır.

Saygıyla Mahkemenize sunulur.

Prof. Dr. Durak Taraklı

Doç.Dr. Baykan Günay

Doç.Dr.Çağatay Keskinok

APPENDIX D

CURRICULUM VITAE

PERSONAL INFORMATION

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MS	METU City and Regional Planning	2007
BS	KTÜ Landscape Architecture	2001
High School	Trabzon Kanuni Anadolu Lisesi	1995

WORK EXPERIENCE

Year	Place	Enrollment
2002- Present	METU City and Regional Planning	Research Asistant

FOREIGN LANGUAGES

English (Advanced)

PUBLICATIONS

1. Acar, C., Demirbaş, E., Dinçer, P., Acar, H. 2003. *Anlamsal Farklılaşım Tekniğinin Bitki Kompozisyonu Örneklerinde Değerlendirilmesi.* Süleyman Demirel Üniversitesi Orman Fakültesi Dergisi, Cilt 1. Sayfa No:15-28

HOBBIES

Photography