

Ankara - Çankaya District Evciler Neighborhood Landscape Character Analysis

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Özet– Kırsal yerleşimler farklı uygarlıkların kültürel izleri ve çeşitli doğal kaynaklar ile biçimlenerek farklı peyzaj karakterlerine ve özgün kimliklere sahip olmaktadır. Günümüzde kentsel alanlardaki insanların turizm isteği, yeni yerleşim alanları arayışı ve doğal alanlara yönelimi gibi ihtiyaçları karşılama açısından kırsal yerleşimler giderek artan baskı altındadır. Bunun yanı sıra kentsel alanların hem fiziksel hem ekonomik olarak gelişimi çevresinde bulunan kırsal yerleşimleri değiştirmeye zorlamaktadır. Kentsel alanlar ve kırsal alanlar elbette gelişim göstermelidir yalnız bu alanların sahip olduğu peyzaj karakteri dikkate alınmadan yapılan gelişim planları ve uygulamaları kültürel ve ekolojik olarak bu yerleşimlere zarar vermektedir.

Yerel ölçekte kırsal yerleşim peyzaj karakteristiği çalışmalarına katkı sağlamak amacı ile bu çalışmada, Ankara - Çankaya ilçesi Evciler Mahallesi'nin sahip olduğu peyzaj karakteri incelenmiştir ve kırsal peyzaj karakterinin değerlendirilmesi için öneriler sunulmuştur. Bu amaçla; yerleşimde incelemeler yapılmış, peyzaj karakter tanımlanması Coğrafi Bilgi Sistemleri (CBS) aracılığı ile haritalanmıştır ve peyzaj karakterinin korunmasına yönelik öneriler getirilmiştir.

Yerleşimin bulunduğu kırsal alanda peyzaj karakter tipleri, bölge ve alt bölge ölçeğinde veri ayrıntısına sahip peyzaj bileşenlerinin çakıştırılmasıyla belirlenmiştir. Temel çakıştırma katmanları olarak; jeolojik yapı, fizyografya, peyzaj deseni ve arazi örtüsü/arazi kullanımı haritaları kullanılmıştır. Kırsal ve kentsel alanlar için fiziki gelişimi esas oluşturacak tasarım rehberleri dünyada giderek daha fazla önem kazanmaktadır. Kırsal alan ve yerleşimlerin peyzaj karakterine dayandırılmadan hazırlanan tasarım rehberleri, doğal ve kültürel özelliklerin korunmasında ve gelecek nesillere aktarımında temel veriden noksan kalacaktır [1].

Anahtar Kelimeler– Kırsal peyzaj, kırsal yerleşim, peyzaj karakteri, özgün kimlik, peyzaj planlama

Abstract – Rural settlements are shaped by cultural traces of different civilizations and various natural resources and have different landscapes and original identities. Today, rural settlements are under increasing pressure to meet the needs of people in urban areas such as tourism demand, search for new settlement areas and orientation to natural areas. In addition, both the physical and economic development of urban areas is forced to change the rural settlements around. Urban areas and rural areas should, of course, show development, and development plans and practices without considering the landscape character of these areas are culturally and ecologically damaging to these settlements.

In this study, the landscape character of Evciler District of Ankara-Çankaya district has been examined in order to contribute to the studies of rural landscape landscape in local scale and suggestions for evaluation of rural landscape character are presented. For this purpose; The site was mapped by Geographical Information Systems (GIS) and suggestions were made to protect the landscape character.

In the rural area where the settlement is located, the landscape character types are determined by overlapping the landscape components with the data detail in the region and sub-region. As the basic registration layers; geological structure, physiography, landscape pattern and land cover / land use maps are used. Design guides that will form the basis of physical development for rural and urban areas are gaining more and more importance in the world. The design guidelines prepared without relying on the landscape character of rural areas and settlements will be deficient in the basic data for the preservation of natural and cultural characteristics and for transfer to future generations [1].

Keywords– Rural landscape, rural settlement, landscape character, original identity, landscape planning

I. INTRODUCTION

Due to the unique identity of the rural settlements, national planning studies need rural planning, rural and urban planning, and rural development. Therefore, the analysis and evaluation of rural settlement characteristics in national spatial planning studies are among the important areas of action.

The main aim of this study is to determine the natural, cultural and visual landscape character of Evciler District of Ankara Province and to produce the suggestions for the development of these characteristics. Rural settlements are habitats that provide information on the identity and potential of the region and the region. Therefore, settlement characteristics should be evaluated together with landscape character types.

Settlements located on the periphery of the city have the risk of losing their original landscape character by zoning practices. In order to prevent this, rural settlement inventory and analysis should be carried out taking into account the natural, cultural and visual landscape characteristics. Landscape protection strategies have been developed by determining the landscape character on the rural settlement of Ankara-Çankaya Evciler.

II. MATERIALS AND METHOD

In the south of Çankaya, the site of Evciler, Çankaya Municipality, was chosen as the study area. Although it is located just to the south of Çankaya and it is located right next to the urban texture, Evciler District has rural characteristics in terms of settlement and transportation conditions.

For landscape character analysis, the maps taken from the Ministry of National Defense Map General Command and the projects taken by Çankaya Municipality between 2010-2014 were used. Data used for landscape character analysis; 1/25000 land use map, 1/25000 map of mera areas, 1/25000 map of forest areas, 1/25000 efficiency map, 1/25000 geology map, 1/25000 geomorphology map and climate information.

1/25 000 topographic maps for natural and cultural landscape character analysis of rural settlement ArcGIS 10.2. program has been digitized into digitized GIS (Geographic Information Systems) environment and the basic map is created. Based on the base map; land use capability map, agricultural productivity status map, topography map, geology map, map of farmland, pasture map and map of natural vegetation, roads, borders, dams and rivers, existing land use maps and land model of the research area have been formed.

III. RESULTS

A landscape character was defined in the vicinity of the region and the sub-region in the Evciler rural settlement landscape.

In determining the character of landscaping, it has determined the basic layers that should be evaluated for a landscape classification study on a national scale. These [2]:

- A. Climate characteristics
- B. Geological structure
- C. Jeomorfoğrafya to
- D. Landscape pattern

A. Climate Characteristics of Rural Settlement

Evciler settlement in terms of climate and vegetation, South (Bala) and the east (Kırıkkale) steppe, north (Çubuk-Kızılcahamam) and west (Beynam) is a makinal transition area between the woodland [3] In the region, the summers are hot and dry, winters are cold and snowy, continental climate prevails. Precipitation, usually in winter and spring months, is around 340 mm per year. The most rainy month is May (50mm), the driest month is August (8mm). The maximum freezing depth can be slightly over 50 cm in January and February, but cannot reach 100cm [4]. In addition, in the survey study, it was concluded that the neighborhood was below the snow from November to the end of March and the winter months were long.

B. Geological Structure of Rural Settlement

Çankaya Municipality carried out 1 / 25.000 scale geological maps and investigations in order to be used in the processes related to healthy planning in the settlement and aimed to determine the problems that the geological structure offered in the field and the problems that can be created in planning and applications. Within the scope of the study, revision of existing geological maps with 1 / 25.000 scale, determination of tectonic and hydro-geological features, forecasting of geological disadvantageous areas in zoning and road-infrastructure issues, investigation of seismicity and investigation of the geothermal facilities of the area are considered in the forefront.

When the geology project carried out by Çankaya Municipality in Evciler settlement is examined; In general geology, Miocene volcanism is found around Evciler settlement. In addition, Bozdağ Basalt is observed as widespread cover units around the study area. Hydrogeological sources in the region are generally determined as cracks and contact sources. It is among the information that comes from the joints of the volcanic rocks and permian limestones, which form the northeast-southwest trending hills of the area, from the joint-fracture-cracks-cavities and contacts of various sizes. These sources of leakage are concentrated in some areas. These springs, which do not have a flow rate of 0.5lt / s, are fed into a large number of fountains as they feed small streams in the study area, and these streams and fountains are thought to facilitate the common pasture livestock. There is no deep water well in the area. However, the main aquifers in the area are the Permian limestones with multiple fractures and cavities, the volcanics and granular alluviums with distinct and three-fold joint-fracture-crack systems. From these formations, it is possible

to supply groundwater at various flow rates by opening deep wells if desired [5].

The volcanics and volcanic-sediments, which form high hills and steep slopes in the vicinity of Evciler Neighborhood, are basaltic, andesitic and dacitic. It is stated that it has three-way, distinct discontinuity systems, especially the cracks in the vertical direction and cracks and joint systems of tectonic origin.

It is seen that these discontinuities will lead to the problem of rock (block) drop in the road-foundation-stone quarry excavations opened in the rock, and the surface water descending in these areas will cause floods in village settlements and valley bases, landslides on slopes and debris flows on slopes. Figure 1 shows geological data of Evciler quarter on the map.

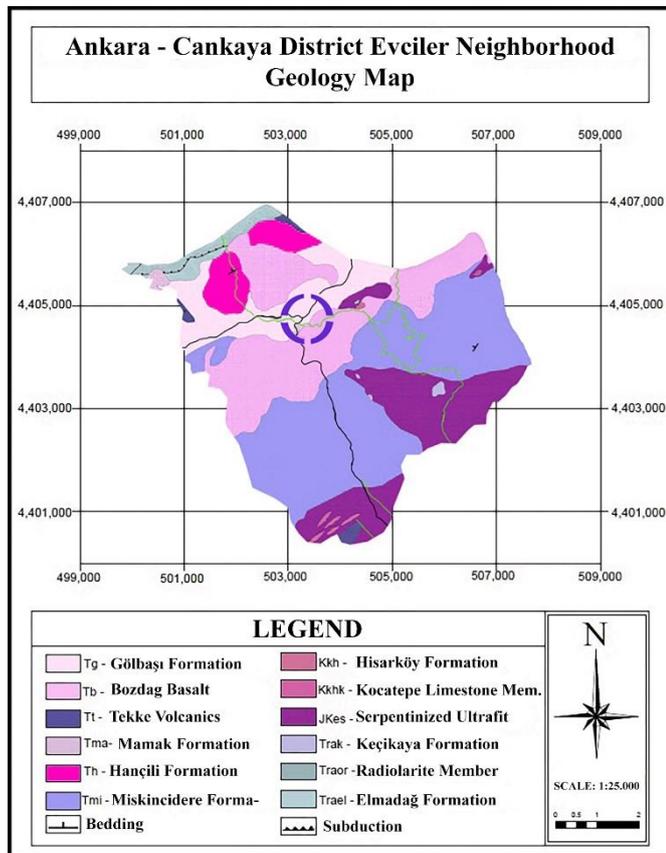


Fig.1 Geological Map (Revised from the original) [5]

C. Geomorphology Characteristics of Rural Settlement

The topographic structure is formed by Elmadag, which extends in the southwest-northeast direction, and the highest point is Elmadag north of Kömürcü (1848m) and the lowest point is Gölyeri Mevkiidir (950m) to the south of Akarlar. Geomorphologically, the most prominent units in the study area are High Hilly Mountainous Land, Hilly Terrain, Slopes and Ridges, Valleys and High Plates. The area is mountainous and bumpy (Fig.2) [4].

The area where the villages are connected to Çankaya Municipality is located within the 3rd degree earthquake zone. Ankara City and Çankaya have never been the center of a major earthquake, either in history or in the recent past, due to its sismo-tectonic position. However, in the western

extension of the North Anatolian Fault Zone (NAFZ) located 120 km to the north; It was significantly affected by the earthquakes formed by the Kırşehir-Keskin Active Fault Zone (KKAFZ) and the Salt Lake Fault (TGF), 90 km to the southeast [4].

While having no earthquake risk, Evciler Mahallesi has an earthquake risk and is willing to resettlement because it is affected by previous earthquakes and other buildings. Resettlement possibilities should be investigated. A modern agricultural village can be established with resettlement [4]. In the zoning applications in the region, the geotechnical conditions of the ground on which the building will be built for each structure should be carefully evaluated.

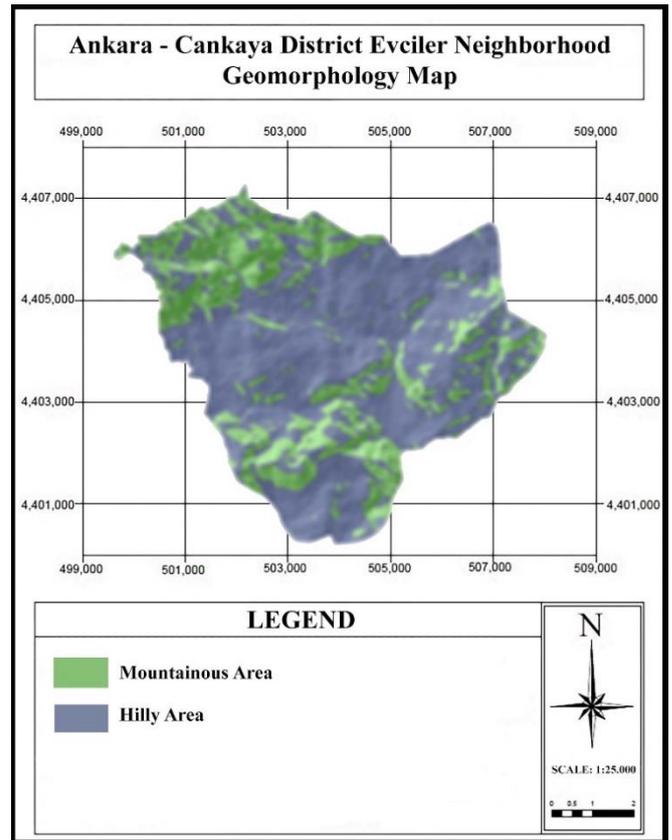


Fig. 2 Geomorphology Map (Two classes are created by reducing the height groups at the settlement boundary, Original 2016).

D. Land use / pattern of the rural settlement (CORINE)

CORINE (Coordination of Information on the Environment) to examine changes in land use in the study. 2010 land cover classification system and its data have been evaluated and adapted to the working area. Information on the types of vegetation can be found in CORINE 2010 data in Figure 3.

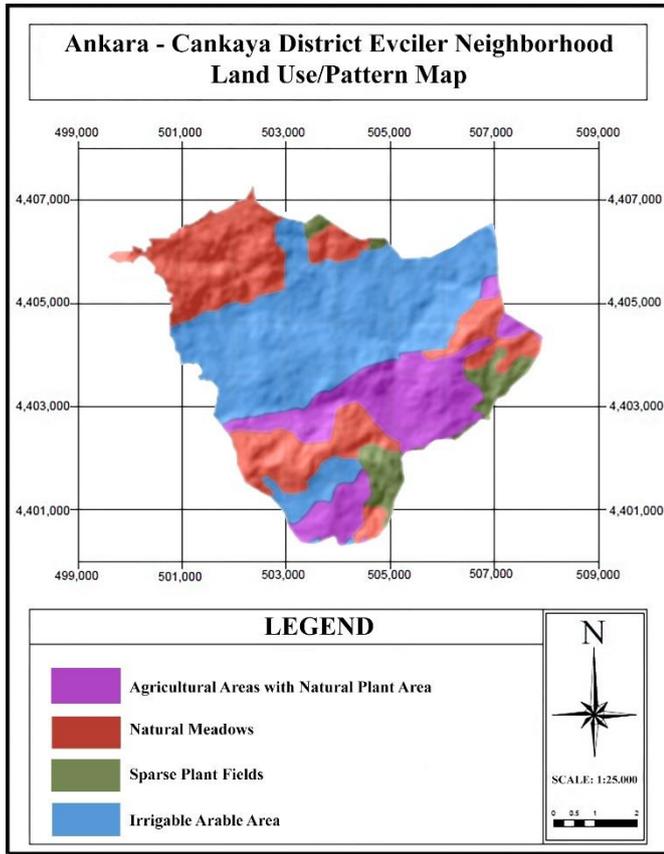


Fig. 3. CORINE 2010 (Global Forest Change/Google Crisis Map).

IV. DISCUSSION/ CONCLUSION

In the rural area where the settlement is located, landscape character types are determined by overlapping of landscape components with data detail in the region and sub-region scale (Figure 4).

Although the local landscape character characteristic is different in the regional scale, it is located in a closed landscape when it is examined in terms of topographic mobility. Landscape character typing could not be achieved at the sub-region scale because of the lack of detailed map (climate map, 1/5000) in any institution belonging to rural settlement.

The landscape character of the settlement is the rural landscape located on the slopes in the valley. Future planning and design studies should be evaluated considering this landscape character type.

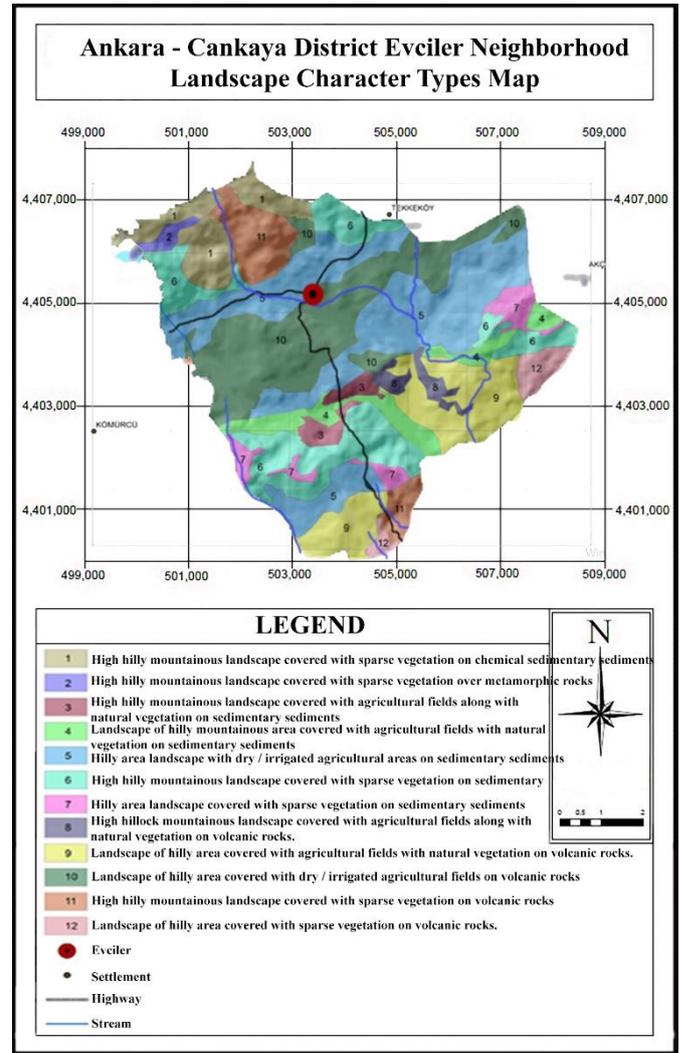


Fig. 4. Types of Landscape Characters (Original, 2016).

It is thought that what kind of transformations will be made in order to identify the problematic issues in rural settlement and make it a livable and healthy area. It is important for the character's value to be made in accordance with the landscape character we defined. In the rural areas, dwellings, trees, warehouses, village mansion, natural vegetation, existing water areas and production techniques should be done in parallel with the landscape character and practices contrary to the identity and texture of the region should be avoided.

According to the results of collective oral interviews and resources [6] for Evciler Neighborhood; main livelihood is herbal production and it is followed immediately by animal production. In animal production, more cattle and ovine livestock farming is carried out. In dry crops, dry farming is done more. Vegetable products such as chickpeas, barley, wheat and oats are grown. Since rural areas have limited tourism areas, a development policy based on agriculture and animal husbandry should be followed.

Considering the potential of the area in terms of rural tourism, the applicability of one of these bicycle paths and resting points, which are one of them, were discussed and it was thought that these routes could be formed on the transportation routes to the Evciler neighborhood.

Cultural landscape and heritage values should be design guidelines, in this context landscape character analysis and evaluation is an important resource.

In this study, the rural characterization and evaluation of the rural settlement landscape analysis can be the basis of design guidelines.

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