



**LAND ADMINISTRATIVE PROBLEMS RESULTED FROM  
ADMINISTRATIVE BOUNDARIES IN TURKISH CADASTRAL SYSTEM**

**Okan YILDIZ\*, Cemal BIYIK**

*Karadeniz Technical University, Faculty of Engineering, Geomatics Engineering*

**Received/Geliş: 03.02.2014 Revised/Düzelme: 10.03.2015 Accepted/Kabul: 18.03.2015**

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**ABSTRACT**

Administrative boundaries, which determine the authority and responsibility areas of institutions, is a term that arise from the need for the easier, productive and more successful management of a country. Administrative boundaries have been recorded by a system based on written documents. These documents have frequently been used to find solutions to the problem of administrative boundaries, which is one of the most severe land management problems in Turkey. This problem usually occurs while determining the boundaries of province or town along with dividing a developing and growing village, establishing or removing villages, and mostly while giving rights to the use of lands, such as a forest and pasture, that are under the authority of the state. In addition, administrative boundaries directly affect the cadastral activities, which determine their study areas according to these administrative boundaries. Instead of being solved by the related administrative units, such as the Ministry of Interior, governorates, district governorships, province and local councils, these problems tended to be solved on the cadastre when cadastral works begin. Because of these reasons, the Village legislation enacted in 1924 is insufficient to fit into today's conditions. These deficiencies have indirectly affected cadastral works and sometimes caused some areas to be excluded from working areas and sometimes led to the cessation of the cadastral works. This affects the cadastral work indirectly. From time to time it leads to a stop.

**Keywords:** Cadastre, land administrative, administrative boundary.

**TÜRK KADASTRO SİSTEMİ'NDE İDARİ SINIRLARDAN KAYNAKLANAN ARAZİ İDARESİ  
PROBLEMLERİ**

**ÖZET**

Yönetim birimlerinin, kurum ve kuruluşların yetki, görev ve sorumluluk alanlarını belirleyen idari sınırlar, bir ülkenin kolay, verimli ve daha başarılı yönetilmesi ihtiyacından ortaya çıkmış bir kavramdır. Türkiye'de en önemli arazi yönetimi sorunlarından birisi olan idari sınır problemlerinde –yazılı olarak arşivlenen- bu belgelerden yararlanılmaktadır. Bu sorun genel olarak, il ve ilçe sınırlarının tespitinde, gelişen ve büyüyen köylerin bölünmesinde, köy kurma ve köy kaldırma işlemlerinde, orman ve mera gibi devletin tasarrufunda bulunan alanların kullanım hakkının verilmesinde yoğun bir şekilde karşımıza çıkmaktadır. Bunun yanı sıra çalışma alanını bu sınırlara göre belirleyen kadastro faaliyetlerini de doğrudan etkilemektedir. İdari sınırlarla ilişkili problemler İçişleri Bakanlığı, valilikler, kaymakamlıklar, yerel meclisler vb kurumlar tarafından çözülmek yerine, kadastro çalışmaları sırasında kadastro üzerinden çözülmeye çalışılmaktadır. Bu durum kadastro çalışmalarını dolaylı yoldan etkilemektedir. Zaman zaman durmasına yol açmaktadır.

**Anahtar Sözcükler:** Kadastro, arazi idaresi, idari sınır.

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\* Corresponding Author/Sorumlu Yazar: e-mail/e-ileti: okan.yildiz@ktu.edu.tr, tel: (462) 377 27 24

## 1. INTRODUCTION

Land administration defined as the “Process of regulating land and property development, the use and conservation of land, gathering of revenues from land through sales, leasing, and taxation, and resolving of conflicts concerning the ownership and use of the land”[1]. In relation to the land administration, a land object defined as a concept that defines phenomena, rights, or restrictions that are related to a fixed area or point of the surface of the earth.

Examples of legal land objects are:

- private property parcels;
- areas where traditional rights exist;
- administrative units, such as countries, states, districts and municipalities;
- zones for the protection of water, nature, noise, and pollution;
- land use zones; and
- areas where the exploitation of natural resources is allowed [2].

Administrative boundaries are the most important component of land administration regarding a defined land object. This land object is directly related to cadastral works in Turkey. Cadastral works in Turkey have been performed based on administrative boundaries. Because administrative boundaries have not been precisely determined after the initiation of cadastral works, some problems have arisen due to such administrative boundaries.

The inadequacy of administrative boundaries is a serious problem in the analysis of social, environmental, economic data and cadastral works. Around the world, administrative boundaries have been structured in an uncoordinated manner, limiting data exchange and integration between organizations. Due to the lack of coordination between boundary systems, current technologies used for analyzing spatial data have not achieved their full potential. A review of the current literature reveals that, until now, little has been done to solve this problem [3].

The Republic of Turkey was founded in 1920. In the period that followed the founding, there were many reforms, including Cadastre, which started on a small scale in 1924. To date, cadastral works have been performed under different regulations and with various technological tools. The first national cadastral target was specified in the ‘First Five Year Development Plan’ in 1963; the Turkish cadastral works were planned to be completed within twenty years [4,5,6]. Currently, this plan has achieved nearly 99%.

If the administrative boundaries are not determined correctly, confusion can be inevitable among the Judicial Institutions and among the administrative units as well. The boundaries and owners of parcels were determined in the scope of those cadastre works. However, some objections to the cadastre works and title registrations have been raised, and some lawsuits have been filed in the courts against those registrations. The number of lawsuits in this context is approximately 5000 per year in Turkey [7].

A number of lawsuits filed against land ownership are based on the administrative boundaries. Boundaries that determine the authority and responsibility areas of administrative units, including institutions and organizations, are called ‘administrative boundaries’. “Administrative boundaries” is a term that was introduced to address the need to manage a country easier, productively and more successfully.

When examining the administrative structure in Turkey, it is seen that it is formed by units of province, towns, municipalities and also villages. In total, there are currently 81 province, 893 towns, 3234 municipalities and 35170 villages [8]. At this point, provinces are the largest local administrative units of the main administration in urban areas. The smallest local dwelling units that have legal entities at the same time are villages. Legislation directly or indirectly, in terms of content, related to the administrative boundaries are presented in Table 1.

**Table 1.** Current legislations on administrative boundaries in Turkey [9].

<b>Legislation Name</b>	<b>Date of statute</b>
Village law (Law No. 442)	1924
Province administrative law (Law No. 5442)	1949
Municipality Law (Law No. 5393)	2005
Law of the management of megacity municipalities (Law No.3402)	2004
Special provincial administration Law (Law No. 5302)	2005
Cadastrre law (Law No. 3402)	1987
Forestry Law (Law No. 6831)	1956
Pasture law (Law No. 4342)	1998
Regulation about border dispute, territorial disparity and unification and village establishment and removal	1988
Regulation on the determination of cadastral working area	1987

Villages have significant roles in the formation of administrative boundaries. The determination of the village boundaries contributes to the determination of the boundaries of towns and provinces. The boundaries of the smallest administrative units, villages, were determined based on the village law dated 1924. Works conducted according to this legislation constitutes a significant part of the administrative boundaries of Turkey. Today, the administrative boundaries of villages, which were determined based on the village legislation that was enacted based on the conditions and the technical possibilities of 90 years back, have resulted in many administrative boundaries problems. In this respect, it was drawn attention to the fact that administrative boundary disputes, territorial disparity and unifications in addition to the problems resulting from village establishment and removals have occupied the administrative and juridical units. The administrative boundaries problems by highlighting a study conducted in Turkey, which revealed that approximately 40% of the administrative works filed an annulment action at Council of State and at Administrative Courts, with 20% of them being successfully annulled [10].

## 2. MATERIAL AND METHOD

In this study, it will be presented on the examples that the basic features and adequacy of administrative boundary records; various cadastral problem arising from this records; why the records are so important for people; various suggestions about administrative boundary problems in Turkey.

### 2.1. Determination of Administrative Boundaries in Turkey

According to the Village Law, which is still valid, the basic approaches in determination of administrative boundaries of villages are as follows:

1. Mountainous areas and forestlands, pastures, plateaus and state controlled areas, such as rocky and infertile areas, are excluded from the village boundaries.
2. A special attention is given to allow the boundaries pass through the points, such as rivers, hills and ways, which can easily be defined and understood.

Within the frame of these basic approaches, village boundaries described in the Village Law of 1924 were approved by the relevant administrative units after the boundaries were determined by the commissions supported by village representatives (Fig. 1). Possible administrative boundary disputes have been addressed by using these records.

There are two administrative boundary sketches, belong to Taşgeçit and Yolgören villages of Trabzon province in Turkey, at the upper of figure 1 and cadastral working area

sketches of the same villages prepared during cadastral work with current techniques at the bottom of figure 1. It is compared with administrative boundaries and cadastral working area sketches which are belong to same villages. The administrative boundary sketches came into force after being approved by authority and other representative of the village and of the neighboring villages in 1939.

## **2.2. Basic Features of the Administrative Boundaries Records**

Because the administrative boundaries records were produced as cadastral data during the formation of written cadastral records, the records currently have a negative effect on the implementation of the data into the ground. Boundaries were generally determined through the description of clear landmarks, and the sketches were accordingly prepared and archived. These boundaries in the regions with 1/25000 scale-maps were mapped in accordance with the descriptions of the boundaries in the records. However, there have been serious problems during the implementation of these plans because the sketches are very outdated and there has been mass migration from villages to cities, and the current generation has little or no information regarding the names of local sites. The basic key features of the administrative boundary records of villages, which constitute an important part of administrative boundaries of Turkey, can be summarized as follows:

1. Administrative boundaries are defined by written records and they do not have scaled plans.
2. Because the boundaries were not determined digitally in the regions where rivers or creeks are administrative boundaries, deformations occurring in the riverbeds as a result of flooding make the implementation of administrative boundaries to the ground more difficult or even impossible.
3. In these records, it is sometimes possible to find some unknown boundary points that cannot be determined today or that are not known by local residents.
4. There are repeated boundaries records that cover the same region.
5. Because the frontier points are usually described as a very long and as a straight line, geographical details or real estate between these points has become a matter of dispute regarding determining to which administrative unit they belong.

It is well known fact that administrative boundaries in Turkey are highly regarded, particularly by people living on agriculture, stockbreeding and forestry in rural areas. The reason for this interest stems from the broad rights that current legislations give to the villagers to benefit from the forestland, pastures, or meadows in the administrative boundaries; this situation has led the villagers to regard these boundaries as defining their own estates.



### 2.3. Boundaries of a Cadastre Working Area, their Relationship to the Administrative Boundaries, and the Resulting Problems that are Confronted

Cadastral working area boundaries and administrative boundaries are different concepts. According to the Cadastre law (No.3402) in Turkey, each village which is the smallest unit in Turkey constitutes the cadastral working area. The cadastre team considers the administrative boundaries of the villages and districts in their applications. However, the determined cadastral working areas are never accepted as administrative boundaries. The real purpose of the determination of the cadastral working area is that parcels near the boundary are not redefined, while the cadastres of neighboring villages or districts are implemented. More specifically, the determination of a cadastral working area has an important role in preventing real estate near shared boundaries from being twice subjected to cadastral works during the implementation of cadastral works at different times in neighboring administrative units. Otherwise, double registration of the same estates under different administrative units would lead to irrecoverable juridical problems.

In current legislations, although cadastral working area boundaries and administrative boundaries do not have to be matched exactly, citizens, in practice, tend to regard the working area boundaries as the administrative boundaries; as a result, they sometimes cease the cadastral works on suspicion that the areas outside of the working areas are left to the neighboring village. A research study conducted by the GDLRC in January 2011 revealed that cadastral works did not operate in 409 villages and districts because of various reasons. Cadastral works could not be held in 44 of these 409 villages all around Turkey because of the problems of administrative boundaries, as shown in Fig. 2. In these 44 villages, there are serious boundary disputes that have caused the cessation of cadastral works. In addition, it is also possible to find incomplete cadastral works because of the many difficulties of such administrative boundary controversies throughout Turkey.

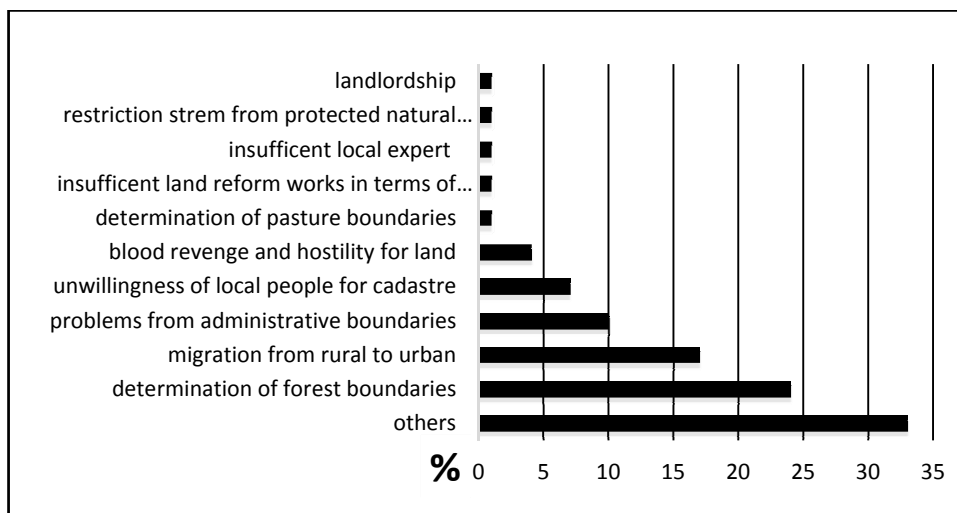


Figure 2. Problems on the areas with incomplete cadastral works [11]

### 2.4. Field of Application

Macka and Araklı, towns of the Trabzon province, were selected as the field of application, as shown in Fig. 3. Problems resulting from administrative boundaries are common in this region, as

is the case in many other places in Turkey. This field of application was thought to be sufficient to clearly represent the problem; also, the solutions suggested for problems in this region were found to be applicable to the other regions suffering from same problems because the problems resulted from administrative boundaries in Turkey are usually similar to each other.

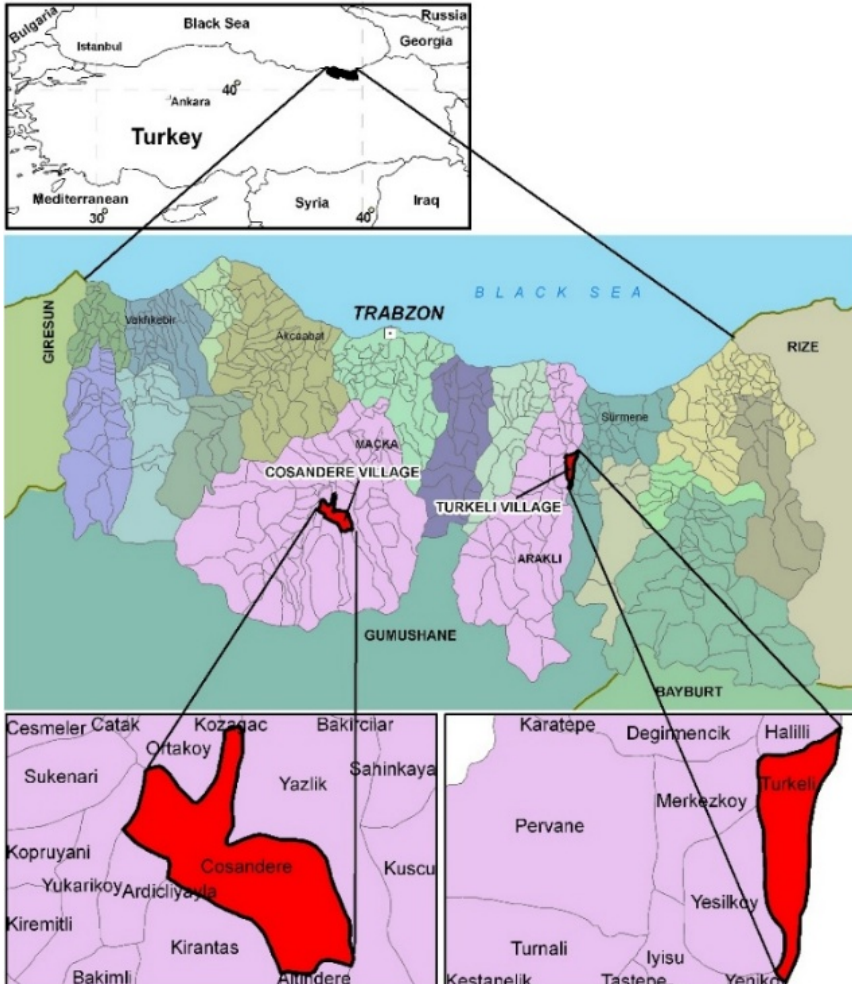


Figure 3. Study areas

### 2.5. Example of Coşandere Village, Maçka Town of Trabzon Province

The administrative boundaries of the village of Coşandere were determined in 1928 (Fig. 4). According to the rules of the Village Law in 1928, forests and pastures that were used by the villagers were excluded by these administrative boundaries.



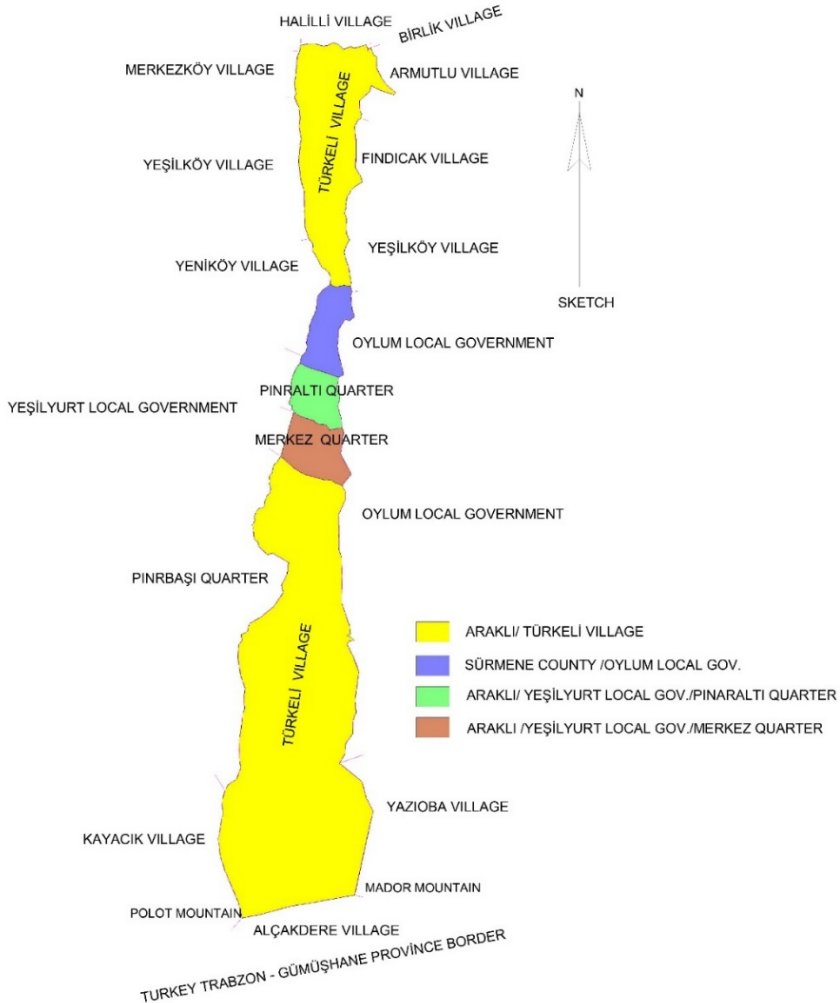




Figure 5. Administrative boundaries, Coşandere and Altındere

### 2.6. Example of Türkeli Village of Araklı, a Town in the Trabzon Province

The administrative boundaries of Türkeli village of Araklı are based on the legislation enacted in 1927. Since then, conflicts over the administrative boundaries between neighboring villages have continued at a low level. However, with the numerical cadastral works started by the support of private sectors in 2005, severe problems occurred during the determination of the boundaries of the working area via administrative boundary records. While the boundaries of the working area were being determined, a total of 15 neighboring residential units (These are from the north Halilli, Birlik, Armutlu, Fındıcak, Yeşilköy, Oylum, Yazıoba, Alçakdere, Kayacık, Pınarbaşı, Merkez, Pınaraltı, Yeniköy, Yeşilköy and Merkezköy villages) were covered (Fig. 6).



**Figure 6.** Administrative and Cadastral working area boundaries of Türkeli

The boundaries of seven of these 15 residential units were finalized by a court decision, and three of them were determined by the Local office of Land Registry and Cadastre. That is, there are disagreements on almost all of the administrative boundaries of Türkeli village. As shown in figure 6, At the end of the cadastral working area application, the boundaries of the cadastral working area are composed of two different regions that are independent from each other in Türkeli village. Therefore, the geographical connection between the village center and the pastures that once belonged to the village was cut off. According to the registrations, the completion of the work of cadastral area boundaries of Türkeli village lasted for 6 months. When it is considered that the total bidding process of cadastral works lasted for 11 months, the effect of the administrative boundaries problem on the cadastral works becomes clearer. The basic boundaries problem between Türkeli village and its neighbor with 15 residential sites resulted from the fact that administrative boundaries sketches and registrations were determined only

roughly and that the registrations were not aligned with each other. A region might be found in administrative boundaries of different villages, with the result that each village claims to have such a region.

### **3. SUGGESTIONS AND DISCUSSION**

The causes of administrative problems in Turkey can be summarized as follows:

1. Keeping areas such as forests and pastures under the control of the state outside of administrative boundaries.
2. According to administrative boundaries, It is given right to use of forests and pastures by authority. Thus, the importance of administrative boundaries is increasing.
3. Incorrect administrative land divisions that cut the geographical connections of the lands that villages use.
4. Insufficient development of objective measures regarding how to distribute the shared lands during the division and unification of villages and being unable to foresee that these situation might cause problems in the future.
5. Rough determination of administrative boundary sketches, registrations do not align with each other and inapplicability of this records on the ground.
6. The presence of the same regions in the administrative boundaries of different villages in the old records and demands of the rights of the related villages depending on the records.

To prevent administrative boundary problems and the resulting property problems arising from them, all of the related legislations, particularly village law, must be revised to align with today's conditions. The following issues should be taken into consideration while implementing these regulations.

1. Territorial disparity should not be allowed, which would otherwise cause serious conflicts among villages and lead to a loss of integrity of a river basin.
2. Regarding the cadastral working area being the same as the administrative boundary: updating the administrative boundaries by the commissions formed by the board of a province or town before the cadastral works begins; works should be placed into a juridical framework and thus boundary problems should be solved before the cadastral works are implemented.
3. Administrative boundaries should be revised and updated. During this working, it must not be any gap between administrative boundaries.
4. Watersheds should be considered as a key element in the determination of administrative boundaries. As is known, river basins are the most convenient areas for sustainable and environmentally sensitive management.
5. The presence of lands, such as forest, pasture, plateau and winter quarters in the administrative boundary of a village should not be criteria in the determination of property rights and the rights of land use. It is necessary to differentiate the term 'administrative boundary determination' from the term 'property'. In this direction, the tenure of areas as forests, pastures and plateaus that belong to the state should be given to appropriate residential unit by the related institution and commissions by considering the public interest and the socio-economic conditions of the villagers.

### **4. RESULTS**

Administrative boundaries that were determined according to the village legislation of 1924 in Turkey have led to severe boundary problems today because of certain incorrect applications of the boundaries. First, boundaries were determined without considering the topographic structure of the field. Second, some boundaries were only roughly drawn, and the boundary plans were not drawn according to proper mapping techniques. In addition, because areas such as forests,

pastures and meadows were excluded by the administrative boundaries, administrative gaps occurred. Additionally, improper territorial divisions which broke the geographical unification of municipalities, increased such problems. Instead of being solved by the related administrative units, such as the Ministry of Interior, governorates, district governorships, province and local councils, these problems tended to be solved on the cadastre when cadastral works begin. Because of these reasons, the Village legislation enacted in 1924 is insufficient to fit into today's conditions. These deficiencies have indirectly affected cadastral works and sometimes caused some areas to be excluded from working areas and sometimes led to the cessation of the cadastral works.

#### **Acknowledgments / Teşekkür**

I hereby acknowledge the contributions of the employees of the General Directorate of Land Registry and Cadastre, and Trabzon Regional Directorate of Land Registry and Cadastre. I, also, would like to thank to contribution of this paper GISLab at Karadeniz Technical University-Geomatics Engineering Department.

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