

Turkish land management at historical process

Cemal BIYIK, Fatih DONER and Fatih BERK, Turkey

Key words: Turkish Land Management

SUMMARY

In this study, the views of the Turkish states on land management, of which there are generally five types of land types in terms of ownership throughout the history, have been examined. The Huns (the Great Hun Empire, the Western Hun Empire, the European Hun Empire and the Ak Hun Empire), the Gokturks, the Avars, the Khazars and the Uighurs, who were among the first Turkish states established in Asia, accepted the land of the country at the discretion of the Hakan and left the administration to his sons and military commanders in the name of the Hakan. It is known that the first Turkish state to accept the Islamic religion is Karahanlılar. Since the states of Karahanlılar, Gazniler, Great Seljuk Empire, Harzemşahlılar, Altınordu State, Great Timur Empire, Babür Empire and Ottoman Empire are Muslims, they have adopted a notion that the earth belongs to Allah and that the saving belongs to the Hakan. Thus, they applied land classification and management in accordance with Ikta in the Seljuks and the Timar in the Ottomans. In the Republic of Turkey, the absolute property system based on the Civil Code is applied.

It can be argued that the classification of the land in terms of ownership provides some conveniences for the accumulation of spatial and non-spatial information for land management, and it is possible to say that the applications in the history form the basis of contemporary land management.

ÖZET

Bu çalışmada, tarih boyunca mülkiyet bakımından genellikle beş çeşit arazi sınıfının olduğu Türk devletlerinin arazi yönetimine bakışları incelenmiştir. Asya'da kurulan ilk Türk devletlerinden olan Hunlar (Büyük Hun İmparatorluğu, Batı Hun İmparatorluğu, Avrupa Hun İmparatorluğu ve Ak Hun İmparatorluğu), Göktürkler, Avarlar, Hazarlar ve Uygurlar ülke topraklarını hakanın tasarrufunda kabul ederek yönetimini hakan adına onun oğullarına ve askeri komutanlara bırakmışlardır. İslam dinini kabul eden ilk Türk devletinin Karahanlılar olduğu bilinmektedir. Karahanlılar, Gazneliler, Büyük Selçuklu İmparatorluğu, Harzemşahlılar, Altınordu Devleti, Büyük Timur İmparatorluğu, Babür İmparatorluğu ve Osmanlı İmparatorluğu devletleri Müslüman oldukları için yeryüzünün Allah'ın olup tasarrufunun hakana ait olduğu prensibini kabul eden bir düşünceyi benimsemişlerdir. Böylece Selçuklu'larda İkta, Osmanlılarda ise Timar sistemi adıyla bilinen arazi sınıflandırması ve buna uygun yönetim uygulamışlardır. Türkiye Cumhuriyetinde ise Medeni Kanuna dayanan mutlak mülkiyet sistemi uygulanmaktadır.

lke arazilerinin mlkiyet bakımından sınıflandırılmış olması, arazi yönetimi için konumsal ve konumsal olmayan bilgilerin toplanmasında bazı kolaylıklar sağladığı görldüğnden tarihteki uygulamaların çağdaş arazi yönetiminin temelini oluşturduğunu söylemek mümkündür.

Turkish land management at historical process

Cemal BIYIK, Fatih DONER and Fatih BERK, Turkey

1. INTRODUCTION

Although the beginning of the Turkish History is known as the Great Hun Empire, which was the first major Turkish state established in Central Asia since the 3rd century, it has been understood from the archaeological excavations and researches made in recent years that the Turks came from much earlier years (Meydan, 2008). The Turks are not exactly known where they lived before Central Asia. However, covering the geography from Asia, Europe to Africa, the Turks set up 17 great states that ruled from the 3rd century to the present day, the continuation of each other, as well as the same periods. It seems that the forms of governance of these states and the rights of life of the people are not very different from each other. The Turks are a nation engaged in the military during the wartime, and they have always maintained a basic form of government that gives an average of 1/10 of their production to the state as tax.

Throughout history, Turks have not embraced and absolutely refused to exploit slavery and labor before or after Islam. In ancient Turks the land was under the saving of Hakan, then was under the saving of State. In some periods, the property of land was transferred to users limitedly or completely.

The Ottomans who come from the Kayı arm of the Oghuzes, which the last migrating from Middle Asia to Anatolia, ruled over three continents for more than 600 years and applied the Timar system until it was destroyed. According to many evaluations; the existence and permanence of a country depends on the fair and successful application of that country's land management strategies. The deterioration of the land management system in the late Ottoman period stemmed from the problems arising from arbitrary attitudes and behaviors of the Timar owners, not from the badness of the system.

Up to the 19th century, the economy of the country was largely dependent on agricultural activities. The farmers had to be supported to grow the economy. With the Turkish Civil Code which was put into practice by Republic of Turkey in 1926, those who actually hold the land became the owner of the land according to the adverse possession rule. In order to regulate the inequitable distribution of land that has arisen, from the proclamation of the Republic (29 October 1923) to today, laws were enacted aiming land reforms with various purposes and the land was distributed to the farmers in the period.

Since principle of sustainability and public interest have great importance in ownership and use of the land in our age, land arrangements are still made in Turkey for good management of land based on the land cadastre by using the technologies of the modern century.

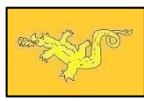
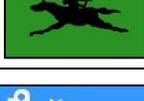
In this study, land management of 17 large Turkish states in history with the Republic of Turkey was investigated. Section 2 emphasis on land management in Turkish states before Islam. Land management of Turkish states after Islam is given in section 3. Section 4 examines the Land Management after proclamation of the Republic of Turkey. Finally, the paper ends with a conclusion section.

2. LAND MANAGEMENT IN TURKISH STATES BEFORE ISLAM

2.1 Great Turkic States of the Period

The largest Turkish states established Eurasia before Islam are shown in Table 1. First one of these is the Great Hun Empire (Map 1). The Great Hun Empire, which was founded by the Turkic communities that did not participate in the migration from Central Asia that started in the BC. 7th century, lived in the Orkhon and Selenga rivers and Otuken and Ordos regions in the early periods. First information about the Great Hun Empire is understood from the text of a 318 BC Chinese treaty written in Chinese.

Table 1: Great Turkish states established before Islam

Great Hun Empire	B.C. 220 - A.D. 216	
Western Hun Empire	48 - 216	
European Hun Empire	375 - 469	
Ak Hun Empire	420 - 552	
Gokturk Empire	552 - 745	
Avar Empire	565 - 835	
The Caspian Empire	651 - 983	

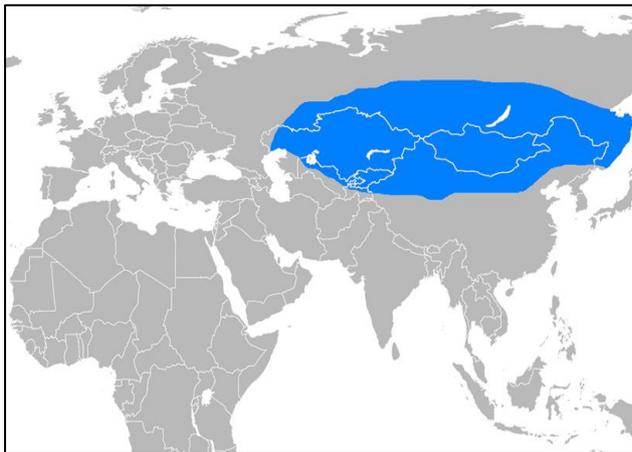
Uighur State	745 - 1368	
--------------	------------	---

The first ruler of the Huns is Teoman. His son, Mete, who was replaced after his death, fought with more Chinese people and took back some of the grasslands. In 48 AD, the Western Huns became a separate empire. They then reached Europe and founded the European Hun Empire (375). The name of today's Hungarian (Hungary) comes from here.

Attila, who was the Emperor in 434, made a voyage to Italy in 452 and returned without fighting because of the request from Pope I. Leon. He died in 453 while preparing for the war against the Sassanids (Iran).

The Huns who came to the south after the breakup of the Great Hun Empire founded the Akhun Empire later on. The Ak Huns, also called the Huns of the Middle East, dominated and continued their empires in the regions of Horasan, Punjab, Afghanistan, India, Khorezm, Iran and East Turkestan for more than a century.

Gokturkler was the first to accept the Turkish word in the history as the official state name. The Silk Road, which affects the economic destiny of Asia, has been in the hands of the Ak Huns for many years. It is possible to see the expressions of sadness and sorrow, sad and wretched which the Turks had fallen into in this period in Orhun Bookstore. The Bilge Kagan period (716-734) was the most brilliant turn of the second Gokturk Empire. These achievements were achieved through perseverance, diligence and harmonious studies of all three of Gokturk elders (Vizier Tonyukuk, Bilge Kagan and Kultigin Han).



Map 1: Great Hun Empire Map

Avarlar established a mighty state in Central Europe between the Frankish kingdom and the Byzantine Empire with the support of the Turkish masses, such as the old Hun, Sabar remains

and Ogur (Bulgarians), for a period of 250 years by taking various Germans and especially the crowded Slavic tribes under their sovereignty. It became an empire that guided European politics. Today the name of Bavaria State in Germany comes from Avarlar.

The Khazars were a Turkish Boy (468-965) who built an empire between Idil's borders and the Crimean peninsula. It is understood that the Khazars established the State on the destruction of the West Hun State (468), developed as the western arm of the Gokturk Empire, and came from the same source with Gokturk. This was reason why they were called with Turkish name.

Uighurs were native peoples of Orhun and Selenga valleys. When the Gokturk state was established, Uighurs recognized Gokturks' sovereignty. In 630, when the Gokturk state was destroyed by the Chinese, they were released and formed a political union.

2.2 Land Management in Turkish States before Islam

Turks are a nation that is fond of their freedom and independence with high spirituality. Thanks to these character, they emigrated with a military spirit and gained new lands and continued their sovereignty over these lands. They have been involved in world history in terms of political, economic and historical victories. They preferred to leave their homes if they were to fall under the rule of someone else. How this is easy for people who living a nomadic life, it is equally difficult for people who living a settled life. The Turkish tribes experienced compulsory migrations in the 5th century and then in the 11th century, when the Mongolian attacks took place (Çandarlıoğlu, 2003).

In the available resources, there is limited information about the land management of some Turkish States before and after Islam. Turks are said to have lived nomadic life in Central Asia. Horses domesticated other large and small animals; this nation, which is the first society to produce agricultural products together with animal husbandry, introduced products produced in Western Europe. The Central Asian Turks have fought to protect the fertile areas of spring, pastures, water resources they have in making agriculture and animal husbandry. Although it is said that they have lived a nomadic life, the fact that they live their lives in these lands and it can be understood from the works they left behind, especially the Gokturks and Uyghurs lived settled life in Central Asia.

The Timar system, which is the form of management of land, was first applied during the period of Genghis Khan (Sencer, 1973). This system is called Ikta in Seljuks and Timar system in Ottomans. Ikta-like applications were also seen in the ancient Turkish states. For example, in the Tuyku, the land was the property of the Khan, the state. The Kagan managed the state administration with 'Sad' and 'Yabgular'. These would control the Tarhans (Timar owners) for the land administration. If the Tarhans behaved according to the conditions, they would sustain their rights over the land for nine generations (Doğan, M. 1977).

The economies of the Turkish states established in Central Asia prior to Islam were based on two basic elements:

- Family economy based on self-sufficient
- State economy based on military power

In Central Asia, families have met the basic necessities from their own resources, such as food, shelter, clothing, etc., as required by the geographical conditions they are in. The most important means of subsistence was the agricultural activities livestock. The animals that were produced by the Turks who succeeded in domestication of the plants and animals by their production and dominion over them came to the place of horses and sheep with more economic benefits, along with camel, goat and cattle herds. The greatness of these swarms was an indication for richness and strength.

In order to provide for their own livelihood and to meet their needs, Turks have also benefited from the products of the animals they feed and have traded them by selling them live. Other necessities have been met by selling unneeded animal products such as meat, dairy products, canned food, leather and woolen.

The Turks became one of the first countries to implement organic agriculture by spreading the fertilizers of the animals they feed on the field and the pastures.

In addition to agriculture and livestock, animals such as precious saddles, martens, rust, beaver, squirrel, fox, tiger, leopard, and panther are hired as separate resources for the family economy. Thus, they did not use the meat of the horses and sheep, the most important fortunes, and met their meat needs and earned income by selling the furs of these animals, processed or untreated.

Old Turks sold their products within the country on the basis of exchange. They have provided their needs either from the periphery or from the merchants who come to the regions they are in at different times of the year (Çandarlıoğlu, 2003).

Over time, due to the water shortage in Central Asia, the shortening of the growing seasons, the desertification of the lands and the formation of the rough terrain conditions resulted in declining of agricultural activities. However, farming was carried out in the winter, on the migration routes performed for animal husbandry, and partly on arable land in the seized countries. Wheat, barley, millet, rye also bushes and oats were planted as horse food. The government has encouraged the planting of agricultural products, which are especially important in imports. Agriculture, which is a subsidiary business in Turkish societies, is generally carried out with animal husbandry.

One of the important earning elements of Asian Turkish states was the trade routes that passed through the countries. The routes called Silk Road (North Road) are sometimes controlled or their routes changed. One of the primary goals of the Turkish state after completing and

strengthening its institutions was to provide control over the Silk Road. For this, they never avoided fighting big states like China and Iran. One of the most important problems between the great states in their surroundings has been the desire to rule the Silk Road. After being dominated by trade routes, they have always had to be strong in military service in order to be able to carry on.

In the east-west, north-south trade, the Turkish states, which are in the position of intermediaries, took 'Transit Tax' from the caravans coming and going. They also participated actively in commercial activities, both through their merchants under the supervision of the family of rulers and through merchants from Sogd, and in particular they made substantial profits from the sale of the China Silk to the west. They secured the passage of the caravans from their countries and built places called caravansary for their accommodation needs. They provided caravans with necessary animals such as horses and camels, provided services such as eating and drinking to the caravans, and received certain fees for the flour. These trade caravans have passed directly from Turkish territory, and sometimes they have bought products produced and sold in the country. These exchanges were subject to taxation by the State (Ahmetbeyoğlu, 2010). The Silk Roads developed by the Turks have enabled the spreading of culture, science, civilization, art, literature, music, religion and philosophy, justice and law, and even diseases and remedies to the world (Bıyık, 2017).

The Turks have to migrate to different geographical areas due to increasing inefficiency of the lands in their homeland, drought, population increase, inadequacy of pastures. The Turkish peoples, who provided their livelihoods through agriculture and livestock, took the animals together while searching for suitable lands to meet their food, clothing and other needs. During these migrations, when there were countries with a low population around them, a community took the place of the other and forced it into the migration. This is one of the main reasons for migrations in the 11th century (Çandarlıoğlu, 2003).

Despite the fact that the Turks have their own writings (Gokturk writings, Uighur writings, etc.), the unwritten law rules developed especially for land management have existed since Central Asia. Today, some traditions and customs are being continued in this subject. For example, the unwritten law rules are still being obeyed in the utilization of land (abandoned to the benefit of a certain people) such as grassland and pasture, in the practices such as tenancy, partnership. The application of the right of possession on a real estate is also an unwritten rule of law from Central Asia.

In the Turkish states, the people gave taxes to the state (average 1/10 -called 'öşür' in Turkish-) of the income, and the remainder of the income encouraged overproduction. In this respect, the land acquired with possession has been multiplied and the arable land has been cultivated.

3. LAND MANAGEMENT IN TURKISH STATES AFTER ISLAM

3.1 Great Muslim Turkish States

In ancient times it was seen that in the Turks there were judges of the heavenly gods' religion while there were many peoples to believe in the forces of nature. It was believed that the sky-god wants the Turks to establish rulership and sends them a Hakan to establish the rulership. God was seen as an entity dealing with the independence of the Turkish people. The wars were won by God's will. God was commanding, rewarding and punishing. Birth and death would be at Gods' request. According to ancient Turkish belief, there was only one God who was eternal and created everything. In the Turks there were no temples where idols took place. The God did not have a shape. God was a spiritual force and the greatest power (Candan, 2013).

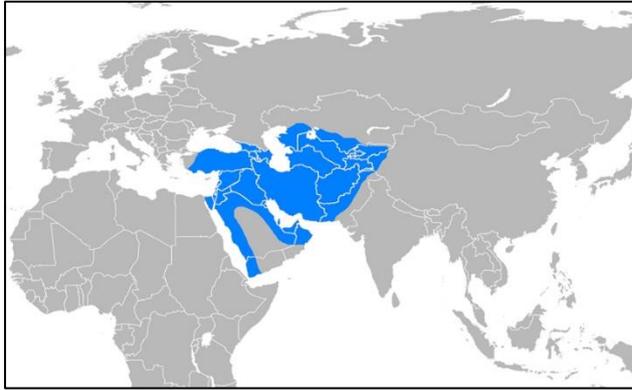
Although the Turks adopted Sky-God-Religion before Islam, there were also some Turkish states and communities accepted Manichaeism, Buddhism, Judaism and Christianity.

The Turkish states that accept Islam as a religion and hold Islamic Law rules in state administration are seen in Table 2.

In 920, Satuk Bugra Khan became the head of Karahanlılar state. In 932, Satuk Bugra Khan adopted Islam as official religion. After this date, he was known as Abdulkерim Satuk Bugra Han. However, the people within the boundaries of Karahanlılar completely accepted the Islam when the time of Baytas who was the son of Satuk Bugra Khan.

Gaznelians state name comes from Gazne, the capital city of East Afghanistan. In the time of Gazneli Mahmut, the state experienced the most brilliant era. In Turkish history, Gazneli Mahmut used the title of sultan for the first time. He had 17 flights to India between 1001 and 1027, adding North India to its territory. Thus, the region became Islamic and establishment the state of the Pakistan came true.

One of the greatest of the Turkish-Islamic states is the Great Seljuk Empire. The Seljuks are members of the Oghuzs' Uçok arm (Kınık). The founder who gave his name to the state was Selçuk Bey. The Seljuks, who accepted Islam at the end of the tenth and early eleventh centuries, represent the dominance, enormous culture and civilization from China to all Middle Eastern countries, including Western Anatolia, Mediterranean provinces, Northwest Africa, Hejaz, Yemen to part of Russia (see Map 2).



Map 2: Great Seljuk Empire Map

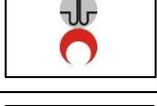
After the Malazgirt victory won on August 26, 1071, Sultan Alparslan demanded the conquest of all Anatolia by ordering execution of the treaty to the commander because the treaty was not obeyed by the Byzantine emperor Diogenes. The Turkmen tribes under the order of Seljuk were sent west from Central Asia to the Byzantine border in Eastern Anatolia. Byzantine fortresses and garrisons, which could not resist the raids of the Seljuks, were passed by the Turks. The Turkish influxes extended to the Sea of Marmara and the conquered Anatolia was settled. All necessary measures were taken for the Turkification and Islamization of Anatolia.

The state of Harzemshahlılar was a Turkish empire established in the Harezmi region in the late 11th century and ruled until 1231 between in the south of Aral Lake and in the North East region of Iran. The founder of the state was Anus Tegin.

After the death of Genghis Khan in 1227, Ogeday occupied the great Khanate authority in Altınordu State. The name Altınordu comes from the word "Orda" which means tent in Mongolian. Since the Khan tent was gold-plated in camps, this tent was called the "Golden Orda". Over time this word is written in Turkish as "Altınordu". The people living in the land governed by the state mostly believed in Islam religion.

Timur, the founder of the great Timur empire state, was born in 1336 in the town of Kes near Samarkand. Turagay, the father of Timur, was the lord of the Barlas arm located in Chagatai. In the years when Timur was born, the Chagatai Khanate was in chaos. The dominion of the country was in the hands of Emirs from the descendant of Chagatai. One of these Emirs, Emir Kazgan totally dominated in the Samarkand. Timur was under Emir Kazgan's order at that time.

Table 2: Great Turkish states established after Islam

State of Karahanlılar	840 – 1040	
State of Gaznell	962 - 1183	
Great Seljuk Empire	1040 - 1157	
Harzemşahlılar	1097 - 1231	
Altınordu State	1236 - 1502	
Great Timorese Empire	1368 - 1501	
The Babylonian Empire	1526 - 1858	
Ottoman Empire	1299 - 1922	
Republic of Turkey	1923 -	

After the collapse of the Great Timur Empire, states such as Shaybanis in Turkistan, Safavids in Iran, and Delhi Turkish Sultan in India were established. The Babur State was the second Turkish state established in India after the Delhi Turkish Sultanate. The founder of the Babur Empire, Zahiruddin Mohammed Babur, was the grandson of Timur by his father. His mother is the daughter of the Chagatai ruler Yunus Khan. Babur's father Omer Sheikh Mirza was the Fergana governor of the Timurids. When his father died in 1494, he became Fergana governor by replacing him at the age of eleven. In the first years of his reign, Babur struggled against other Timur lords.

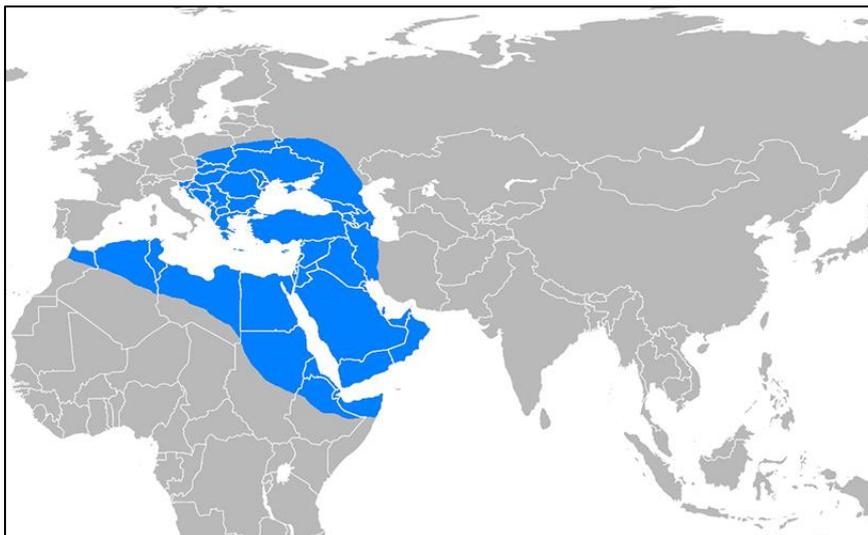
With the disintegration of the Anatolian Seljuks in 1308, struggles aimed at restoring the Turkish unity, especially among the principals in Western Anatolia, were fierce. At the end of these struggles, Anatolia will witness the history of a magnificent Turkish state (Osmanogullari)

that has exceeded six hundred years. The founders of the Ottoman Empire belonged to the Kayı arm, one of the 24 tribes of the Oguz. According to the Oguz tradition, the Kayı is the greatest tribe of Bozoklar's Gunhan branch placed on the right branch. Therefore, in the Oguz organization structure the Kayı is a dominant element. In the 13th century under the leadership of Ertugrul, the Kayı peoples came to Anatolia from Central Asia by moving to the west, and they were placed in the village of 'Sogut' town on the Byzantine border by the Seljuk Sultan. When Ertugrul died, his son Osman took his place. This Turkish state, which dominated over three continents for six centuries from the beginning of the 14th century to the beginning of the 20th century (1299-1920), takes its name from Osman Bey, the state's founder. Osman Bey (1299 - 1326) gained his independence and began to enlarge his dominance as the Seljuk Empire finally came to an end.

3.2 Land Management in Muslim Turkish States

Throughout history, Turks have not accepted and practiced exploitation and slavery, even fighting those who have practiced it. The Islamic beliefs that coincided with the period of the Turks to the settled life have become systematic, overlapping with minor changes in the form of land administration.

The Turkish States have been able to maintain livelihoods of peoples both in their own countries and in the under their jurisdiction, and also have aimed to keep the economy strong by collecting taxes for state from increasing production. They continued this systematically by applying various forms of Timar and Ikta systems in the period from ancient Turks to Ottomans. The Ottoman Empire applied the Timar system very successfully until its deterioration, and lasted more than 600 years in three continents.



Map 3: Map of the Ottoman Empire

3.2.1. Land Management in the Seljuks

In Central Asia, Turkish communities looked for fertile fields and found the fertile plains of Anatolia and came to this geography. They have, of course, joined cultures with the people here and adopted agriculture as their first priority economic activity. All sectors along with agricultural fields and agriculture have been put into a system. Not only the land arrangement, but also the entire system of the state was written by Alparslan's vizier Nizamulmuluk in his work called *Siyasetname*. Thus, both the state administration of the Seljuk State and the agriculture and other sectors are connected by a system and a law (Direk, 2015).

Lands under sovereignty in the Seljuk state were considered to belong to the sultan and his family. This situation did not give a property right on behalf of those who settled on the land, so settlements were not maintained permanently. This situation, which has been shown among the reasons for the destruction of the state, has been partly changed in the Ottoman Empire.

In the Seljuk State, the land belonged to state and landowners and farmers were only able to own the land when they were planting. Thus, a mechanism was established that keep the land alive constantly. Farmers who did not work in the land or did not receive enough crops were kept away from these activities. This made a contribution to increase productivity. The lands that were cultivated in the Seljuk State were subject to a management called *Ikta*. There were four types of lands in this frame:

1. **Has Lands:** The income is given directly to the sultan and his family
2. **Ikta Lands:** It is a land in which a certain part of the country's land is separated and left for the maintenance of some state officials for a certain period in terms of its services (salary). The right to collect taxes from these lands belongs to the *Ikta* owners. On the other hand, the *Ikta* owner is obliged to raise a soldier with some of the collected taxes and the remaining part was for *Ikta* owners' own livelihood. This system was improved by the Ottomans and applied as the "Timar System". With the *ikta* system:
 - The state had a powerful army without spending money
 - Efficient use of land was achieved
 - Continuity in production was ensured
 - State authority had strengthened
3. **Haraci Lands:** Means the lands in the hands of the non-Muslim peoples who gives taxation (called *Harac*). The income of these lands was directly transferred to the state treasury.
4. **Vakif Lands:** The income of these lands was allocated for public benefit and social needs. These lands could not be used for profit because they were used for charity purposes.
5. **Mulk Lands:** While belonging to the state, these lands were given private persons for their usefulness and services, then inherited as a heritage to their children, and some of them were turned into *Vakif* land.

3.2.2. Land Management in the Ottoman Empire

In Ottoman State philosophy, Muslims and non-Muslims were granted three basic rights: Liberty, Justice, and Equality.

When the state-owned lands were distributed, these principles were applied. When these principles were not obeyed, deterioration was seen in the system.

In Turkish states before Islam, it was believed that property belonged to Hakan and Hakan was appointed by God. After Islam, on the other hand, property belonged to state. The main idea in Ottoman Empire is that, "land is the domain of God, and the only power of disposal on land can be used by the Sultan" (Tüdeş / Bıyık, 2001).

As stated in the Land Code of 1858 ('Arazi Kanunnamesi' in Turkish), the land was classified into five groups in the Ottoman Empire:

1. **Miri (State) lands:** Miri land is a land that forms part of the arable lands of the country. The operation of these lands, also called *Dirlik*, has been left to the Ottoman State officials and officials in charge of certain services. *Dirliks* are classified into three groups according to their annual incomes:
 - *Has* (Large Fief): The annual income is more than 100,000 *akche* (money unit used in the Ottoman Empire). These were given to the sultans, viziers, members of divan, princes, grand seigneur. According to the incomes of *Dirliks* (for every five thousand *akches*), the *Has* owners are responsible for equipping one soldier ready for battle at any moment.
 - *Zeamet* (Middle Fief): The annual income is between 20,000 - 100,000 *akche*. *Zeamet owners are responsible for* equipping one soldiers for every five thousand *akches* except for first twenty thousand *akches*.
 - *Timar* (Small Fief): The annual income is between 3,000 - 100,000 *akche*. These were the lands allocated to a number of soldiers and civil servants to ensure their livelihood and to cover the cost of their services. *Timar* owners separated three thousand *akches* of their incomes for their livelihood. It was called a sword *Timar*. For the rest of the every three thousand *akches* they had to equip one soldier (Bayrakçı, H. 1990).

According to *Timar* System;

- *Timar* owners are state officials and have to work under the command of the State.
- Those who do not fulfill their duties are removed from their duty.
- *Timar* cannot be granted to another person by inheritance because of the income of the land is being utilized.

- Timar owners are responsible for doing the work the government gives and using the authorities given.
- If Timar owner does not participate in the war without apology, the Timar can be revoked.

Ottoman land management was also referred to as the "Timar System" because the highest number of lands in Ottoman Empire was the Timar Lands.

2. Mulk (Private) lands: Mulk land is the land that held by individual ownership. Mulk land is divided into two:
 - Osur Lands: Osur Lands are the lands belonging to the Muslims during conquest or given to the Muslims when seized. These lands were the property of their owners and they could use as they wanted. When these property owners were killed, the land could remain in their heirs. Basically, the landowners were being given the 1/10 of production to government as tax.
 - Haraci Lands: These are the lands left as "property" in the hands of non-Muslim people during conquest. Like Osur lands, such lands could be inherited by their owners as well. But, the tax rate from these territories was determined to be higher than Osur lands.
3. Waqf lands: Revenues of waqf lands are reserved for the expenses of collective service institutions such as mosque, madrasah, hospital, mansion, khan and hammam. It is strictly forbidden to buy and sell of waqf lands and these lands are exempted from tax. The people working on the waqf lands gave the tax to the administrator of the waqf if the land had been allocated to waqf.
4. Metruk lands: Metruk lands are lands which close agriculture such as meadow, pasture, spring, winter, road, bridge, and square. All of the members of the community or the village or town in which these lands were allocated could benefit from the Metruk lands.
5. Mevat lands: These are the lands which are left out of development zones and are not suitable for agriculture (rocky, swampy, bushy and thorny, extreme slope). These lands can be revived with permission in case of transforming to lands which are suitable for agriculture.

By recording the lands of the country into a land registration book (Kuyud-u Kadime), the Ottoman administrations established a land information system of that period. Numerous documents related to these are still in the General Directorate of Land Registry and Cadastre, the Ottoman Archives and other archives and libraries (Bıyık / Yavuz, 2006). The registration of land was mainly started in 1534 by the Magnificent Suleyman. A land registration book called Kuyud-u Hakani or Kuyud-u Kadime was used to record the land interests with the following information (Bıyık / Yomralıoğlu, 1994):

- The name of villages and farms
- Landholders name
- Annual income of land
- Land classification
- The boundaries of public-use areas
- Property quantities with their handling purposes
- Natural resources on the land
- Population
- Paid tax

In the time of the Magnificent Suleyman, the empire territories were divided 36 provinces for better administration. These provinces were then divided into the sanjak (provincial districts). For land management process, a kind of land registry branches had been established within the sanjaks. The main aim of these branches was to register land and up to date the land-related information within their districts for taxation purposes (Ayni A. Efendi, 1602). Besides the Kuyud-u Hakani books, there were also some other books that were used as reference for the main registration book. The mufassal (detailed) books (Mufassal Tahrir Defterleri) are arranged based on sanjaks.

From 1847 onwards, land records based on the Land Register were initiated in the Ottomans, and until 1935, when the map-based geometric cadastre was started, written-cadastral- works were carried out under different names based on private property. Until the geometrical cadastre was built, these records, which were recognized as title deed, maintained their qualification as a right of certificate (Bıyık, 1987).

4. LAND MANAGEMENT IN REPUBLIC OF TURKEY

Independence war was won and after the proclamation of the Republic of Turkey (1923), the Turkish Civil Code (1926) was put into practice by translating the German Civil Code. At the same time, the Mecelle which can be accepted as Civil Code of Ottoman Empire was repealed. Thus, the Miri land regime was abolished by law, and the principle of "absolute ownership", which is a European concept of ownership, was accepted. After that time, private property gained importance. In addition to possessory, the registration to land register was compulsory. Thus, based on a multi-purpose cadastre and real estate information system, title deeds were established.

With the Civil Code, the issue of regulation of the unbalanced distribution of property arising in the country as a result of conversion of lands from Miri to Private was discussed in the Economy Congress held in Izmir between 17 February and 4 March 1923. This congress, which affected the first ten years of the economic activities of the Republic, seemed to be the most of the participants were landowners but landless farmers were not represented. In this congress, it

was decided to remove the tax (called Asar) collected from the farmer (Doğan, M. 1977). Following this, in 1925, with the Law No. 716 "Land Distribution for Landless Formers" land was distributed to emigrant and landless farmers. Later on, the laws named the Giving Land to Landless Farmers (1945) and the Land and Agricultural Reform Law (1973) were enacted, but the desired results were not gained in application and then the agricultural reform-related projects were emphasized with the law named Agriculture Reform Law on Irrigation Areas (1983). Thus, it was aimed to increase the efficiency of the unit area and reduce the cost by increasing the quality of the product.

5. CONCLUSIONS

The Turkish nation, which is known from historical resources that it has ruled over three continents (Asia, Europe and Africa) since at least 2500 years ago, defended equality and justice, not slavery and exploitation. The Turkish states established in the pre-Islamic eras prevented the formations which might have feudal power by continuing the applications of the Timar system in using the lands, which are the most important economic resource of the time. In addition, it was encouraged the efficient use of land with taxation based on the income. Although the justice in land management is first provided by unwritten legal rules, written law applications have also been included since Seljuks.

The land management that became institutionalized during the Ottoman period was an important factor in the domination of the state for 600 years. On the contrary, the deterioration of the land management system and the emergence of the overlords led to the weakening and disintegration of the State.

The Republic of Turkey maintained the property law and related it with the Civil Code. By completing the cadastral work carried out in accordance with the rule of law and public good principles, the state started to work in order to direct cadastral outputs to land management targets for the development of the country and the spreading of social welfare.

When evaluating past practices, it is seen that a multi-purpose and comprehensive cadastral system is needed because current cadastral studies have more legal nature in Turkey. The Land Information System which will be established based on this cadastral study which might be defined as the second cadastre will be a system that can always provide updated information for land management. By directing this information to the objectives of national development, the protection of the public interest as well as the people and the sustainable use of the country resources will be ensured.

REFERENCES

Ahmetbeyoğlu, A. 2010. "İslam Öncesi Orta Asya Türk Devletlerinde Ekonomi", Birinci İktisat kongresi Tebliğleri-1, İstanbul.

Ayni Ali Efendi, 1602, Osmanlı İmparatorluğunda Eyalet Taksimatı, Toprak Dağıtımı ve Bunların Mali Güçleri, El yazmasından çev.: Hadiye Tuncer, Gürsoy Basımevi, Ankara, 1964.

Bıyık, C. 1987, Kadastro ve Eski Yazı Tapu Kayıtları, Prof. Burhan Tansuğ Fotogrametri ve Jeodezi Sempozyumu, 8-9 Ekim 1987, TMMOB HKMO ve YTÜ, İstanbul. Bildiriler Kitabı, s. 115-127.

Bıyık, C., 2017, Tarihi İpekyolu'nun Trabzon'da Bıraktığı İzler, Ortahisar Belediyesi Açık hava Panelinde sunulan bildiri, 12 Ekim 2017, Trabzon.

Bıyık / Yavuz, 2006, Land Registration and Cadastre in Turkey from the Ottomans to Date, Journal of Applied Sciences 6 (6): p. 1415-1425, ISSN 1812-5654.

Bıyık / Yomralıoğlu, 1994, Land Information Systems in 1500's, FIG XX. International Congress, Melbourne, Australia, Special Session 153, TS. 153.2 p. 153.2/1-10.

Candan, Ergun, 2013, Atalarımızın Göktanrı Dini, Sınırötesi Yayınları, İstanbul.

Cin, H. 1985. Osmanlı Toprak Düzeni ve Bu Büzenin Bozulması, Boğaziçi Yayınları, İstanbul.

Çandarlıoğlu, G. 2003. İslam Öncesi Türk Tarihi ve Kültürü, Türk Dünyası Araştırma Vakfı, İstanbul.

Direk, M. 2015. Türklerde Toprak Kullanımı ve Gelişimi, Selçuk Üniversitesi Ziraat Fakültesi Tarım Ekonomisi Bölümü, Konya.

Doğan, D. M., 1977, Tarih ve Toplum, Türkiye'de Toprak Meselesi, Dergah Yayınları: 37, İstanbul.

Meydan S., 2008, Köken, Atatürk ve Kayıp Kıta MU 2, İnkılap Yayınları, 2008, İstanbul.

Sencer, M., 1969, Osmanlı Toplum Yapısı, Ant Yayınları: 24, İstanbul.

Tüdeş, T. / Bıyık, C. 2001, Kadastro Bilgisi, KTÜ, Trabzon.

BIOGRAPHICAL NOTES

Cemal Bıyık is a Professor for Land Management in the Department of Geomatics Engineering at Avrasya University, Trabzon, Turkey. He received his PhD degree with the thesis entitled "The Organization of Cadastral Workings in the East Karadeniz Region in Turkey" in April 1987. His research interests are land administration, cadastre, forestry cadastre and project management.

Fatih Doner is an associate professor in the Department of Geomatics Engineering at Gumushane University, Turkey. He received a PhD from Karadeniz Technical University for his thesis “A 3D approach for Turkish Cadastral System” in 2010. His main research interests are spatial database management systems, GIS architectures, land administration, 3D data models and relevant GIS applications.

Fatih Berk is a Geomatics Engineer in Trabzon, Turkey. He graduated from Avrasya University, Department of Geomatics Engineering in 2017.

CONTACTS

Cemal Biyik
Avrasya University, Faculty of Engineering
Department of Geomatics Engineering
61000 Trabzon
TURKEY
Phone: + 90 462 377 2767
Fax: + 90 462 328 0918
E-mail: cemal.biyik@avrasya.edu.tr

Fatih Doner
Gumushane University, Faculty of Engineering and Natural Sciences
Department of Geomatics Engineering
29000 Gumushane
TURKEY
Phone: + 90 456 233 1000
Fax: + 90 456 233 1119
E-mail: fatihdoner@gumushane.edu.tr

Fatih Berk
Geomatics Engineer
61000 Trabzon, TURKEY
fatihberk@gmail.com