PRINCIPLES OF LAND ACQUISITION, EXPROPRIATION, AND COMPENSATION CALCULATION FOR INFRASTRUCTURE PROJECTS IN TURKEY AND AN ANALYSIS OF KEY ISSUES

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Abstract

The requirement of land acquisition for public infrastructure is critical for the site selection and project appraisal phases. There is more than one method to acquire land for projects such as purchase, easement, land donation, lease, land readjustment and expropriation. Expropriation is often preferred for public investments in Turkey and state and public legal entities are able to partially or completely expropriate real estate in private ownership for public interest by paying in advance the value of such real estate. Public institutions have expropriated 300 thousand hectares of land over the last 15 years and approximately 10% of the state and local administration investment budgets was paid to land owners for expropriation. However, it is commonly observed that the owners are not satisfied with the expropriation compensation appreciated and paid. The amounts paid for expropriation in many projects are higher - due to a variety of faults or reasons - than the actual real estate market value. The structure and functioning of land markets, and issues in the implementation of valuation techniques extend the operation and cost appreciation process of expropriation and lead to delays in public investments. Furthermore, valuation principles set forth in the expropriation legislation do not comply with the performance standards of international financial institutions. From public and private entities that apply for project loans, international financial institutions demand the compensation and consideration of transport costs and the replacement value in compensation regardless of ownership cases of people affected by the project, as well as compensation for legal and illegal uses of public land and a resettlement action plan for people and groups affected by the project to be prepared. In order to facilitate financing of public investments with credits provided by international institutions, it seems necessary to reorganize the legislation on real estate acquisition and expropriation processes and to ensure the compliance of current practices with international standards.

Keywords: Infrastructure Investment; International Standards and the Turkish Legal System; Land Acquisition; Valuation and Compensation.
1. INTRODUCTION

Due to an increase in a community’s needs, services that are expected from the state are also rapidly diversified, and there is a rapid increase in the requirements of public institutions for technology, qualified staff and funding. For high growth rates in transitioning and developing countries, land acquisition has assumed critical importance in the framework of neo-liberal economic thought. Public and authorized private institutions are bent upon large scale land acquisitions for industry and infrastructure investments (Khan, 2014). Land acquisition is required in every country for public services, infrastructure and superstructure investments and different methods are used in land acquisition. In the acquisition of real estate in large quantities necessary for the implementation of development projects, methods such as expropriation, purchasing, zoning, land consolidation, easement, donation and leasing are used. However, each real property acquisition method is regulated by different laws and the implementation stages, procedures, valuations, and payment of the amount of each of the methods differ. In this context, expropriation processes frequently used by public institutions in Turkey are carried out according to principles defined in the Turkish Constitution and Expropriation Law No. 2942, and purchase methods in accordance with the Public Procurement Law 4734. Regarding both methods related to land acquisition, possible solutions are sought for problem areas by the judiciary organs and well-established precedents of the European Court of Human Rights (ECHR), and efforts are made towards improving the efficiency of land acquisition.

Real estate needed for infrastructure investments must either be owned by the public or transferred to the public domain. Land acquisition and expropriation processes for public investments are observed to be conducted differently in almost every country and there is a lack of generally recognized international procedures and best practice guidelines in this field (Viitanen et al., 2010). During work conducted in Turkey towards land acquisition for public services and the compensation of land owners, there are discussions in terms of the nature of investment, the nature of the investing institution (public, private and international initiatives) and the location of investment (rural or urban). In cases of interference in private ownership on the grounds of public interest, the presence and extent of public and community interest in the said process is a regular topic of discussion. The entire law of land acquisition, which operationalizes the doctrine of eminent domain to actualize public interest, fails to make meaningful socio-economic differentials and interventions with respect to acquisition incidence and compensation entitlement (Khan, 2014). The execution of construction projects within public investment through both direct procurement and contracting, as well as land acquisition and expropriation in projects where construction work is carried out with alternative financing options, are necessary. In particular, for projects carried out by foreign institutions or
international initiatives through models such as build-operate-transfer (BOT), build-operate, public-private partnership (PPP), the existence of public interest in land acquisition becomes a matter of debate.

Under the Turkish Legal System, immovable property ownership and use, intervention in ownership, regulation of residential construction and infrastructure projects are regulated by the Constitution, Law No. 2942 and different laws for the public and private sectors. State and public entities have the right to expropriate real estate on private property for the public interest through making an upfront payment for the value. The valuation of land, businesses and other assets affected by the expropriation process, the compensation of the affected persons, the monitoring and evaluation work at the beginning of the project’s operation period and the development of mitigation measures when required are neglected in many countries. Many projects carried out in the public interest have consequences such as unemployment, loss of income sources and social structures being adversely affected. Beyond that, the methods used in the valuation of the expropriated real estate, valuation conditions, the validity period of the value, interest rate applications, payment of the values and compensation for non-pecuniary damage come to the fore. The issues experienced in these areas cause major problems between the owners and officers or competent public institutions in the expropriation process (Tanrıvermiş et al., 2004a), and owners even tend to apply to the ECHR with a claim for compensation in cases where the local judicial process has been completed. In fact, the value of the expropriated real property is expressed in many countries as fair price, fair compensation and full replacement value and the ECHR decisions also make reference to the criteria in question. However, it should be emphasized that in Turkey, different valuation approaches are defined in expropriation and property acquisition according to the types of real estate instead of fair compensation, and considerable subjectivity and uncertain aspects are present in the implementation of the valuation criteria.

In this study, the basic principles and problems in real estate acquisition and expropriation practices for public investments have been defined and in the second stage, principles of valuation of the expropriated real estate based on their types and methods for calculation of compensations have been examined. The methods of real estate acquisition and compensation calculation for large-scale fixed capital investments have been evaluated in terms of legislation and international standards as well as their economic, social and environmental impacts. According to the research results, the problems encountered by public administrations, owners, and other stakeholders as well as the non-overlapping aspects of national regulations with international standards have been identified and the measures to be taken to improve the country practices are listed. In this context, land acquisition as defined in
local regulations, improvement of valuation and resettlement practices, identification of rights holders to be compensated, and involuntary resettlement practices during the land acquisition phase of projects were evaluated. In addition, real estate acquisition, expropriation and compensation principles requested to be implemented within the framework of performance standards in case of infrastructure projects receiving funding from international organizations were compared with the practices in Turkey.

The results of this study prepared on the basis of research on legislation and literature, as well as stakeholder interview, will also be significant since it allows the identification and effective implementation of policies to improve the land acquisition process for infrastructure investment both in Turkey as well as many countries that display similar characteristics. The study consists of four main parts; the importance and the scope of the study have been defined in the first part. In the second chapter there is a comparative analysis of real estate acquisition processes for infrastructure projects in Turkey, and in the third chapter Turkish and international standards in terms of immovable property expropriation are examined, and fundamental problems in real estate acquisition and valuation areas are also addressed. In the conclusion of the study, legislation and practice results are evaluated and solutions for the identified problems are recommended.

2. REAL PROPERTY ACQUISITION METHODS FOR INFRASTRUCTURE PROJECTS

2.1. The Relationship between Public Investment and Public Interest

Investments represent additions to existing human and financial capital to increase the national income and ensure economic growth, and for the country to develop in a balanced way, interference by the public through infrastructure investments and other means becomes inevitable. The most important and most powerful vehicle for the direct intervention of the public is undoubtedly infrastructure investments. The use of public investments to reduce regional disparities amounts to the state spending more on a relatively backward region than the revenue generated from the area in question (Genç & Ertuğrul, 2007; Kalem, 2015).

The main purposes of public investment can be listed as ensuring maximum level of contribution to growth, supporting private sector investments, reducing inter-regional disparities, and increasing employment opportunities and public welfare. Priority in public investment is given to areas that have significant impact on economic and social development, such as training, healthcare, drinking water, sanitation, science and technology, energy, transportation and irrigation and infrastructure investments to be carried out with public resources (for example highways, ports, airports, railway station complexes, drinking, irrigation and power generation dams, pipelines, thermal and nuclear
power plants). While most public investments are not profitable financially, since they are acceptable from economic or social perspectives and interest of private firms in these investments is usually not possible without public support or contributions, it is necessary to use public resources.

The 1982 Constitution stipulates that everyone has the right to property and that this right may only be restricted by law based on the grounds of public interest. According to Turkish Civil Code No. 4721, ownership is a right in rem that gives the owner the authority to use, utilize, and control their possessions as they wish within the framework of the rule of law. Expropriation is a process that ends the authority to maintain the possession of the property. The right of the owner to property may be terminated in the public interest due to reasons such as health, public order, social justice, equality, economic and social development, solution of important social issues, communication and effective settlement policy. In this context, expropriation can be described as a competent authority forcibly taking possession of real property owned by natural or legal persons to perform a public service which aims to serve the public interest, paying its value upfront (or in installments if certain conditions are met) through the procedures set forth in the relevant legislation (Böke, 2003; Tanrıvermiş et al., 2016).

The right of public administrations to acquire real property necessary for the purpose of performing public service or public undertakings through expropriation has been defined in the Constitution, Law No. 2942, as well as legislation governing the duties and powers of the different institutions. The main reason and purpose of expropriation is the execution of public services or enterprises, and it has been observed that in infrastructure projects financed in recent years, the relationship between public service and the concept of public interest has come under question. Whether the services provided by some public institutions are public services, and land required for the services in question can be acquired through expropriation are often matters of discussion. This problem is especially apparent in projects funded via BOT and PPP models, and expropriation efforts in favor of private individuals and institutions. Due to the very high financing costs of projects implemented through BOT and PPP models and their requirements for high technology, they suffer from protracted development periods in the public sector. In terms of accelerating local development and raising service quality, it is clear that investing in these models will be of benefit to the general public. However, it is noteworthy that the operating rights granted to eligible companies in the BOT model, rental periods and prices in the PPP model, as well as guarantees granted by the state in both models have come under question.

Large-scale fixed capital investments such as highways, bridges, airports and ports are of interest to the Turkish private sector as well as foreign investors. The BOT model is used for the financing of
projects such as Istanbul’s Third Bosphorus Bridge and Northern Motorway, the Marmaray, Istanbul’s third airport, the Çanakkale Harbor Bridge, and the Gebze-Izmir Motorway, while the PPP model is preferred for healthcare investments. The growing interest of foreign entities in toll road, bridge and tunnel investments contributes to the shortening of the investment period and the resolution of financial problems. For example, the Gebze-Orhangazi-Izmir Highway Project, providing access between the provinces of Istanbul and Izmir, is one of the large-scale fixed investments built under the BOT model, and due to the highway’s route through fertile farmland and plantations in the western part of the country, the expropriation process is difficult and the costs are very high. Due to the high efficiency of the land affected by the project, the economic revenue generated by agriculture in the area, and the project’s nature, the land prices demanded by property owners are high.

While the financing of public investment projects with BOT or PPP models in general have positive outcomes in favor of public institutions, local residents engaged primarily in farming are affected by the project and are adversely affected economically and socially. Apart from land consolidation, the standard method of expropriation has been used in land acquisition for the project, the physical and economic resettlement of the households affected by the project has not been questioned, and the process of land acquisition is not consistent with international standards. Also, according to Article 6 of Agrarian Reform Law No. 3083 on Landscaping of Irrigation Areas, a contribution fee of up to 10% can be deducted from public and private land within the boundaries of the consolidation area according to the project’s characteristic for places to be used by the general public, such as channels and roads. According to Law No. 3083, what is meant by places dedicated to public use, such as roads and channels are road and channel investments to be allocated for project purposes. Considering large-scale and large-scope projects such as motorways cannot be part of the implementation of land consolidation projects in irrigation areas in this context, it has been ruled by the Council of State that charging a contribution fee of up to 10% from places within the consolidation project for highway construction, or the places to be considered in the scope or implementation project is not in accordance with the purposes of Law 3083 (the Council of State Office 17, E 2015/7256, K 2015/3602) and the Administration in charge has restarted expropriation work for all road routes.

The share of the investment budget varies between 2% and 3% of the total gross national product in Turkey and with the use of alternative financing possibilities due to insufficient internal savings for large-scale fixed capital investments, the projects are required to be completed in a short time (Aliefendioglu & Tanrivermis, 2016). Owners frequently criticize the use of expropriation for property acquisition, particularly in projects constructed with models such as build-operate-transfer
(BOT), build-operate, restore-transfer, and public-private partnerships and on the grounds of the length of operation times of projects, they emphasize that expropriations are conducted in favor of private individuals and organizations and that there is no public interest in this process. Furthermore, due to the construction and future management of many energy and mining projects within the scope of the licenses granted to private individuals and organizations, the relevant ministry acquires land through expropriation in case the acquisition of the required real estate via purchase fails. Although conducting expropriation in favor of private individuals and institutions is explicitly defined in legislation under the authority granted by special laws, significant problems are encountered in the perception of these regulations by those affected by the project and the completion of the property acquisition process. Regardless of the financing method, it is obvious that transportation projects will ease the increasing traffic pressure and shorten transit times significantly. In addition to shortening the duration of transport, ensuring fuel savings, reducing accidents and increasing the comfort of travelers due to the quality of the road, the investment would be beneficial to the general public.

2.2. Evaluation of Real Estate Acquisition Methods and Practices

The methods of acquisition of lands required for the conduct of public services vary based on laws defining the duties and powers of public institutions and land use purposes. Although land acquisition applications are arranged with various laws, zoning development practices in urban areas and land consolidations in rural areas, and additionally, expropriation and purchase methods on both sides are particularly and often preferred. Apart from these, real estate acquisition by means such as right of servitude, rental, and donations are also possible.

In order to obtain the land required by local and central governments to provide services to the public, from parcels within the zoning application according to Zoning Law 3194, up to 40% Development Readjustment Share (DOP) is deducted, and the land obtained in this manner must be used for common services and facilities associated with these services such as primary and secondary schools by the Ministry of Education, roads with controlled access except for highways, waterways, squares, parks, playgrounds, green areas, places of worship, and police stations. When land acquired by public institutions through DOP is insufficient or in specific areas where zoning cannot be implemented or rural areas, expropriation is required for the acquisition of land necessary for public investments. For places in rural areas identified and declared as land consolidation application areas under Law 3083, a contribution deduction of up to 10% can be made from land in private ownership, according to the project’s characteristics and for investments that will be used by the general public, such as roads and channels. In summary, there seems to be a requirement to select the correct methods used in the
integration of lands required for social and technical infrastructure projects to the public to ensure that property rights, ethical values, and social justice are fulfilled and satisfied.

With the protocol signed in Turkey in 2012 between the General Directorate of Highways and General Directorate of Agricultural Reform, it was decided that land consolidation and transportation projects should be addressed together, disintegration of aggregated land should be prevented, and expropriation costs reduced. For example, with the 406 km route of the Gebze - Izmir Highway Project, it has been proposed that 80% should be expropriated and the rest (1,150 hectares) is to be acquired from private individuals through a land consolidation project. As a result, one-fifth of the total area to be expropriated for the project is planned to be acquired through consolidation. However, due to the revocation of land acquisition through consolidation by the court, expropriation work has restarted. While construction work has begun, the land acquisition process has not yet been completed.

In the acquisition of real property necessary for infrastructure projects subject to private ownership, expropriation can largely be conducted in accordance with Law 2942, or purchased in accordance with Law 4734 on Public Procurement. In accordance with the provisions of Law No. 2942, the purchase, easement, full and partial expropriation, transfer of real estate between two public bodies, rush confiscation, free use, and administrative easement methods can be used for expropriation.

Many laws cite the two basic regulations already mentioned, and even agreements related to energy projects built according to international conventions specify that land acquisition will be performed in accordance with national legislation. Public institutions have preferred to conduct expropriation in property acquisition for many infrastructure projects despite the high financial burden of the process due to reasons such as the legal basis of the practice, ease of application, and provision of fast results if properly prepared; however, a system for analyzing the income and living conditions of the households affected by the project in the pre- and post-project periods and a monitoring and evaluation system have not been established.

A comprehensive legal framework for the appreciation and payment of expropriation (compensation) has been established in Turkey. Expropriation procedures are more intensive, costly and problematic. These problems depend on the location and properties of the project, affected land tenure, land use, income sources of affected persons and other factors. In settlements where the main source of income is irrigated land and livestock and there is no other income source, the impact of choosing irrigated land and pastures for implementation of a project will be much higher and even destructive compared to projects affecting non-agricultural lands.
In addition to privately owned land, the use of public land is required for investment projects. According to Meadows Law No. 4342, meadows are lands excluded from registration, and are public lands that people of the village or town benefit from. Pasture land required for expropriation is removed from the pasture and rangeland classification by the Commission and can be used by the relevant authorities after registration on behalf of the Treasury. For the use of forest land, the Forestry and Water Affairs Ministry’s permission is required in accordance with Forests Law No. 6831, and compensation must be provided for damage to the forests. Forest lands are protected by Law No. 6831 and restrictions are imposed on individuals regarding using the forest individually and jointly. In the event of being located in state forests or in the case of necessity or public interest, permission can be granted to real and legal entities in return for the value, for those made and/or operated by the State free of charge for a period of 49 years, and this period can be extended up to 99 years.

According to Settlement Law No. 5543, in the expropriation for construction of facilities related to airports, factories, economy and defense, the resettlement of individuals forced to leave their homes due to partial or complete change of ownership is undertaken. Resettlement and provision of the former standard of living of those who will be obliged to leave their dwellings is provided. Enforceability of Law No. 5543 requires a physical relocation or major reduction in income and livelihood resources. Law No. 2942 prescribes the compensation of land owners and possessors, and Law No. 5543 takes families benefiting from land as its basis. Therefore, state support to be provided in accordance with Law No. 5543 envisages provision of housing and land that will be adequate for the family and granting of the required means as per their livelihood resources.

**2.3. Expropriation Methods and Functioning of Expropiation**

In the expropriation process, the administration that is to conduct expropriation makes a decision in the public’s interest and then various characteristics of the real estate will be identified. The administration makes a scaled plan that includes boundaries, surface areas and types of real estate and resources to be expropriated, and thus the part of immovable property to be expropriated will be determined with certainty. In places with cadastre, whether the record belongs to the immovable is investigated, and information (volume, page etc.) on the property is noted in the plan. In situations where plan preparation and sufficient funding is obtained by management, valuation for expropriation with the purchase method will be conducted primarily by the appraisal commission established in the management structure, and expropriation of the land will be completed after reaching an agreement with the owner. If no agreement can be reached with the owner, valuation and appraisal procedures for the registered lands are performed by experts chosen by the court.
Different methods can be used in the expropriation process. However, with the year 2001 amendments to Law No. 4650, it has been made mandatory to initially use the purchasing method for expropriation and prepare adequate funding before the start of implementation. After the decision of expropriation, the administration establishes one or more value appreciation commissions each consisting of three persons from its own structure. The administration may engage in an agreement with the owner over the value to be appreciated by the value appreciation commission and purchase real estate, resources or easements on them. Real estate, resources or easements purchased in this fashion are deemed to have been expropriated from the owner through purchase. However, appeals against expropriation and compensation will not be possible.

The Commission will assess the value using reports by experts and institutions as well as trading values received from local real estate trading offices, or when necessary industry and chambers of commerce in addition to the article’s criteria. The fact that Article 11 of Law No. 2942 stipulates the requirement of using only the method of income in land valuation, whereas the provision of the opportunity to utilize free trading values in addition to the income method for administrative value assessment commissions is seen as a major contradiction. The efficient and effective operation of commissions and completion of expropriation processes in a short time are not easy due to the lack of assessment infrastructure. Additionally, it is observed that administrative commissions do not always use the valuation methods defined by law and valuations are not conducted based on scientific principles. Some public administrations prepare commission reports after receiving research and consultancy services from real estate development departments of universities and valuation companies, and ensure that the process is more transparent and accountable.

The administrations appoint one or more reconciliation commissions to conduct and finalize purchase or exchange transactions over the appreciated price through bargaining. The administration notifies the owner in writing that it intends to purchase the real estate, rights or resources to be expropriated through barter or exchange without specifying the fee determined by the valuation committee. If the owner or their representative applies to the administration within 15 days, bargaining negotiations take place and if an agreement on the value or exchange that does not exceed the assessed value is reached, minutes that contain all the legal and actual properties and the expropriation value of the real property will be arranged and executed by the owner or their representative and commission members. Within 45 days from the execution date of the minutes, the amount due will be made available for payment by the administration, and the owner will be notified to submit a waiver on behalf of the administration in the land registry. Upon grant of the waiver in
favor of the administration by the owner or their representative, the compensation will be paid to them and thus, the expropriation process is completed.

If expropriation is not performed using the purchase procedure, assessed value will be determined by the court and the real estate will be registered in the name of the administration. The administration applies to the civil court of the region where the property is located with a petition that includes the assessed value and other data and documents, and requests the determination of the property’s value and a decision of the property’s registration in the name of the administration in return for the payment of the determined value in advance or in installments if the required conditions are met. The court determines the day of the hearing for no later than 30 days from the date of filing and annexing the lawsuit petition and a sample of the documents submitted by the administration, calls the owner of the real property with annotated invitation or if the address of the owner cannot be found, calls them through notification by publication. The administration will also be notified of date of the hearing (Kalabalık, 2003).

If the parties cannot agree on compensation, the judge gathers a new committee of experts if required to settle the dispute within 15 days. According to the type and nature of the place to be expropriated, an expert committee of at least three individuals will be established and at least one of them must have a master’s degree or doctorate in real estate development or be an authorized real estate appraiser in accordance with Capital Market Law No. 6362 dated June 12, 2012. The experts’ areas of expertise are determined taking into consideration the nature of immovable property to be expropriated. Utilizing the reports and statements of the involved parties and experts, the judge will assess fair and equitable expropriation compensation. Upon the agreement of the parties, the administration will have 15 days to pay the determined expropriation compensation (depositing the payment in the bank announced by the bank and submitting the receipt of deposit). Where necessary, this period may be extended once by the court. The registration judgement is final; however, the parties have the right to appeal the provision concerning the compensation amount (Kalabalık 2003, Tanrıvermiş and Doğru 2004).

In areas where cadastral work has not yet been conducted, a delineation of the property must first be drawn. To determine the place to be expropriated, the highest civil authority in the region appoints two regular and two substitute members upon application of the administration to conduct the expropriation, and these members take an oath in the magistrate’s court and are notified by the administration to conduct the expropriation. In determining the real estate, the mukhtatar or their representative and two members of the elders’ board shall also be present. The administration that is to conduct the expropriation will have the real property, the owners of the real estate at the land
registry or possessors if there are no land registry records and their addresses identified. To this end, the administration may utilize title deeds, population, and tax records or conduct external research. However, it should be emphasized that facility cadastral work in Turkey is 99.5% complete, and therefore land without cadastre for infrastructure projects would be rare.

In recent years, it has been observed in Turkey that Council of Ministers’ decisions are taken to acquire land via urgent expropriation application in almost all fields including urban development, transformation, energy, and infrastructure projects. Under Law No. 3634, in the expropriation of real estate for national defense or in situations of urgency decided upon by the Council of Ministers, or in extraordinary situations as envisaged by special laws, upon the request of the relevant administration, a court may decide on seizure of real estate under the principles set forth in Article 12 and based on the value of the real estate to be appraised by experts selected as per Article 15, upon which the determined value will be deposited to a bank in favor of the owner, saving that any procedures apart from value assessment will be completed later under the rule of urgent expropriation. It is obvious that the valuation methods to be used for the procurement method and employed in valuation processes that will be conducted by both the commissions to be established within the administration and the expert boards to be selected by the court will be the same. Public institutions have been observed to prefer urgent expropriation applications in order to avoid the obligation to conduct expropriation via the valuation and purchase method defined in Article 8 of Law No. 2942, reduce administrative responsibilities, and obtain the right to enter the land in a maximum of one month, before filing a value determination and registration proceedings.

There may be public interest in expropriation of the whole or a part of real estate that is required for a public service or enterprise that the administration is obliged to implement. If after expropriation of a portion of land it is determined that the remaining part of that land has become unusable, expropriation of the remaining part may also be requested by the owner. If it is not possible for the owner to utilize the remaining sections, the owner will have the right to demand complete expropriation of the property. When the administration conducts expropriation, it must allocate that real estate to its expropriation purpose and public interest. Under Law No. 2942, if the administration takes no action in line with the purpose of expropriation, for example, it does not construct any facilities to fulfill the aim of public interest, the owner has the right to reclaim the expropriated real estate. If the administration that has conducted the expropriation does not make any operations or erect any facilities in line with the purpose of expropriation or if the immovable property is left as is without being allocated to meet in favor of public interest within 5 years from the finalization of the expropriation cost, the owner or their heirs may repurchase the real estate by paying the expropriation
compensation plus the legal interest to be committed from the day they had received the payment. The right to repurchase must be used within 1 year from the birth of the right in question.

3. AN ANALYSIS OF REAL ESTATE VALUATION AND COMPENSATION METHODS AND COMPARISON WITH INTERNATIONAL STANDARDS

The expropriation procedures attained a very complex nature with Law No. 2942; the ambiguous aspects of the valuation process have multiplied, and rational decision making has been made more difficult. The determination of real estate expropriation value will be based on appraisal reports taking the declarations of individuals and all the related factors such as type of real estate; surface area; all the qualities and elements that may affect the value of real estate and the value of each characteristic; tax declaration, if any; value assessments made by authorities on the date of expropriation; net income that the real estate or resource in question may generate on the date of expropriation based on the location and condition of lands; relative sales value compared to example sales without a special purpose that took place before the day of expropriation for land plots; official unit prices and building cost calculations and depreciation shares and other objective criteria that may affect the value of real estate. Law No. 2942 enforces classification of the type of immovable property as land, land lot, and structures. However, valuations in many countries are based on market value regardless of the type of real estate and international financial institutions require the addition of full replacement costs to the compensation in addition to the market value. Many problems exist in the field of valuation of real property according to type in real estate acquisition and these are summarized below.

3.1. An Evaluation of Land Valuation Principles and Practices

Under Law No 2942, the revenue value of the land must be determined with the basic capitalization formula. The revenue value of the land (V) will be equal to the value to be found by dividing average annual income (R) by the current capitalization ratio (r): \( V = \frac{R}{r} \). In this way, the value of land is found by the accumulation of all the envisaged average annual net incomes of the land until the time when the expropriation process will take place (Murray et al., 1983). To calculate the net income of the land, land rental and production costs excluding rental reserves must be calculated. Since accounting records are not kept in agricultural enterprises, there is considerable difficulty in obtaining physical and monetary data related to agricultural production costs, product yields and income calculation at village and local levels. Another important difficulty is experienced in determining the capitalization rate. Due to the country’s economic and structural properties, there is a requirement to determine the capitalization rate that will be applied in land markets with the market
approach \((r=R/V)\) at the provincial, district, and village levels and based on land types (Tanrıvermiş et al., 2004b; Tanrıvermiş & Şanlı, 2008).

The current use, the state of the land as well as the yields, prices, production costs, and revenues of the widely grown crops are not observed to be rationally analyzed. It has been found that the average yearly income of the land is not possible to be analyzed consistently and that the irrigated and arid land distinction is based on assumptions rather than the actual state due to lack of accounting records in farms and the inadequacy of the parcel-scale data of agriculture and cadastral agencies regarding land use, revenues, and costs. While the income method is based on solid economic grounds, significant problems are also encountered in determining the revenues of the lands and the appropriate rate that can be used for the capitalization of the estimated revenues (Rehber, 1999). The capitalization rates of the lands are primarily taken based on assumptions and personal convictions rather than the current capitalization rates based on land types and the principles of the capitalization theory, which is the basis for the income method, is neglected. Under these circumstances, there is a requirement to audit the reports of both the value assessment commissions within the administration and the expert witnesses assigned by the courts, and comprehensive field studies must be made in order to verify the validity of the appraised value (Tanrıvermiş, 2008; Tanrıvermiş & Aliefendioğlu, 2015).

Depending on the location and use forms of agricultural land, differences between the value of land revenues and the market value emerge. The income method remains insufficient in valuation of the value of lands surrounding particularly big cities and in coastal areas made available to settlement. In these areas, land income, which is the main basis of the income method, often stops being a factor in determining land values. Although the land expropriation value found in line with the income method in value appreciation of lands with potential land plot characteristics on urban-rural area borders may be increased up to 100% taking the objective criteria in law into consideration, this is not seen as a consistent practice. In the present circumstances, in the implementation of the income method in regions where lands in process of transition are situated, approximation of the assessed land values to current market values through identification of land values that may be accepted or desired by owners, if not to real market value of such lands, may be useful for decreasing the number of disputes frequently observed in practice. However, efforts in this direction will always involve subjectivity.

The problems caused by working conditions, exacerbated by the approaches of the managers of the administration in expropriation-related matters and the problems arising from employing individuals who are not experts in the field of value assessment in the real estate and expropriation units of public
institutions as well as from working conditions do not allow for local level land value appreciation based on detailed scientific research at administrations. This structure complicates the process of value assessment based on the income method for lands. In order to facilitate the work of administrative value assessment commissions and to ensure that land appraisals are conducted based on objective criteria, the conducting of scientific studies to determine average annual net income and applicable capitalization rates as per land types at local levels by professional individuals and institutions is required and mandatory. As the opportunity for value assessment through receiving reports from subject specialists and organizations when required, as well, is also provided to commissions in Turkey, it will also be possible to reduce problems in value assessment in expropriation to a large extent and resolve the problems of the administration through the support of formation of accredited private sector organizations that independently conduct appraisal activities and ensuring that such organizations provide advisory and consulting services to administrations (Tanrıvermiş et al., 2004b).

3.2. An Evaluation of Land and Building Valuation Principles and Practices

The type of parcels located within municipalities, included in the zoning plan implemented by the municipality, benefitting from municipal services and having residential surroundings are considered to be “land lots.” The value of land will be determined by the precedent value of sales the day before expropriation and comparative sales analysis will be used for this purpose. The precedent taken for valuation will be sought to show the same qualities and characteristics of the real estate in question, but when such a precedent is unavailable, sales made in previous years of different quality, in different places and regions will be taken as precedent and valuation will be performed taking into consideration differences in quality, region, and time as well as superior and inferior aspects of the real estate. If there is a building on the precedent, the value left after deducting the value of buildings will be taken as basis for comparison. An appraisal committee and experts must examine the selected precedents individually, specify the superior and inferior aspects, should not be content with a general comparison, and also indentify the properties that cannot be used as precedents and explain in detail the reasons for this. According to the expropriation legislation, the precedent value or market method will be used for the determining of expropriation values. For this, the lands to be compared must bear similarity in terms of all the qualities that affect land values such as location, shape, physical structure of soil, length along the road, the road the land is located on, the width of the street and imposed restrictive regulations (such as floor limit, usage ratio of the land) (Tanrıvermiş, 2016).

It has been observed that in the valuation of parcels considered as land lots, incorrect operations were performed by dividing the precedent value by land area in expert reports received by the court, and
real estate zoning plan functions and development rights were not taken into account. It has been observed that in expert reports prepared in many provinces, the precedent with the highest unit value is generally selected for valuation, and with the application of this unit value to the estate in question “the property is assumed to be several times more valuable than the precedent in terms of urban services, infrastructure, regional development speed and structuring advantage” and the assessed property value is so high as to be considered exorbitant. It has been determined that in cases of both land and land lot expropriation, incorrect operations were made and the valuation work performed was determined not to be in accordance with international valuation standards and scientific principles.

Valuation performed through official unit prices on the expropriation date for buildings is defined in legislation, and this process completely ignores usage patterns and revenue of the building. In the cost analysis, integral parts and add-ons will be included in the structure’s value. Cost calculation will be determined according to the unit prices on the official date of expropriation. In cost analysis, all features of the structure must be shown in detail and a detailed report providing opportunity for checks must be presented. For the construction costs calculation, depreciation from the date of the building’s construction to the expropriation date (or notification date) is to be calculated and subtracted from the cost of reconstruction, and thus the present value of the building will be determined. If the building’s ruins are the owner’s property, the value of those ruins will be subtracted from the present building value to determine the expropriation value. If the ruins remain in the administration’s possession, their value will not be deducted from the cost of the building. If there are goods and materials to be removed from the building such as machinery, their dismantling and transportation costs will be paid to the owner, but the necessary expenses for re-assembly will not be paid.

3.3. Comparison of Real Estate Valuation Practices with International Standards

In cases where public interest exists, Article 46 of the 1982 Constitution allows for the expropriation of private real estate. Within the framework of Law No. 2942, a certain amount of compensation is paid to individuals who prove that they are the owners or possessors of real estate expropriated for public interest. This also applies to public lands and their relevant public institutions, within the framework of the principles set forth in the law. It is not possible to pay compensation to users other than those already mentioned, or to individuals who utilize the land in other ways. For individuals who use or jointly utilize public lands, no payment of compensation is possible. Since expropriation procedures and payment of costs are tied to certain time periods and the use of land is not possible without paying for its value, expropriating institutions have been obliged to be more attentive in this
regard (Tanrıvermiş et al., 2004a). In recent years, urgent expropriation procedures have often been used by central and local governments, and free access to the land has been obtained without waiting for the completion of value assessments and land registration cases. However, this practice leads to relatively higher expropriation costs.

According to Law No. 2942, expropriation compensation is paid to those whose lands have been seized and such compensation will be calculated based on the (income) value and market value of the land. In addition to this, compensation will be paid for damages to be incurred on any assets located on the land. However, under Law No. 2942, expropriation compensations may only be paid to persons who have rights over the land. During the implementation of roads, organized industrial zones, new housing, urban renewal and development plan projects, while a requirement to conduct new expropriations emerges, an increase in the value of real property that will be expropriated can also occur. In the event of the expropriation of properties whose value has increased due to development of a region, municipalities and governor’s offices being paid based on such increased value will also be unfair. The administration endures the real burden of development and the owners do not have any direct contribution to the increased value of real property due to development (Kalabalık, 2003). Therefore, in the assessment of expropriation value, it is proper not to take into consideration value increases originating from development, and the value of the real estate prior to development should be used.

This calls attention to the fact that in Turkey, the calculation method of the amount paid to the owner of the expropriated real estate is not compatible with international valuation standards, the decisions of the ECHR and the performance standards of international finance institutions. First, Article 46 of the 1982 Turkish Constitution states that just compensations are to be paid in the expropriation of real estate, and this concept is known as “market value” or “fair market value” in valuation science. The ECHR decisions state the provision of payment of the market value of the goods and properties expropriated, and the ECHR interprets the concepts of goods and property independently from the domestic law norms of member states. In appeals, Courts tend to accept the “value” that the state interferes with the administrative procedures and actions, legal regulations or judicial decisions, regardless of the social and economic context, in the scope of the property (Gemalmaz, 2006). In Turkey, although Article 46 of the Constitution stipulates that the just compensation of the expropriated real estate will be paid, Article 11 of Law No. 2942 stipulates that expropriation costs are to be calculated as income in real estate of land characteristics, as market value in real estate of land lot characteristics, and as net cost in buildings. It is observed in Article 11 of Law No. 2942 that
such classifications as commercial business, economic value and social rights do not exist, and the concept of market value only applies to real property of land lot characteristics by law.

The principle of proportionality is violated through legislation and practices, and property rights are limited. It is, in the first place, possible for the administration to receive information from expert individuals and institutions as per the law; to approach expropriation processes through scientific and international criteria; to process valuation procedures related to expropriated real estate considering the balance between the individual and public interest; and to practice fair, quick, reasonable and equal expropriation for all beneficiaries, without the need to resort to such ways as urgent expropriation and land consolidation. In expropriation realized by force and without the owner’s consent in essence, redressing of the balance will be ensured by, as required by Article 46 of the Constitution and Article 1 of the ECHR Additional Protocol No. 1, the payment of just compensation of the real estate in accordance with the principles of fast and fair satisfaction with a fair trial. While restricting property rights, the immunity of goods and property of right owners should be respected; provisions that are non-arbitrary, determined by law, predetermined, accessible and containing certainty should be applied in property rights restrictions; and they should be against individual property rights, in favor of general interest, and need to be individual and should not overload in value appreciation or in the process of procedures and lawsuits. Care must be taken to have proportionality and balance in the protection of property rights and requirements of the general interest.

Owners are observed to be dissatisfied with expropriation on grounds such as losing their income and/or job areas, not considering the paid amounts sufficient, and destruction of social and cultural assets. Similarly, institutions and courts with the authority to expropriate also complain about the functioning of the process and excesses of the workload. Particularly owners in rural areas, people with no income or means of livelihood save crop and livestock farming activities, tend to exhaust the expropriation money they receive in non-production areas in a short time even if they have received the entire cost of the expropriated property. Additionally, families who have lost their land and other means of production settle in the suburbs of large cities and cause great social problems. The first example in Turkey was that of the Baku-Tbilisi-Ceyhan Cure Oil (BTC) Project, where compensation of the revenue loss that could be caused by damage to public common areas, except for the real estate value of the households affected by the project, was supported with social projects and many contributions have been made by service delivery to the affected settlements. International financial institutions demand the development of certain projects in order to minimize the negative
impacts on these individuals resulting from the related projects, to assist them in rebuilding their lives or businesses, and to ensure that they maintain their lives (Tanrıvermiş & Doğru, 2004).

Property acquisition for public investments has positive and/or negative impacts on the local community and owners affected by the project. As mentioned before, there is more than one method to acquire land for realizing public investments. The method requires acquisition of land depending on the purpose of the project to be developed, the surface, the type of land ownership and land use status before the acquisition and the regulations in place. Forced or improperly planned resettlements can cause irreversible consequences such as destruction of existing modes of living and production, poverty, and environmental and social stresses. To avoid or to minimize these effects during land acquisition, project-related countries and/or international financial institutions such as the IFC and EBRD established a standard called the “Land Acquisition and Involuntary Resettlement Standard” to be followed by their clients or investees. According to this performance standard, involuntary resettlement refers both to physical displacement and to economic displacement due to land acquisition associated with a client’s/investee’s operations. Usually displaced persons may be classified as persons who (i) have formal legal rights to the land they occupy, (ii) do not have formal legal rights to land, but have a claim to land that is recognized or recognizable under national laws or (iii) have no recognizable legal right or claim to the land they occupy.

Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for the affected individuals and communities, as well as environmental damage and social stress in areas where they have been displaced. For these reasons, involuntary resettlement should be avoided or at least minimized. From this point of view, the client/investee should behave in accordance with the following requirements (International Finance Corporation World Bank Group, 2012; European Bank for Reconstruction and Development, 2014):

- Compensation at full replacement cost and other assistance for displaced persons or communities to help them improve or at least restore their standards of living or livelihoods.
- Establishment by the client/investee of a grievance mechanism to receive and address specific concerns about compensation and relocation that are raised by displaced persons or members of host communities.
- Based on a census of the impacts and the persons who will be displaced by the project, the investee should provide a social impact assessment, resettlement planning and implementation.

However, displacement due to land acquisition or project implementation is separated in physical displacement and economic displacement. In the case of physical displacement, people living on the
site of a client’s/investee’s operations must move to another location. As a requirement in this case, the client/investee will: (i) offer displaced persons choices among feasible resettlement options, including adequate replacement housing or cash compensation; and (ii) provide relocation assistance suited to the needs of each group of displaced persons, with particular attention paid to the needs of the poor and the vulnerable. In the economic displacement case, land acquisition for the client’s/investee’s operations causes loss of income or livelihood. The client/investee will promptly compensate these persons, for example by compensating affected business owners for the cost of re-establishing commercial activities elsewhere, for lost net income during the period of transition, and for the costs of the transfer and reinstatement of their business operations. The resettlement should be managed in collaboration with the responsible government agency if one exists. This is known as government-managed resettlement.

According to the IFC and EBRD standards, replacement value is calculated as the market value of assets plus any transaction costs associated with restoring such assets (e.g. transfer taxes, registration costs). The replacement value of land corresponds to the market value of land with similar characteristics in the vicinity of the affected land and any transaction costs. The valuation of land takes into account the quality and productivity of land. Valuation of plants and trees takes into account various important features, such as their age or the resources and amount of time that would be needed to grow a new tree/plant. Even after receiving compensation, individuals affected by projects are allowed to salvage plants/trees, i.e. remove them with roots and attempt to replant them in other locations. However, for losses that cannot easily be valued or compensated for in monetary terms, in-kind compensation may be appropriate. This compensation should be made in goods or resources that are of equivalent or greater value and that are culturally appropriate. According to the International Valuation Standard Council, replacement cost is the cost that is relevant for determining the price that a market participant would pay as it is based on replicating the utility of the asset, not the exact physical properties of the asset. Usually replacement cost is adjusted for physical deterioration and all relevant forms of obsolescence. After such adjustments, this can be referred to as depreciated. The three key steps to follow in the replacement cost method are (Hobbs, 2012; International Finance Corporation World Bank Group, 2012; European Bank for Reconstruction and Development, 2014; State Hydraulic Works (DSİ), 2015):

• Calculate all of the costs that would be incurred by a typical market participant seeking to create an asset providing equivalent utility,
• Determine whether there is any depreciation related to physical, functional and external obsolescence associated with the subject asset, and
Deduct total depreciation from the total costs to arrive at a value for the subject asset.

The replacement cost is generally that of a modern equivalent asset, which is one that provides similar function and equivalent utility to the asset being valued, but which is of a current design and constructed or made using current cost-effective materials and techniques. The cost approach should capture all of the costs that would be incurred by a typical market participant. The cost elements may differ depending on the type of the asset and should include the direct and indirect costs that would be required to replace/recreate the asset as of the valuation date. Based on that point of view, the difference with “full replacement cost compensation” required in IFC and EBRD standards may come from an asset that cannot easily be valued, such as cultural assets, etc.

If expropriation is conducted for a project, a Resettlement Action Plan (RAP) should be developed and the population whose lives and production systems are adversely affected should be provided compensations for land, housing, infrastructure and other losses. The affected group is defined as all groups with use or moral/traditional rights on the land and other assets; and the non-existence of a title deed or any other legally valid document will not be a justification for non-payment of compensation. According to international standards, those who are adversely affected and have by any manner use rights on land must be compensated without having to legally prove this situation. The valuation process of the real estate affected by the project will need to be carried out at substitute cost. Assessment of the monetary value of some losses such as public services, buyers and sellers, fishing, grazing, and access to forest land is not easy. Therefore, every attempt should be made to ensure access to equivalent and culturally acceptable resources and income opportunities. The resettlement plan should cover land allocation to protect the livelihoods of sensitive groups or culturally acceptable alternative income strategies (The World Bank, 2002; European Bank for Reconstruction and Development, 2014).

There are significant differences between legal regulations on real estate acquisition and compensation calculation in Turkey and international standards. First of all, while in Turkey the onus is on an individual to prove that they are the owner or possessor for the payment of expropriation compensation, the performance standard envisages that individuals who use the land in any way to obtain income must be compensated regardless of whether there is legal basis for their right to benefit from the land. Secondly, the principle was created requiring the compensation of all assets, including

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1 Direct costs covers materials, potentially including land, and labor.
2 Indirect costs define such as transport costs, installation costs, professional fees (design, permit, architectural, legal, etc.), other fees (commissions, etc.), overheads, taxes, finance costs (e.g., interest on debt financing), and profit margin/entrepreneurial profit to the creator of the asset (e.g., return to investors).
full replacement value and transportation costs. In fact, the international standard is directly concerned with an individual’s income from the land and accepts that any practices that may lead to a reduction in such an income should be compensated. As per Law No. 5543, those who are deprived from their land totally or partially due to expropriation as well as those who have lived in the related settlement for 3 years and do not have any other properties may benefit from resettlement and the related incentives on the condition that they cannot make a living because of the land they have been deprived of or they will have to relocate. According to international standards, however, physical relocation will not be compulsory, and even if the livelihood of the person is not adversely affected, they should nevertheless be compensated.

3.4. Situation Analysis in Projects Financed by International Finance Institutions

It is observed that in Turkey, amongst international financial institutions, the public and private sectors often exploit such sources, in particular the IFC and EBRD, and the institutions in question initially requested the preparation of land acquisition and resettlement action plans within the scope of the directives, and in the recent years, of performance standards. Funded by the IFC, the BTC Project is a large, multinational project for the planned transport of Azerbaijani oil through a pipeline to be built through Azerbaijan, Georgia and the Republic of Turkey to the Mediterranean for sale on the international market. An Intergovernmental Agreement (IGA), Host Government Agreement (HGA), and Turnkey Contractor Agreement (TA) have been made between the governments of Azerbaijan, Georgia, and the Republic of Turkey in order to realize the project. The construction activities of the project began in 2003 and were completed in early 2006.

According to the Trans-Anatolian gas pipeline (TANAP) Project Host Government Agreement and Article 30 of the Intergovernmental Agreement, expropriation costs will depend on the realization of the investment in question or on the previous fair market value of the real estate prior to the investment becoming known. For the determination and compensation of the cost, the appropriate provision will be reserved on or before the date of expropriation to be allocated for the payment and the cost will be paid without delay. Fair market value will be denominated in U.S. dollars, and the agreed upon interest rate from the expropriation’s payment date will also be included. Any dispute related to expropriation will be taken to arbitration in accordance with the provisions of Article 34 of said agreement. However, it is observed that the value measures in said agreement and the value measures in the domestic rules of law are different, and within the scope of the project, real estate valuation is carried out according to their types in a manner which is customary.
In the BTC Project, “land acquisition and expropriation procedures to be performed according to the domestic rules of law” were agreed, however with the resettlement agreement prepared, illegal users, fishermen and non-eligible parties according to the domestic rules of law along with title deed expenses were also compensated. The rights of the property and the individuals processing the land by ownership in Law No. 2942 are recognized, and there is no payment of compensation to the ones using meadows and pastures, and forest lands. With resources transferred to the Resettlement Action Plan (RAP) Fund found in projects financed by international sources, revenue losses that are not possible to be paid under the Turkish legal system, costs and the payment of other reimbursements are made. Unlike the projects funded from domestic resources as related to a reduction in the income of owners and processors, reducing the social impact of the implementation of expropriation is targeted through social investment programs for the affected settlements.

New opportunities provided by international projects in terms of expropriation and valuation included payment of both the land price to the related administration and payment for loss of income to the village or neighborhood administrations if it is identified that they benefit from the land on the route. After the completion of construction in pastures, meadows and forests, it was determined that normal grass yield could not be secured for an average of 3 to 5 years, although it varies according to climatic and soil conditions. The second major new practice is that of paying loss of income to fishermen fishing in landlocked and coastal waters, due to the restriction of the right to benefit from such resources. Third is that tree, product and asset prices were paid to those who illegally used public and private land. Fourth is that people were informed about value appraisal. The negative side of the expropriation and cost assessment approach applied in the project is that owners and users in the settlements on the project route are inclined to expect the implementation of the same standards in other projects and therefore, expropriation prices artificially rise and the conciliation opportunities reduce.

Of the total investment amount (US$1.31 billion) in the BTC Project, 7.04% consisted of expropriation expenses (US$99 million). If the US$3.4 million resource allocated to the RAP Fund is taken into account, the proportion of the total payment made to public and private land owners, possessors and users within the scope of the project is 7.28% of the investment cost. Under these circumstances, it appears that product, tree and asset prices for users on public and private land and income losses paid for public lands had no significant impact on the total investment amount. Compared with other investments in Turkey, although the price paid for the land was higher than its market value, it was revealed that the share of the land supply expropriation expenses from the total investment amount was quite low. In many projects, this ratio reached 30%, and there were even
investment projects where it reached the 50% and 70% levels (Tanrıvermiş & Gündoğmuş, 2004). Given that the total of expropriated land was 3,105 hectares, it appears that one hectare of the land was supplied at an average of US$3,188.41. The realized average expropriation cost is sufficient to explain that the unit land value is above the market value. It needs to be emphasized that the rate of the expropriation cost in all of the provinces on the project route to the market value of the land varies between 100% and 200% (Aliefendioğlu & Tanrıvermiş, 2016), and although it conflicts with the theoretical principles, the value income exceeds the market value, and this value is higher than the fair market value.

3.5. Issues of the Implementation of Expropriation and Evaluation of the Results

The share of the infrastructure costs in state and local institutions expenditures is approximately 11% over the last 15 years. The requirement of a state to have an adequate budget for expropriation brings the economic characteristics of expropriation to the foreground. However, real estate acquisition by public institutions and expropriation spending are not determined according to their ways of acquisition and announced each year. In this aspect, expropriation expenses were identified by examining the last 10 years of final accounts laws. In Turkey, in the period 2006 to 2016, the share of expropriation payments in the central government’s investment budget was on average 8.55%; for local governments, the share of expropriation payments in the investment budget averaged 12.97%, and the total expropriation costs of the central and local governments totaled 10.1% of the overall investment budget (Table 1). When compensation payments, interest and other expropriation costs paid by all public entities for lands they confiscate without expropriation are added to this amount, it is inevitable that the share of the total payments within investment allowance will double. Also, it should be noted that among the expropriation costs revealed by the archival research, there was no payment made from funds especially other than the budgetary discipline.

Table 1. Development of the Share of Expropriation Expenses in Investment Expenditures in Turkey (Source: Ministry of Finance, General Directorate of Public Accounts Records)

<table>
<thead>
<tr>
<th>Years</th>
<th>Central Government Investment Costs (1000 TL)</th>
<th>Central Government Real Estate Acquisition and Expropriation (1000 TL)</th>
<th>Share of Expropriation and Real Estate Acquisition (%)</th>
<th>Years</th>
<th>Municipal and Provincial Special Administrations Investment Expenditure (1000 TL)</th>
<th>Municipal and Provincial Special Administrations Real Estate Acquisition and Expropriation (1000 TL)</th>
<th>Share of Expropriation and Real Estate Acquisition (%)</th>
<th>Share of Land Acquisition in Investment as Total of Central and Local Administrations (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>12,097,713</td>
<td>666,297</td>
<td>5.51</td>
<td>2006</td>
<td>9,928,863</td>
<td>1,036,164</td>
<td>10.44</td>
<td>7.73</td>
</tr>
<tr>
<td>2007</td>
<td>13,003,480</td>
<td>639,571</td>
<td>4.92</td>
<td>2007</td>
<td>12,328,370</td>
<td>1,128,518</td>
<td>9.15</td>
<td>6.98</td>
</tr>
<tr>
<td>2008</td>
<td>18,515,893</td>
<td>1,873,134</td>
<td>10.12</td>
<td>2008</td>
<td>13,649,093</td>
<td>1,153,131</td>
<td>8.45</td>
<td>9.41</td>
</tr>
<tr>
<td>2009</td>
<td>20,071,509</td>
<td>2,251,001</td>
<td>11.21</td>
<td>2009</td>
<td>11,878,975</td>
<td>916,076</td>
<td>7.71</td>
<td>9.91</td>
</tr>
<tr>
<td>2010</td>
<td>26,010,306</td>
<td>1,653,437</td>
<td>6.36</td>
<td>2010</td>
<td>13,035,045</td>
<td>1,551,390</td>
<td>11.90</td>
<td>8.21</td>
</tr>
<tr>
<td>2011</td>
<td>30,905,295</td>
<td>3,147,857</td>
<td>10.18</td>
<td>2011</td>
<td>15,981,759</td>
<td>1,737,691</td>
<td>10.87</td>
<td>10.42</td>
</tr>
<tr>
<td>2012</td>
<td>34,365,315</td>
<td>2,733,041</td>
<td>7.95</td>
<td>2012</td>
<td>19,058,729</td>
<td>2,591,822</td>
<td>13.60</td>
<td>9.97</td>
</tr>
</tbody>
</table>
According to the analysis results of the macro data, there is a linear correlation between the overall economic growth trend and the share of the budget earmarked for expropriation in the investment budget. In times of crisis, the budget earmarked for expropriation decreases; however, for a quick exit from the crisis, the public needs to make investments and stimulate the market through spending.

According to the research results, it was seen that low funds were appropriated for expropriation, real estate required for the investments in this period were used in construction projects without being expropriated, and in the following years high amounts of confiscation compensations were paid. Essentially, this approach is not cost efficient for the administration and is incompatible with the responsibilities of administration for the protection of property rights.

It has been identified that in the last 15 years, public institutions have expropriated approximately 300,000 hectares of land for different purposes and that land requirements have rapidly increased due to increasing large-scale public investments. High amounts of expropriation costs are paid for infrastructure investments, and these kinds of projects also create physical barriers on agricultural land. With the protocol signed between the General Directorate of Highways and the General Directorate of Agricultural Reform, displacement of parcels corresponding to highway routes by consolidation projects with the surrounding public land by consolidation can be provided, and it is also possible to reduce expropriation expenses and to prevent unnecessary expropriation by arranging the remaining parts which fall outside the road route in the existing expropriation practices and parts which are mandatorily expropriated parcels by consolidation. Consolidation of land along the route of transportation projects as well as consolidation of parcels remaining from expropriation will facilitate access to sources of income and also prevent victimization of owners. Under this protocol, in three investment projects such as the Ankara-Niğde Highway, Istanbul-Izmir Highway and Malatya North Ringroad, a total of 387,918 hectares of land was consolidated, and as a result the expropriation cost, which was 380 million TL, was reduced to 226 million TL. A 327 km section of the Ankara-Nigde highway, 75 km section of the Istanbul-Izmir highway, and 30 km section of the Malatya North Ringroad were acquired through land consolidation, and in these three projects, 154 million TL savings were obtained by public institutions.

The construction cost of the Gebze-Izmir Highway Project was determined to be US$9 billion and the expropriation costs totaled US$466.35 million in 2009 prices, while the share of expropriations of the total investment was estimated at 5.18% (The Turkish Ministry of Transport, General
Directorate of Highways, 2007). However, it is expected to reach 15% for several reasons: a section of the project route covering fertile lands cannot be acquired through consolidation so expropriation procedures must be reinitiated, the court’s finalized assessment value being much higher than even the market value, and litigation expenses. The eligible firm has been given an operating period of 22 years 4 months, which does not include the project’s construction period. The land required for toll road, bridge and tunnel construction is to be acquired by expropriation and consolidation by the project. In the project’s 406 km route, a total of 12,000 parcels are required to be expropriated. The land required for the project is approximately 5,500 hectares, of which 3,500 hectares are private property and the remaining 2,000 hectares are public lands. It has been identified that almost all the parcels affected by the project are actually used as agricultural or forest land and that there are structures on only 240 parcels. It is observed that land acquisition for toll roads through land consolidation has been annulled on the grounds that this is clearly inconsistent with the objectives set forth in Law No. 3083; that the administration has started the standard expropriation procedures; and that the required expropriation practices have not been completed although the road construction is approaching completion, and therefore, the administration is at risk of facing confiscation without expropriation proceedings.

It consequently emerges that construction of such infrastructure projects that divide agricultural lands and settlements and adversely affect transportation among the lands and rural settlements through contribution shares that would be obtained through consolidation projects that should be conducted in order to enable the integrity of agricultural lands and access to agricultural lands with regard to social aspects is unacceptable. It is obvious that additional arrangements should be made in the laws on zoning development and consolidation applications in order to avoid causing speculative increase in the land values of new transport projects. The preference for land acquisition in transport projects with uncompensated methods such as zoning and consolidation does not conform to scientific principles and procedures, social values, and fairness. The preferred course of action should entail the acquisition of the project’s required lands through expropriation followed by consolidation of the fragmented agricultural lands, and in cases where access rights to land is restricted, a re-planning of the settlements must be preferred. It seems mandatory that the investing public institution should revise the specified works under the scope of a resettlement action plan and adopt land acquisition and compensation principles that are in harmony with international standards for economic resettlement.

The structural characteristics of rural and urban land markets in Turkey do not allow for rational land acquisition for projects. There are certain structural characteristics that do not allow for rational
valuations or the audit of those valuations. The lack of an established national data network for recording statistical data at the local, regional and national levels is one example, and such an organization would be able to monitor factors such as actual purchase and sales values following the completion of cadastral work, land and building leases, and income and costs in the use of agricultural land. Similarly, other examples include the lack of identified and published records of applicable capitalization rates valid at the provincial and district levels and insufficient institutionalization in the valuation area. When the approach of managers in public institutions towards expropriation, insufficient numbers of real estate development and valuation experts in administrations, and problems caused by working conditions are added, it is observed that valuation is not performed using scientific research at the local level in administrations.

It is noteworthy that the problems encountered in real estate acquisition and expropriation by public institutions include legislative problems, budget deficits, lack of human resources, and inadequacy of the data network organization. Besides the lack of established infrastructure for real estate valuation for expropriation and other purposes, conformity of the methods that need to be used in valuation and the methods used by experts to international valuation standards and valuation science is also a matter of debate. Furthermore, when the fact that different persons and institutions apply different practices is added, it is revealed that quality and conformity in the methods, data and approaches used in valuation to certain standards is not ensured; and this situation leads to major problems in almost every project between public institutions and owners.

In the focus group studies conducted with the executives of the central and local administrative units that are authorized for expropriation, the issues related to real estate acquisition and expropriation were analyzed. Among the main problems encountered, were issues such as project development and planning practices not being given sufficient time; failure to provide adequate financial resources in a timely manner; executives being indifferent and ignorant in the subjects of property rights and expropriation; protracted expropriation practices and cases usually resulting unfairly; inadequate and obscure parts of the expropriation legislation and aspects conflicting with international regulations; failure to establish adequate data infrastructure in public administration; and lack of a properly functioning real estate market and valuation system were specified. In addition, it has been identified that due to the lack of sufficient funds in municipalities, confiscation without expropriation is often preferred and this has been found to bring significant financial burden in addition to eroding confidence in the municipality. These problems could be collected under the following titles: problems in approach to expropriation and property issues; legislative issues; budget insufficiency; human resources insufficiency; valuation infrastructure and data network organization insufficiency.
• i. Problems in Approach to Expropriation and Property Issues: In practice, it is observed that the managers of the responsible and authorized institutions sometimes fail to pay sufficient attention to the protection of basic human rights such as right to property and though not vital for the project, they resort to expropriation, they confiscate real estate without expropriation and neglect the impact of expropriation on the owner. If the scope of expropriation, which has a crucial influence on the living conditions of people, is too broad and if it impacts the village and even the district as a whole, it can prove to be a common problem for an important part of the society. Unless far-reaching public policies and resettlement action plans for the elimination of the social and sociological issues of expropriation are put into action, it is not possible to create awareness among local populations about the attention paid to the protection of the peace and security of local communities, or the protection of property rights and right to life. The versatility of the proprietary rights and in projects where the loss of property rights means also the loss of work and living spaces requires the establishment of resettlement living environments, and the resettlement must be supported by economic and social means. Ignoring this imposes great danger in terms of public authorities and officials and may lead to the emergence of social loss and damage of a scale much larger than the benefits to be accrued by expropriation.

• ii. Issues Originating from Legislation: The preparations required to begin work on the expropriation process, and especially the criteria for determining the existence of public interest and the criteria for the analysis of the type of real estate are not explicitly identified in the legislation. Among the primary controversial issues and the issues that lead to the prolongation of cases due to objections, failure in the actual distinction between land and land lot during value determination, lack of regulations in the legislation related to the situation of the real estate in terms of planning, cadastre and land register, and its counterparts according to the state of the current use and if any, how to perform the income and expense analysis could be listed, and it can be observed that they usually lead to incorrect operations. The obscurity of the legislation on which the land and land lot distinction is based, and the lack of detailed research carried out for this purpose in this practice mostly do not allow for rational valuation. Multipurpose projects, which require expropriation, with resettlement elements such as large land acquisition, access roads and tunnels usually involve more than one ministry or public institution and although the responsibilities and authorities of the institutions are clearly defined in the legislation, mostly because the institutions cannot provide simultaneous operation, the desired result from the project practices are delayed, and it is inevitable for the affected people to react. As a result, existing legal regulations include general provisions and remain inadequate in today’s circumstances. In addition, even a single miscommunication with a single
administration leads to noncompliance between governmental administrations and institutions and disconnects the institutional link.

In recent years the pace of investment has increased, particularly in transportation and urban transformation, but also in infrastructure and superstructure projects. As a result, increases in the expropriation practices of public institutions and in the number of cases have been observed. Owners usually file annulments in the administrative judiciary against expropriation practices in obligatory cases, and the administration files suit in the jurisdiction for the value determination and registration of real estate that could not be obtained by purchase. It is seen that between 2009 and 2015, there was an increase in Turkey in the number of expropriation cases filed in the administrative judiciary compared to the rate of total case numbers (Table 2), and it is observed that the conclusion of cases is usually protracted, and realization of the investments within the time and the feasibility of the investment are adversely affected by this situation. In addition to the expropriation cases, when confiscation compensation cases filed due to land acquisition without expropriation and cases filed for the nullification of expropriation practices are included, it is seen that the number of cases has at least doubled.

Table 2. Total Number of Cases in Civil Courts in Turkey and Number of Expropriation Cases (Source: http://www.adlisicil.adalet.gov.tr/istatistik)

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Number of Cases</th>
<th>Expropriation Cases</th>
<th>Share of Expropriation Cases in Total Number of Cases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,729,980</td>
<td>38,502</td>
<td>2.23</td>
</tr>
<tr>
<td>2010</td>
<td>1,810,201</td>
<td>37,197</td>
<td>2.05</td>
</tr>
<tr>
<td>2011</td>
<td>1,870,830</td>
<td>52,090</td>
<td>2.78</td>
</tr>
<tr>
<td>2012</td>
<td>1,708,497</td>
<td>51,409</td>
<td>3.01</td>
</tr>
<tr>
<td>2013</td>
<td>1,954,803</td>
<td>55,724</td>
<td>2.85</td>
</tr>
<tr>
<td>2014</td>
<td>2,142,665</td>
<td>55,306</td>
<td>2.58</td>
</tr>
<tr>
<td>2015</td>
<td>2,167,986</td>
<td>61,196</td>
<td>2.82</td>
</tr>
</tbody>
</table>

The number of cases filed in administrative courts in 2015 was 190,525; expropriation cases numbered 1,977, confiscations without expropriation numbered 172, and disputes relating to expropriation procedures numbered 557. The share of cases relating to expropriation from the total number of administrative cases was determined to be 1.42% and it was found that the share of the cases related to expropriation in the total number of administrative and judicial cases in Turkish courts was 2.71%. The total number of court cases versus Turkey in ECHR is 65 thousand and the 20% of them is related to ownership of the real estate and compensation complaints.

If real estate cannot be acquired through negotiations with the owner in the expropriation process and the value is determined by the court, not only is real estate acquisition process prolonged, but it
has also been revealed that the value settled by the court tends to be much higher than the value determined by administration or the value assessed by independent experts through service procurement. Identification and registration procedures of the expropriation costs of real estate by the court are usually completed within 1-2 years; and because this period is long, many public institutions decide to implement confiscation by Cabinet Decree within 1 month for urgent expropriation; investments start with this decision and value appreciation and registration cases are carried out simultaneously with construction. Currently, of the 61,071 expropriation value determination and registration cases still being heard in courts, 93.38% have been adjudicated, and it has been found that generally conclusion of the cases take 2 years.

• iii. Issues Originating from Budget Insufficiencies: One of the major problems encountered in projects of compulsory land acquisition by expropriation is the lack of sufficient financial resources of public institutions. Public administrations need expropriation while providing service to individuals to whom they are obliged to serve, and one of the main obstacles faced in such a situation is the lack of financial resources. The provision of adequate financial support to public administrations for expropriation is one of the fundamental requirements for effectively ensuring the public interest (Köycü, 2006). With the amendment made in Law No. 2942 by Law No. 4650 in 2001, a regulation was made stipulating that administrations cannot initiate expropriation practices without first providing adequate funds. Similarly, according to Public Procurement Law No. 4734, construction projects cannot be initiated before completion of land provision, property acquirement, expropriation and zoning procedures if necessary, and application projects. Despite the aforementioned two basic regulations, problems in expropriation caused by lack of funds remains unresolved, and it can be observed that projects without sufficient funds are awarded a contract and construction work begun. Under these circumstances, confiscation of land subject to private property without expropriation becomes an obligation, and this leads to the undermining of confidence among private owners.

• iv. Lack of Qualified Human Resources: There have been ongoing problems in recent years in expropriation practices. Of these problems, the primary ones are the lack of specialist knowledge or experience in the fields of real estate and asset valuation in committees of court-appointed experts and in commissions established by administrations, as well as the lack of auditing in the majority of valuation procedures. Both in public institutions and in committees of experts, experts with undergraduate and graduate qualifications in real estate development and management and certified appraisers are required to perform duties. However, in the absence of experts with the specified qualifications, it is considered necessary in many provinces and rural areas to select experts from
neighboring provinces and to appoint instructors from real estate development and management departments of universities as experts in specialty cases. In this way, a reduction in the number of reports not based on technical and scientific factors, valuations performed in accordance with objective principles and international standards, and the protection of the rights of all stakeholders could be ensured. Another problem is that local pressure groups having expectations of interest in important infrastructure investments try to inflate values by putting pressure on incumbent committees of experts and courts; and though small in number, some cases of coercive increases in land acquisition costs in this way could be encountered. In such cases, the solution would be the mandatory selection of experts from neighboring provinces and universities.

v. Insufficiency of Valuation Infrastructure and Data Network Organization: It can be observed that the assessed value of expropriated real estate cannot usually be defined as fair value, and in many projects the land’s value is even higher than that of the market value. Land owners are generally dissatisfied with the assesses and paid expropriation value, while administrators of public institutions claim that the expropriation value exceeds the real market value of the land and this causes delays in investment projects and increases the investment cost. In many investment projects, the paid land expropriation compensations are higher than the real market values of the real estate due to lack of developed standards, lack of institutionalization of real estate expertise, and significant valuation errors. The structure and operation of urban and rural land markets, lack of professional standards, insufficient number of qualified appraisers along with the fundamental problems in the implementation of valuation methods lead to prolongation of operational and valuation processes of expropriation as well as realization of public investments, increases in investment costs, and naturally, based on the model of recovery of costs, increases in service prices.

In rural and urban real estate markets, because actual purchase and sale values are not recorded and real estate ownership is usually shared, the land acquisition process is often slow and costs are relatively higher. For this reason, it is necessary to establish a database of physical and financial values related to acquisition methods of the real estate used in each project, and provide a basis to apply benchmarks in valuation procedures. Integrating the amounts and costs of land acquisition of public institutions with a data network organization or, more importantly, the land registry will make it possible to share the results of previous studies and to reduce possible valuation errors to a minimum.

In Turkey, the procedures for informing stakeholders, preparing guides for land acquisition and expropriation in public administrations, and performing situation analyses and valuation procedures before the start of work are often neglected. However, in recent years, the interest in developing
alternatives to standard expropriation approaches and improving land acquisition processes has increased. In addition, resettlement action plans need to be prepared for households and settlements forced to leave their locations due to expropriation, and efficient practices with resources to be allocated from the project budget should be provided. In order for those who have been displaced by expropriation to reestablish their businesses, supported should be provided for obtaining bank loans and business development, thus providing them with a share from the real estate values that will increase after investment.

The elimination of issues resulting from expropriation practices by three basic main solutions seems possible. The first is enacting regulations to address the system’s shortcomings. Along with this, many problems, but primarily practices related to value and problems in the judiciary, will have been resolved. The second is the necessity to take precautions in order to solve the problem of insufficient financial resources, one of the main causes of all problems faced in practice. The third and perhaps the most important way to solve the problems is related to the vision and efficiency of political and administrative authorities. It is emphasized that attempts by political authorities and administrative bodies to use expropriation for purposes other than public interest, and the display of behaviors such as bringing private interests and political and personal animosity to the forefront, may lead to expropriation practices yielding results that disturb social peace (Köycü, 2006).

4. CONCLUSION AND SUGGESTIONS

Land acquisition for large infrastructure projects in almost each locality may affect the assets and quality of life of the people living in the areas in question in positive or negative ways. Various expropriation methods are used to acquire the land required for public investments and there will be a need to implement the standard method of expropriation in land acquisition for infrastructure projects and to analyze the post-expropriation changes in the economic and social situation of the households affected by the project as well as the possible changes in the natural environment. In the valuations carried out in the process of acquisition of immovable properties required for the projects, following a primary analysis of real estate by type and characteristics, value assessment of real estate is based on market value for building lots, on income value for lands, and on net cost for buildings. The prices are paid to the owners and possessors and it is not possible to compensate the sharecroppers, illegal users, or tenants who cultivate lands that belong to others or estate lands without a contractual relationship. Important differences in compensation calculation methods are observed both between countries and between a country’s practices and international standards (such as international valuation standards, or the policies of international financial institutions).
Despite all the regulations for assessment of expropriation costs, problems in this field are rapidly increasing. Conducting valuations on lands based on income, on land lots based on market value and on their complementary parts based on income, market, and cost methods has become a legal requirement. However, the related regulations are observed to contain many contradictions and there are also significant problems in terms of operation. Land and land-lot distinction is made directly based on agricultural directorate, municipality and title deed registry data and according to the previous judicial decisions, if any, before adequate field work is carried out in the project area. Assessments are based on precedent transaction analysis in land-lots and on the frequently used alternation systems, product yields, product prices and production costs in lands and the results of research carried out in this field show that average yields, revenues and costs of the parcels in a given investment route generally differ from those of the relevant agricultural organizations. The demand of judicial bodies that income and cost analyses be made using only the data of agricultural organizations not only fails to comply with the basic valuation standards, but is also incompatible with the conditions and realities of the country. However, if it is desired for each parcel to be assessed in their original condition and if the net income that can be derived if the land is used as it is desired; analyses of yield, cost and income according to the type of land on each parcel and in the surrounding land becomes necessarily mandatory. Since even this simple fact of valuation is not able to be understood in Turkey, there will be no sense in mentioning basic valuation standards.

In public institutions, the number of technical staff having theoretical or practical knowledge about valuation is quite limited or non-existent. The essential thing to do is train technical staff and experts assigned to the value assessment commission within the administration on valuation techniques and improve their qualifications, reduce the number of important problems encountered in this field, and prevent expropriation from being a means of unjust gain by increasing the expropriation price. In particular, due to the complete amendment of the provisions of Law No. 2942 relating to expert selection in 2016, the appointment of individuals with specialized knowledge in the field of real estate development to committees and the provision of basic training will be useful in terms of increasing the quality of valuation practices. In Turkey, as in many developed countries, individuals who complete vocational training programs on expertise provided by research institutions, and who document their knowledge level and adequacy of their experience with a certificate should be added to the expertise list; and expert’s reports prepared in cities/towns should be continuously monitored and evaluated. In practice, technical staff who usually issue inaccurate reports should either be required to re-take vocational training or be forbidden from being added to the expert list again.
It is seen that properly functioning infrastructure has yet to be established for real estate valuation in the areas outside valuation practices for capital markets. It is necessary to revise land acquisition for public investments and the valuation system according to international standards and the practices in highly developed countries. The sales values of lands and land lots that are found to actually be traded before valuation time, land income and capitalization rates are often chosen randomly and based not on detailed research but on the subjective ideas of individuals. Institutionalization of nationally standardized valuation procedures will allow the use of data based on the results of research carried out periodically in each region, instead of subjectively conducted activities.

In projects implemented by different institutions in Turkey, expropriation practices take considerable time, and interest rates are applied to the value since value appreciation and registration cases usually take 1-2 years. The lack of an established valuation system for the compensation of rights owners and the different expropriation valuation practices of different institutions at times results in the under- or overcompensation of individuals affected by land acquisition and expropriation. The gain of one and the loss of the other always appears on the agenda, and the issues even exceed national boundaries and are escalated to the ECHR. Valuation practices with expropriation purposes and value appreciation and registration cases occupy the judicial system as cases seek results for years. In expropriation practices conducted by different public institutions, it is observed that land acquisition and expropriation costs stipulated for projects usually remain way below the actual expropriation costs at the end of the project. In this aspect, expropriation is moving away from being a method to be adopted both by owners and administrations. Developing a real estate management policy which will allow for the protection of the right to property for each citizen in an equivalent measure, and adopting implementation of methods other than expropriation in land acquisition for public investments should be ensured.

There are significant differences between the legal and institutional approaches towards expropriation and resettlement processes in Turkey and the approaches of organizations such as international financial institutions. These differences arise both in the calculation of compensation and in the determination of those to be compensated. In Turkey, valuation is conducted in the expropriation process according to the type of real estate; transactions are realized over the income value of the land, market value of the land lots and net cost value of the buildings. Payment of the net cost without regard as to whether the building is a commercial enterprise causes a significant loss of rights for owners. Secondly, while compensation of only the land owner and possessor was mainly given, regardless of the ownership bond according to the performance standards of international institutions, in case of a damage due to any activity to the income of the person using the land and
its resources in some way and providing income from it and/or in case of prevention of access to sources of income, compensation of these losses is necessary, regardless of the ownership bond. These arrangements are particularly important in projects that will be financed by foreign funding. Because of widespread trespassing on public and private properties in Turkey and incomplete cadastral work, in the event of implementation of performance standards principles, land value of investments will increase and many investments will no longer be feasible.

It is often argued not only by the administrators of public institutions, but also other stakeholders and owners affected by the projects that expropriation procedures are often problematic and costly. In order to conduct land acquisition and expropriation processes in less problematic ways, information infrastructure, especially cadastral bases, must be adequately equipped in terms of quantity and quality. Due to the lack of data related to land use at the district, village and even parcel levels, as well as the lack of data concerning the products grown, average product yields, input use and costs, and the actual land purchase and sale values and rent money; it is observed that land valuation based on income is very difficult. Additionally, the capitalization rates of lands valid according to their type at the district, village and even locality base are not known, and under these circumstances, it is not possible to revise land valuation procedures and valuations conducted by value appreciation commissions and experts. Furthermore, some problems are experienced in the classification of the type of real estate to be expropriated as land or land lot; increases of up to 10 times are observed by raising some rationale such as parcels which are within municipal boundaries, outside the scope of the development plan and actually farmed plots to be considered as land or to be taken as land lots and showing possible use patterns for the future at the revenue value appreciated (objective criteria); and all the principles of capitalization theory are neglected and the income approach turns out to be meaningless. Similarly, it was detected that precedent sales were involved in land valuation studies, and that the evaluation of development rights and use cases and comparative sales analysis studies have not been conducted in an acceptable manner. It is understood that valuation procedures are conducted without taking the age, class and wear of structures into consideration. Furthermore, due to phenomena such as issues related to parcel and structure ownership, errors in addresses and lack of information in urban areas, rational valuation also requires expertise.

It is commonly encountered that public investments divide settlements and cause disintegration of parcels and agricultural enterprises in rural areas. Taking only parcel integrity as a basis in compensation calculation or taking business integrity and access to income opportunities into consideration causes significant problems for the affected households and settlements. The urban settlement planning practices of large-scale investment projects and the implementation of these
projects in rural areas together with land consolidation can make positive contributions to the social lives and economic conditions of people living in those areas. Particularly in public investments by land consolidation, agricultural land is protected either by the absence or infrequent use of expropriation practices, and this will also prevent rural populations that earn their livelihoods from land to be expropriated from being displaced from these rural areas. When expropriation is conducted in any area, the lives of the people in this area are affected in an irreversible way. Citizens who receive expropriation payments abandon their jobs or businesses and migrate to cities. In some situations they fail to use the expropriation payments for their intended purpose, which leads to great social and family problems. Conducting upper-scale planning work at the regional and national levels and following this, at the stage of performing land use planning, considering available and possible transport projects, building airports and residential areas of the institutions related to infrastructure investments, and developing and applying infrastructure projects eligible for land use decisions should be ensured and particular attention should be paid to protection of natural resources, especially productive agricultural land. In this context, consolidation projects for improving agricultural infrastructure and increasing the capacity of the agricultural business will also make an important contribution to the proper execution of infrastructure investments. One of the primary expenses of public investments is the cost associated with large scale expropriations.
REFERENCES


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