



Why Is There a Need for a Value-Based Zoning Application Method in Urban Areas in Turkey?

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Abstract

In addition to the economic and social problems experienced due to migration from rural to urban areas in developing communities, there are also problems of 'physical settlement and use of property' in urban areas. After determining the needs for the solution of urban problems, it is necessary to "manage urban settlements and existing resources" in a fast, effective, accurate and sustainable approach. In this regard, the approaches implemented by central and local governments within the scope of the '11th Development Plan of the Republic of Turkey', titled "Free Individual, Strong Society, More Democratic Turkey" published by the Ministry of Justice in 2021 are based on the perspective of 'individual rights and social reconciliation'. In addition, the importance of real estate property right, its strengthening and the need to use it without any problems were mentioned. In the process of ensuring the development of the 'zoning plan implementation in the Land Readjustment method' model including the sustainable, innovative and applicable qualifications for Turkey; Institutional level projects are produced by practitioners, users and academics. In this method/model development process, in the Land Readjustment (LR) method, it is important to 'pre-regulation and post-regulation equality of land value and protection of property rights' in the process of allocating zoning parcels to the property owner. In the phenomenon of sustainable urbanization, real estate is also the determinant of the social life of living in urban sociology in terms of 'problem-free use of property'. For this reason, innovative solution proposals are needed in cities where 'zoning planning and plan implementation processes will be carried out in a sustainable land management approach and interactively'. In this study, the deficiencies and negativities encountered both in the legislation and during the implementation of the LR method currently applied in Turkey will be revealed; in this regard, the methods applied in the world and the 'appliance based on value equality' models will be examined. Taking into account the social habits regarding the use of property, an answer will be sought to the question of why it is necessary to switch from the area-based application (equiproportion) principle to the value-based application (equivalence) model in the LR method in Turkey.

Keywords:

Equiproportion, equivalence, land readjustment, sustainability

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INTRODUCTION

A growing understanding of the importance of land as a limited/scarce resource is leading to the adoption of sustainable land use and management practice (Solly et al., 2021). The technical, social and economic changes experienced over time; in particular, the consequential effects of the Second World War gradually accelerated the transformation of the land, causing its 'over-exploitation despite the recognition of its finite nature'. The COVID-19 epidemic, which is experienced at the global level today, has warned us very strongly about 'sustainability of the natural environment and being able to be resilient in unexpected situations' for the sustainable construction of both today and the future (Cotella and Vitale Brovarone 2020/a). In this context, it is even more important to find and adopt integrated solutions in order to protect the past and ensure sustainable development today and in the future (Filho et al. 2021). The approach of political decision makers who play a role in the social process, 'careful and correct decision-making on urbanization and land management that will positively affect the welfare and quality of life of the society' will be the most effective solution.

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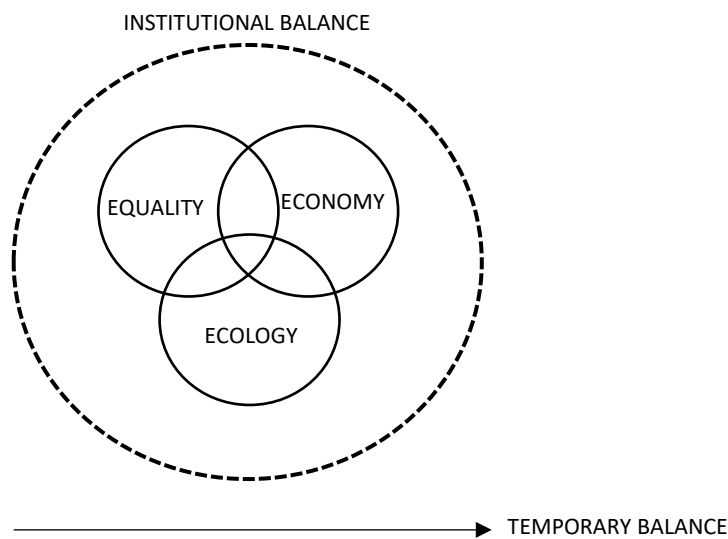


Figure 1. Sustainable development balance (Cotella et al. 2020/b)

The research and studies on sustainable urbanization and land use have increased in terms of developing different definitions and interpretations of the concept of 'sustainability'. Sustainable urbanization: It focuses on the diversity of land use in the transfer of the current urban development to the future, which is environmentally friendly, with efficient resource management. Sustainable land use, in particular, seems to depend on both the social and economic processes that accelerate spatial development and the effectiveness of the tools that regulate these processes (Solly et al., 2020). In this context, when the existing literature at national and international level is examined, it is seen that sustainable development consists of a cycle both individually and interconnected, depending on three basic (equality-

ecology-economy) principles (Nulkar, 2018) (Figure.1). In addition, while the adoption of the principle of transparency in taking, implementing and auditing the right decisions requires ensuring institutional balance; It should not be forgotten that the solutions found to periodic problems provide temporary balance.

After determining the needs for the solution of urban problems, it is necessary to "manage urban settlements and existing resources" in a fast, effective, accurate and fair manner, but with a sustainable approach. In this regard, the approaches implemented by central and local governments within the scope of the '11th Development Plan of the Republic of Turkey', enrichment of zoning implementation methods in Turkey with the perspective of 'individual rights and social reconciliation' put forth by the Ministry of Justice in the plan titled "Free Individual, Strong Society, More Democratic Turkey" published in 2021 and attention was drawn to the issue of transparency of the implementation process; the importance of the right to property attached to real estate properties, its strengthening and the need to use it without any problems have been mentioned.

In the process of ensuring the development of the 'zoning plan implementation in the readjustment method' model including sustainable, innovative and applicable qualifications for Turkey; alternative solution proposals necessary for the construction of more livable cities are studied on the platforms of practitioners, users and academics, and projects at the institutional level are produced. In this method/model development process, in the Land Readjustment (LR) method, which is the priority zoning plan application, it is important to do the application with transparency, accountability and objectivity, aiming 'pre-regulation and post-regulation equality of land value and protection of property rights' in the process of allocating zoning parcels to the property owner.

Real estate, which is a tool of economic wealth in the phenomenon of sustainable urbanization, is also the determinant of the social life standard in urban sociology with its 'seamless use of property' aspect. For this reason, innovative solution proposals are needed in cities where 'zoning planning and plan implementation processes will be carried out in a sustainable land management approach and interactively'. In this context, it is of great importance that the solutions needed are reflected in the field by the local administrations.

In this study, the deficiencies and negativities encountered both in the legislation and during the implementation of the Land Readjustment method currently applied in Turkey will be revealed; in this regard, the methods applied in the world and the 'appliance based on value equality' models will be examined. Taking into account the social habits regarding the use of property, an answer will be sought to the question of why it is necessary to switch from the area-based application (equiproportion) principle to the value-based application (equivalence) model in the Land Readjustment method in Turkey.

LAND READJUSTMENT

Sustainable urban development, at the URBAN 21 conference held in Berlin in July-2000; it has been defined as "improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components, without leaving a burden to future generations". The basis of sustainable urban development is urban planning and institutional policies based on sustainability principles. In order to achieve this, zoning plan implementation methods are important tools. In this context, the most effective zoning plan implementation method used in our country is the Land Readjustment method.

For the first time in our country, "Ebniye Nizamnamesi (Building Regulations)" was issued in 1848, during the reign of Mustafa Reşat Pasha, to be implemented only in the province of Istanbul. In 1864, "Turuk and Ebniye Nizamnamesi (Building and Roads Regulations)" was enacted. Considering that it has been practiced for nearly 160 years, it can be said that it is a well-established practice that has its own characteristics. The method can be briefly defined as 'forming the real estates and determining the usage characteristics', taking into account the legal, economic and social characteristics, in order to "ensure that the real estates registered in the land registry are used in accordance with the order brought by the provisions of the zoning plan".

It can be seen that the practice of land readjustment basically causes two major changes. The first is the changes in the ownership structure, and the second is the changes that occur in the urban area. It is normal for these changes to occur, as the application to be made is basically for development purposes. The change in ownership of the real estate with the application is given in Figure 2.

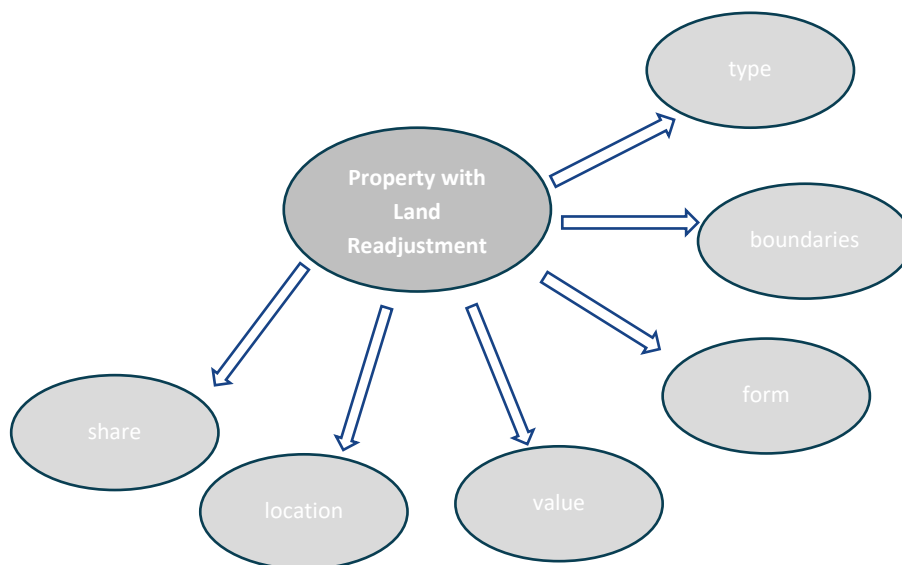


Figure 2. Changes to property by LR applications.

The change in the real estate for the welfare of the urban life and the rights and security of the inhabitants is closely related to the change in the urban areas (Figure 3). In this context, an application that "advocates the development of the region, is non-profit/income,

provides more effective use for both the public and the inhabitants" is possible with sustainable land development, which is the basis of common development.

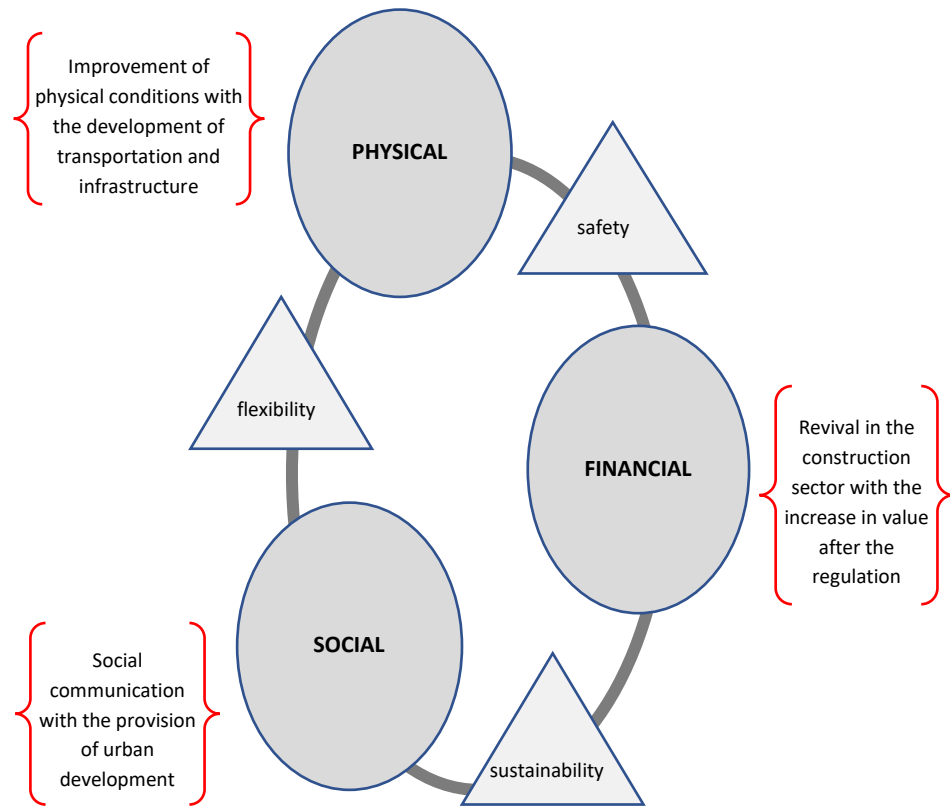


Figure 3. Changes caused by LR practices in urban areas

On September 25, 2015, the United Nations published a result document after the action plan for the post-2015 period themed “Transforming Our World: 2030 Agenda for Sustainable Development” (UNGA, 2015). Among the 17 different global sustainable development goals published under the title of “Sustainable Development Goals” in this outcome document, “Goal 11: Making cities and human settlements inclusive, safe, resilient and sustainable” is of great importance. With the “High Level Panel on the Post-2015 Development Agenda (HLP)” held by the United Nations in 2013, it was emphasized that sustainable urban development and management are important for the quality of life of the people (SDG, 2013). Again, in the same panel, the employment problem of the urban population, which would be experienced after the rapid flow of the world population from rural areas to cities, was also included. Therefore, within the scope of Goal 11, it is recommended that the land readjustment method be applied effectively in the process until 2030 for inclusiveness, security, flexibility and sustainability for sustainable urban development and planning and management of human settlements.

In this context, the land readjustment method, as a different approach to financing urban development, is a zoning implementation tool that 'combines significant advantages with a series of technical intermediate processes'. In a world agenda where the urban population

is likely to continue to increase in the coming years, it is necessary to make a new regulation with the content of creating legislation for the 'most appropriate model/principle application' in land readjustment method in order to make the urban infrastructure healthy and to solve the existing problems.

Methodology of Land Readjustment

Problems related to urbanization (land acquisition, planning, financing, permission by the authorities, infrastructure, construction of buildings and evaluation of the project, etc.) experienced in our country keep increasing day by day in different ways, like the rest of the world. Solving existing problems, ensuring a sustainable environment for the inhabitants and the public good are possible by placing development strategies on a solid and stable basis (Köktürk and Köktürk, 2005).

The model/principle in the land readjustment method applied in Turkey is the practice of 'making equal proportional land deductions from each parcel', which is perceived by everyone as "sharing as a regulation partnership portion in return for the value increases in the parcel due to the arrangement". Although this practice is similar to expropriation by some circles due to the deduction of the regulation partnership share (DOP) made on behalf of the public interest, it is clear that it is not an expropriation (Köktürk, 2007). Transactions related to zoning are the ones emerged from public law as planning and implementation, and public power is used (Aksay, 1999). Therefore, the land readjustment process has features that "restrict the right to property for the purpose of public benefit" (Türk and Türk, 2006). As of the date the method started to be implemented in Turkey, the DOP ratio has changed with an increasing momentum over time in order to provide the necessary equipment as a result of urban development. Although the phrase 'provision for the increase in the value of the parcel' is used for these increases, the expectation that the same amount will be deducted from each parcel is wrong. Because each parcel does not have the same zoning right, the post-implementation value gain will be at different rates. The relationship between value increase according to different DOP rates in the process of land readjustment practices in Turkey is given in Figure.4.

Land Interruption Rate (p) %	Value Increase on the Real Estate %	Applicable Law or Name of Practice	Law Date / No
15	18	Building and Roads Law / For All Municipalities	21.06.1933 / 2290
25	33	Zoning Law / Article 42	09.07.1956 / 6785
35	54	Zoning Law	03.05.1985 / 3194
40	67	Law on changing the DOP rate in the Zoning Law	03.12.2003 / 5006
45	82	Law on Amending the Land Registry Law and Some Laws	4.7.2019 / 7181
50	100	-	-

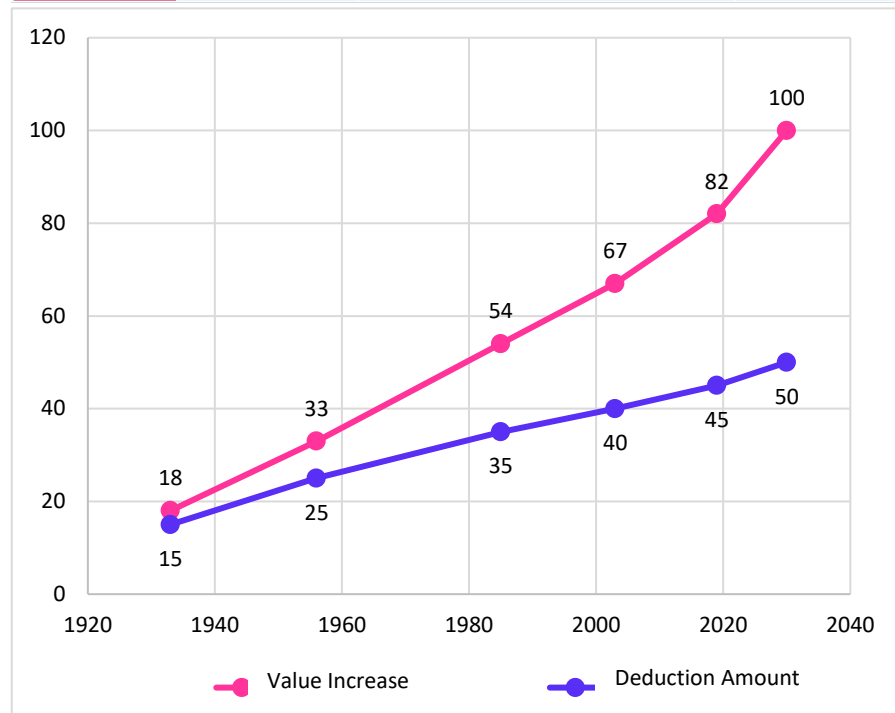


Figure 4. Comparison of the theoretical value increase amounts (Köktürk and Köktürk, 2019) with the DOP

To explain the application of the method with a simple example; let there be a 1000 m² field real estate belonging to owner A within the passed regulation limit for an application to be made. If the calculated DOP rate, in accordance with the zoning plan decisions and on the basis of the regulation limit, is 45%; owner A has to leave 450 m² of his real estate to the municipality free of charge. After the implementation, a 550 m² zoning parcel is allocated to the owner A. If the DOP rate is more than 45%, donations are requested. If an agreement cannot be reached, expropriation is made from each parcel in accordance with the provisions of the expropriation legislation. In the application of this method, it is theoretically thought that 'the increase in value corresponding to the deduction rate is provided equally for each parcel'. However, in reality, it is seen that 'the amount and rate of increase in

value after the implementation does not occur equally for every parcel within the same regulation area'.

Advantages and Disadvantages of Land Readjustment Method

In the land readjustment method, the plan implementation process allows to improve the condition of the property that cannot be used for construction purposes in accordance with the current zoning plan decisions, and it is the most ergonomic method that also serves the public interest for 'making arrangements in at least one zoning building block'. Basically, there are some benefits of land readjustment for both public administration and landowners (Yomralıoğlu, 1993; Uzun, 2000). When the advantages of the method at both national and international levels are compared, it would be correct to group the main benefits as given in Figure 5.

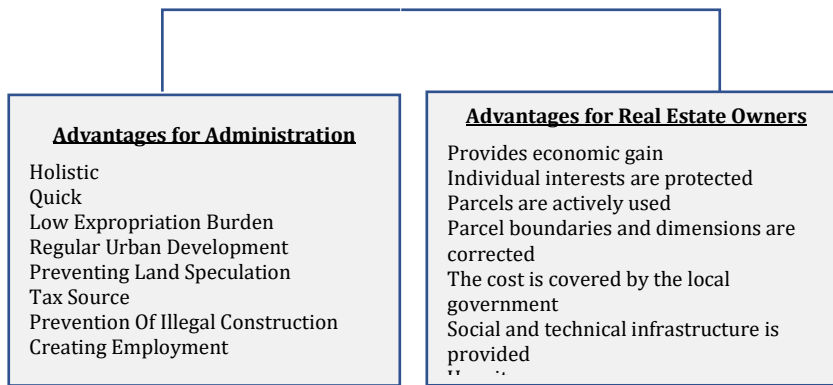


Figure 5. Advantages of LR applications

As a requirement of practice, it is impossible to avoid changes in the real estate. The important thing is that these changes are reflected in every real estate in a balanced way. Problems occur when this balance cannot be achieved (Salahi, 2014). The distribution of serviced urban parcels is limited to the original owners only. After the arrangement, the property structure is reshaped, and the distributed land may be of relative size due to the contribution percentage. This situation does not cause a problem in the transformation of large enough real estate into development parcels. However, it cannot guarantee the formation of decent urban areas that will form the output of the planning in small-area and multi-share real estates (Manandhar, 2019). It is a time-consuming and stressful process as it requires the agreement of each property owner (Larsson, 1997). It would be correct to collect the most basic problems arising from the operation of the method and the applications made in our country under four main headings as "technical, legal, economic and planning-urban problems encountered before, during and after the implementation" (Figure. 6) (Salahi, 2014).

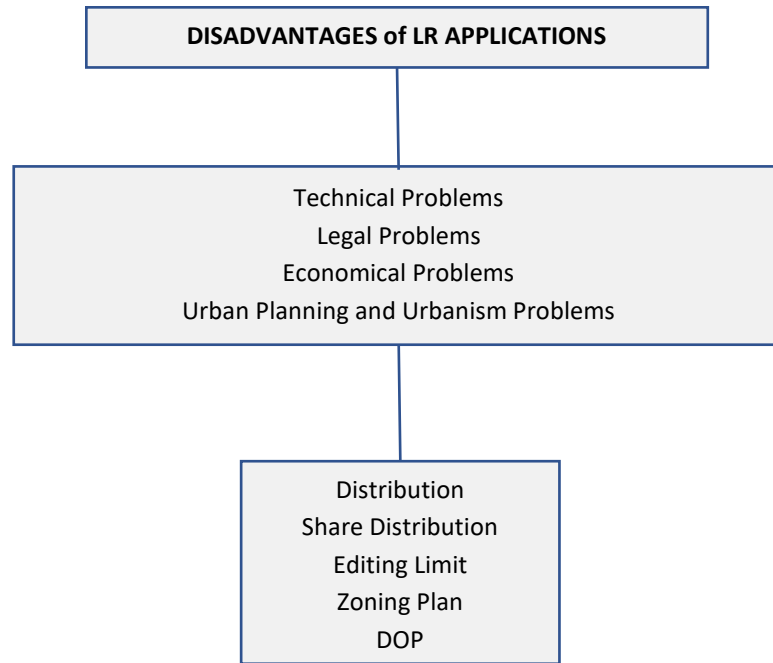


Figure 6. Disadvantages of LR applications

The 'Land Readjustment' method, which has been applied in our country since the 1950s, especially in the development areas;

- Failure to provide equality,
- It does not cover the construction of technical and social equipment areas,
- Failure to ensure participation outside the suspension process,
- Not making the increase in value public,
- It is only area-based,
- Administrative and political demand concern,
- Lack of alternative approaches,
- Changes in parcel locations,
- Inadequacy of technical specifications and lack of a transaction standard,
- Confusion of authority and responsibility,
- Inconsistencies experienced in distribution and parcellation principles,
- Lack of judicial review and problems in recycling processes,
- Formation of prejudice due to non-participation in the application,
- The problem of unqualified expert, often criticized for its reasons.

When the negative features of the LR method are examined in general terms; it is seen that the method has a major disadvantage in terms of 'regulation pre-post-editing equality'. The application is applied only for the purpose of urban land production, rather than the construction of technical infrastructure and social equipment facilities, which are indicators of urban development. Also, there is no coordination between planning and implementation.

Considering that the practice concerns the real estate owners very closely, not ensuring participation is a major disadvantage. For this reason, most of the objections made by the real estate owners are

rejected by the municipalities and the issue is brought to the administrative jurisdiction. The fact that the DOP concept, which is at the center of the application, is only the basis of an 'area-based' application, causes many legal problems in addition to the existing technical problems. The reviewed decisions of the Supreme Court and the Council of State (Figure 7) reveal the seriousness of the issue.

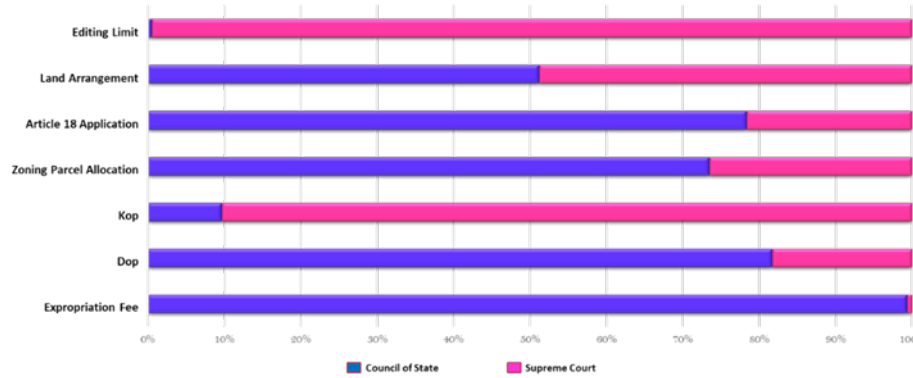


Figure 7. The decisions of the Council of State and the Supreme Court for the institutions that make/have made Land Readjustment practices according to the 18th article of the Zoning Law No. 3194

In this context, it is not only possible "to bring the increase in the value of the real estate to the public after the implementation". For this reason, it is important to adopt the principle of value-based practice (equivalence) in the LR method in Turkey, taking into account our social habits regarding the use of property. Moreover, there is a consensus in all countries of the world on the application of the LR method based on the 'equivalence principle/model'.

Among the 31 countries that apply LR or similar methods worldwide, especially Germany and Japan models come forward. While these countries apply the method not only for urban development but also in the land development process; at the same time, they make a profit by marketing their methods to different countries. In the light of the experience gained as the applications are made, it is seen that the process of 'optimization in value-based application models' is still going on. In this context, it would be beneficial to examine the applicability of the method application of the two mentioned countries for Turkey with the main lines.

LAND READJUSTMENT IN GERMANY AND JAPAN MODELS

Land Readjustment in Germany Model

German Law is based on the principle that "property bears responsibility; the exercise of this right must bring benefit to society". Therefore, with the regulations made in urban areas, the property right is used only in line with the zoning plan. There is a situation where the property is inspected. Initiatives aiming at unfair zoning gain (return) are not allowed, and the surplus values created on the urban area are transferred to the public. Thus, the German Federal Zoning Law (BauGB) directs the real estate market by balancing the interference with land ownership. Municipalities in Germany are required to prepare 'urban

land use plans' as soon as possible and to the extent necessary for 'sustainable urban development'. Urban land use plans, 'preparatory land use plan' and legally binding it consists of a two-stage process, namely the 'land use plan' (Linke, 2018).

The purpose of the land readjustment (also called reallocation, land pooling, reorganization of land, zoning or land holdings) in effect; improvement of local public infrastructure, creation/improvement of the transport system and to open new fields both developed/mature and undeveloped/raw lands, is to rearrange it to form parcels suitable for building development and special areas or other uses in terms of location, shape or size (BauGB, art.45). In the distribution where the value criterion is used, "new parcel or parcels with a value equal to the market value on the day the real estate is decided to be arranged" is allocated to each owner. Therefore, participation and allocation value must be known. Participation value is the market value of the real estate for which an implementation development plan has been made but the land arrangement has not been made. The allocation value, on the other hand, is the market value that takes into account the financial gain of the owner after the land arrangement (BauGB art.57; Linke and Yıldız, 2012). Distribution based on value criteria has a more flexible structure in terms of implementation. The only difficulty of the method is to objectively determine the pre- and post-regulation values of the parcels participating in the regulation. The regulations in which the value criterion is applied are mostly suitable for the infrastructures of which have been completed, the urban reconstruction (rehabilitation) zones or the depression and improvement areas (urban transformation) (Çağdaş and Linke, 2019).

Implementation first begins with the decision to regulate. Before this decision is taken, the owners are interviewed, information about the application is shared and the regulation area is determined. The parcels within the regulation area must be specified one by one (BauGB, art.47). The parcels are calculated according to their area and combined as the arrangement mass (BauGB, art.55/1). The distribution mass is determined by subtracting the public areas from this mass (BauGB, art.55/4). Area and market value are calculated for each parcel (BauGB, art.56/1). A zoning parcel equivalent to the parcels in the distribution mass in terms of location, size or value should be determined and allocated (BauGB, art.59). If the real estate cannot be allocated from an equivalent place, value equalization can also be made with money. Financial compensation and compensatory measures are based on the value valid at the date of acceptance of the allocation (BauGB, art.58). In cases where it is not possible to allocate the parcels calculated according to the zoning plan and implementation regulation, some solutions can be provided with the approval of the real estate owners. These solutions giving money in the value of real estate, establishment of joint ownership on another real estate or a land outside the allocation area, granting zoning rights similar to real estate property rights, it takes

place in the form of granting rights under the Condominium Law (Wohnungseigentumsgesetz) or other real rights within and outside the reallocation area (BauGB, art.59). In such a case, with the agreement of the owners, the lands can be allocated to common ownership, or the shared ownership can be converted into individual ownership (determined to correspond to various legal relations and to replace individual plots or powers) (BauGB, art.62).

The arrangement is made on the basis of the land readjustment plan, which is prepared according to the decision to be made by the organizing committee after the negotiations with the owners (BauGB, art.66). The allocated parcels replace the old parcels in terms of 'the rights of the old parcels and the conditions concerning these parcels' according to article 63, paragraph 1 of the German Zoning Law. With the distribution according to the value criterion, the owner of the real estate is given a new real estate with the same value as the value of the parcel that was put into process at the time of the decision to arrange. However, if equivalence cannot be achieved due to various reasons, the difference is eliminated by "equalizing in money according to the market value at the time the arrangement plan is made". If a more valuable land is allocated to the owner of the real estate than the old parcel, the right owner is debited as much as the difference. If a less valuable piece of land is given to the right holder, a one-time payment is made by the land readjustment office. The basic principle in the value criterion is to provide equivalence in regulation (Yıldız, 1977; 1987; 1990; Köktürk and Köktürk., 2009; Çağdaş and Linke, 2019).

Land Readjustment in Japan Model

Tochi Kukaku Seiri, which is the land readjustment in Japan, it is a 'public private partnership' tool where governments and landowners bear the costs of urban development and benefit where existing land use models are inadequate and inefficient. The purpose of the law is to facilitate the construction of sound urban areas, to promote the public interest by taking necessary measures for the allocation of implementation and project costs to LR projects (art.1). According to this law, land readjustment means "to establish public facilities in the urban area or to improve the existing ones in order to change the shape and condition of the lands, to create better public facilities and to increase the efficiency of use of each land" (art.2/1). Also, according to the law, there are six types of executors for LR projects (art.3). These take shape as individuals, landowners and leasing associations. LR share companies established by the landowners, the Ministry of Land-Infrastructure-Transportation and Tourism (MLIT), Urban Renaissance Agency (a central government agency), and Housing and Urban Development Organizations (governor's or municipal administrations) take part in the implementation process in this context (Larsson, 1997; Sorensen, 1999; Desouza and Ochi, 2018). The first three of the executors are considered as private practitioners, while the others are

considered as public administrators. The Japanese LR model, which enables the implementation process to be shaped in support of the law; It is a method that varies according to the location, the practitioner and the purpose of its construction. The implementation regulation is prepared by the relevant institutions according to the needs of each region or application area.

In the Japanese LR application, the design of the parcellation is determined so that the parcels correspond to their location before the project. This work is called the 'principle of equivalence'. The model is based on the cooperation of real estate owners using the land. Made up of personal property applications made with the aim of remodeling an urban environment, apart from its function of producing zoning parcels, it is also considered as a 'land development project'. LR applications have important purposes such as "evaluating the contribution of reserve land, calculating compensation for loss of damage, calculating re-registration area, calculating stock collection and payment". Compensation is money that will be collected and paid to correct the imbalance of value, if any. Evaluation of land and valuation of real estate; In addition to the traditional system based on market value, the Japanese LR model is based on street value. The street value is converted into an index for each plot size multiplied by its individual characteristics. Evaluation of every parcel; adjusted for land market prices in the region and taking into account property-tax values for sale or indices, national assessment for inheritance tax, and publicly disclosed land prices (Hayashi, 1982). New parceling plan "the plot must comply with the 'legal compliance principle' overseen by the enforcement agency, along with former land, location, soil, water condition, land use, environment and other characteristics" (Desouza, 2018). In Japan LR applications, project costs are shared among the stakeholders. Reserve land is a resource for project cost recovery. Landowners share the project costs by "contributing some of their real estate for the reserve land". Thus, a situation is achieved where the total value of all new development parcels is equal to the total value of all private lands prior to the project (theoretically, a landowner does not profit from his land)' (Desouza, 2018).

When these models applied in both Germany and Japan are examined, it can be said that the success of the LR practice is directly related to the existence of legal legislation. In practices, the process is regularly shared with the public and participation is ensured. In both models, the process is open and transparent. These models, which have effective real estate valuation systems, also have serious legal penalties. In both countries, there are special 'land regulation boards' for implementation. However, since the application is aimed at 'developing infrastructure and superstructure on a field basis', the implementation times are long.

Implementing a value-based model is somewhat more complex than an area-based method. The main idea is to share the benefits of urban

development between the landowner and the municipality. The method, in its simple form, is based on neither profit nor loss of the owner of the real estate. But this theoretical condition cannot be fulfilled. Landowners, earn the income from the land value increase over time as a result of the 'real estate maturation' that occurs through LR.

BASIC PRINCIPLES OF VALUE-BASED (PRINCIPLE OF EQUIVALENCE) REGULATIONS

The LR method, which is made according to the current implementation legislation in Turkey, is frequently criticized for reasons such as not being able to provide equivalence in distribution and the public not being able to benefit from the increase in value after the implementation. However, instead of the 'area' basis, it is clear that it would be more beneficial to use the 'value' basis as a distribution principle, considering that many factors that cause comparison between parcels have an effect on the parcel value (Öngören, 2016). The equalization of pre-regulation (BR) and post-regulation (PR) real estate value is called the 'equivalence principle'. The method depends on the value of the real estate. This approach is based on the idea that the value of real estate in the same regulation area will increase at the same rate. However, it should not be forgotten that there will be different economic value increases in each of the real estate in practice (İnam, 2020). The main purpose of the proposed model is primarily to reorganize the property rights and real estate conditions for structural uses with the implementation zoning plan. Secondly, it is the provision of the necessary supply for the public space uses of the real estate. In this context, five principles that will always be valid for the editing studies to be carried out with the proposed model can be mentioned (Linke and Yıldız, 2012):

- **Exclusive use principle:** The municipality takes action when there is a publicly justified need to provide new development plots. In the arrangements it makes, it provides possible zoning parcels to the owners in the zoning plan.
- **Eligibility principle:** With the arrangement, the location, shape and size of the real estates change. But this change has to comply with the zoning plan determinations.
- **Protectionism principle:** The increase in value resulting from the reorganization of the real estate and exceeding the participation value is calculated on behalf of the owners.
- **Solidarity principle:** Some real estate owners are at a disadvantage in the creation of technical infrastructure and public spaces in the zoning zone. The public use areas are therefore balanced among the owners who benefit from it.
- **Balancing of gains principle:** Although the municipality covers all costs, the taxes of the owners who are not in the regulation area can also be used. Therefore, after the arrangement, expenses can be distributed in line with the gains of the real estate owners.

Since the day the AAD method was started to be implemented in our country, it has also shown important developments. In general, although the process seems to be working, the problems experienced in technical, legal and implementation issues especially reveal the need for the distribution criterion to be 'value-based'. When the applications made using the value criterion are examined, it is necessary to mention three different approaches on the basis of equivalence. These approaches based on the value of the real estate are the regulation models based on the current value, nominal value and development rights.

The basic philosophy in the model, which is based on the current value, is to allocate the parcels that have entered the regulation to new parcels based on the value before the regulation. The resulting increase in value should be transferred. There is no DOP or similar interruption in this approach. TL, that is, monetary value, is used as the criterion. In the applications made with this method, the parceling planning is done according to the minimum parcel size and the distribution (zoning parcel allocation) is done on these zoning parcels. The resulting zoning parcels are distributed to the owners of the real estate according to their values before the arrangement. There will definitely be a surplus or a deficiency in the meaning of value. Instead of making shares, money equalization is done. In fact, the method is not so foreign to us in this sense. In the applications made pursuant to Article 10/c of the Law No. 2981, the owner of the real estate may be the 'mortgage creditor or debtor' of the price to be determined according to the Law No. 2942. A kind of monetary equalization is made. The method uses the "q" factor, which is the ratio of the total value resulting from the regulation to the total value determined before the regulation. With this method, it can be said that the increase in value can be seen clearly.

In the model, which is based on the nominal value, the 'characteristics and location' of the real estate is taken as the basis before the value. For this reason, each real estate is defined by the value factors to be determined before and after the regulation. Each of the factors that will affect the value of the property is scored over 100%. In this method, there will be two different scoring as before and after the regulation (Yomralıoğlu et al., 2007). Because at the end of the application, there will be changes in the location and geometric shape of the real estate. For this reason, weight coefficients are determined by considering the factors that will affect the value of the real estate. The allocation of the real estate according to this method is made according to the criteria of points, not money. It is a method that can be applied more actively than other alternatives, especially in cases where the regulation area is large and the number of real estates is high (Güngör and İnam, 2019). However, it is criticized for reasons such as the absence of a price index on a country basis, the absence of certain standards in valuation studies, and the fact that the number of factors is variable (not clear).

The model, which is based on zoning rights, uses the zoning right (equivalent or total construction area right, building quality, etc.) as the basic criterion to ensure equivalence. In this context, it can be said that it is a 'hybrid' method. The basic philosophy of this method is that the zoning right that will occur after the regulation is the most important factor affecting the value of the real estate. The method is based on 'the distribution of the proposed development right for the regulation area in direct proportion to the real estate areas before the regulation' of the real estates located in the regulation area. The distribution is made on the basis of the area criterion, but the value increases arising from the zoning right are taken into account. This method is particularly It is envisaged to be applied in places where "pre-regulation real estate value is similar and distribution of development right is homogeneous". After the arrangement, the owner may not use the zoning right. In such a case, the development right can be converted into a price, a certificate can be obtained through land banking, or the given right can be transferred to another region. Çağdaş (2019) stated that this model is more effective than other methods; bringing the increase in value to the public and even distributing a part of this increase equally to the owners of the real estate, it has been summarized as eliminating the possible problems arising from the valuation processes and "eliminating the value differences that may occur due to the location" by allocating the real estate from the same place or close to it.

All the approaches described show that the success of the method is related to the correct determination of the real estate value. It is clear that the main problem of the proposed approaches is 'valuation problems'. Considering the countries that make value-based practices, it is seen that the success of the method depends on their experience in real estate valuation and their legal regulations. In this context, the existence of independent committees to determine the real estate value gains the trust of the participants. Because value is relative. Considering that the value appreciated by the administration in expropriation procedures is transferred to the judiciary by the owners of the real estate, the necessity of independent valuation boards emerges.

CONCLUSION

For a sustainable development in urban areas, the elements of economic, ecological and social equality should be provided together. In this respect, ensuring sustainability urban development are one. People's actions and thoughts are shaped in cities, which are direct living spaces, and continue in a mutual interaction with urban development. For this reason, the success of sustainable development policies is possible by reflecting them to the space. In this sense, the implementation of policies and practices that will ensure sustainable urbanization is the basic principle for sustainable development.

The fact that land is seen as a limited resource increases its value even more, especially in urban areas. In this sense, it becomes difficult to

provide technical and social equipment areas that are needed by urban life. Although the DOP deduction is seen as a legal compensation for the increase in value in the method applied in our country (in line with the law, regulation and the decisions of the Council of State), the 'legal confiscation' lawsuits at the end of the implementation, the success rate of the applications and the trust in the application are open to discussion.

In line with the explanations, it should be noted that regardless of the proposed application principle/model, we must first have a strong 'real estate valuation' system. The biggest deficiency in our country in this regard is the valuation process and the relevant technical and legal infrastructure. In accordance with the principle of the responsibility of the state in the establishment of the right to property, the title deed areas of the real estates are under guarantee. However, due to our lack of infrastructure in valuation, it is possible to experience problems after implementation. With the Land Registry and Cadastre Modernization Project (TKMP) realized in 2008, real estate valuation was put on the agenda. In 2019, the Department of Real Estate Valuation was established within the body of TKGM. With the 2019-2023 strategic planning of the relevant institution, especially the creation of real estate value maps and integrating them with property information, the implementation of real estate valuation legislation and the establishment of a reliable registration system came to the fore. LR practices will also be positively affected by the presentation of healthy and accurate data on valuation in the Land Registry and Cadastre System in our country.

When the practices of different countries are examined, it becomes clear that participation and public empowerment are necessary for a strong and sustainable land management and development. In this context, a 'value-based' application method should be adopted within the scope of an urban land development awareness and acquisition initiative created by the public and real estate owners. In fact, the issue is not the abandonment of the 'area-based' method with a radical change and the replacement of the 'value-based' method. The aim is to diversify and enrich the application principles in the current LR method within the scope of laws and regulations. Therefore, recommended methods need to be modeled and tested in accordance with the regulation.

Whichever model is adopted as an approach, the proposed method should balance the interests of the people and the public, and their participation in the implementation process should be ensured. It should also have a clear and simple methodology, rather than a detailed and complex method. The increase in the value of the land should definitely be brought to the public. It should be fair and transparent, eliminating the share ownership structure as much as possible. It should be a sustainable method that takes into account the location of the cadastral parcels as well as the values before and after the regulation.

As a result, the adoption of a value-based implementation method is important and necessary within the scope of our country's sustainable development goals. However, the transition process from the current method to the proposed method should be clearly defined. In the short term, the general structure of the currently applied LR system should be preserved and justice should be ensured with the arrangements to be made on the issues of valuation and compensation. In the long term, all legal, technical, legal and valuation processes related to the system to be implemented should be established.

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