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Petar Mitkovic, PhD

**Editor**

Petar Mitkovic, PhD

**Co-Editor**

Milan Tanic, PhD

**Text formatting, prepress and cover**

Milan Brzakovic

Ana Curk

Vojislav Nikolic

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Ana Curk





## THE POSSIBILITY OF APPLYING LAND READJUSTMENT IN SERBIA

**Mladen Soskic**

Faculty of Civil Engineering Belgrade, Serbia  
*PhD., Teaching Assistant, [mladens@grf.bg.ac.rs](mailto:mladens@grf.bg.ac.rs)*

**Rajica Mihajlovic**

Faculty of Civil Engineering Belgrade, Serbia  
*PhD., Assistant Professor, [rajica@grf.bg.ac.rs](mailto:rajica@grf.bg.ac.rs)*

**Stevan Marosan**

Faculty of Civil Engineering Belgrade, Serbia  
*PhD., Assistant Professor, [marosan@grf.bg.ac.rs](mailto:marosan@grf.bg.ac.rs)*

**Nenad Visnjevac**

Faculty of Civil Engineering Belgrade, Serbia  
*Teaching Assistant, [nvisnjevac@grf.bg.ac.rs](mailto:nvisnjevac@grf.bg.ac.rs)*

### **ABSTRACT**

*Basic principles of land readjustment as tool for urban planning from the aspect of its usage considering current circumstances in Serbia are explained in the paper. The most common issues that urbanization in Serbia is dealing with and potential usage of land readjustment in solving those issues are analyzed in the paper. The potential benefits of applying land readjustment are represented on both, government and its structures and on land owners. Potential difficulties which may be expected while introducing land readjustment and possibilities of their exceeding have been identified.*

**Keywords:** land readjustment; urban development; urban plans; parcel structure.

### **1. INTRODUCTION**

Taking into account the fact that land, i.e. territory is a limited and the most worth resource of each country, it is clear why there is a need for right and meaningful managing of that property and why it has to have priority if the society strives to progress and development. Due to rapid urbanization in contemporary times one aspect of land development comes to fore. That is urban land development. Serbia is not an exception in this process, on the contrary, urbanization in Serbia is very intensive since the middle of the last century until today.

Although urbanization represents positive social process and logical repercussion of economic development in general, it may be a source for numerous problems/issues unless it is not accompanied with suitable mechanisms for urbane land arrangement. Primarily, those mechanisms have to deal with two main problems of urbane land arrangement: to provide a land for public needs (streets, squares, parks, green areas, various objects for public usage - for example schools, medical centers, etc.) and shaping building plots in accordance with the standards of urban planning.

Land readjustment represents complex process of arranging building land where existing parcel structure is being cancelled and new one is being made (Soskic, M., 2016.). Principles of retaining property rights and value are being kept. Parcels that are not suitable for building, whether because of their size or shape are adjoined as a one whole – readjustment mass by land readjustment, in order to have parcels that are in accordance with urban standards for building according to all parameters (size, shape, position) out of that readjustment mass. Usually it is land that used to have other usage (agricultural, forest or industrial, etc.) but according to urban

plan it is being transformed into building land. Also, land readjustment can be conducted on existing building land that has unsuitable parcel structure in shape, size or has inappropriate infrastructure.

One of the most significant characteristics of land readjustment is land providing for public requirements: streets and other roads, parks, green areas, playgrounds, etc. and if there are larger readjustment areas, lands for school, kindergartens, medical centers, sports centers, etc.

Besides having favorable parcel structure for building and providing land for public needs, property rights on readjustment area are being solved by land readjustment. Those problems are known to be a big problem and obstacle to the efficient urbane land arrangement in Serbia. Besides that, principles of retaining property rights and value by the land owners are being kept. Those principles enable land readjustment participants who had property rights over land prior to land readjustment to keep the ownership over part of the readjustment mass which will be redistributed to them after land readjustment pro rata to the area or land value which they brought to the readjustment.

Since in this project land for public needs is being excluded, it is clear that land area that participants will gain after the readjustment will be less than they brought in. Having in mind that land which is parcelled in accordance with urban parameters and for which public areas are being provided have greater value by the land unit, it is clear that participants are reimbursed in the manner that they got land of higher value. Besides that, in some cases construction of public infrastructure may be part of the process of land readjustment.

## 2. THE BEGINNINGS OF LAND READJUSTMENT IN SERBIA

The first clue of land readjustment in this area is mentioned in Construction law of Kingdom of Yugoslavia in 1931. All phases of land readjustment, jurisdiction of certain institutions, processes and other aspects were developed in highly detail manner in the law. From today's perspective that was a high quality law especially taking into account time when it was brought. That was approximately just 20 years after the first land readjustment law was established (Lex Adickes) which had been initiated by the major of Frankfurt am Main, Franc Adickes after which it was named. Unfortunately, there are no records of mass usage of the law and land readjustment in general in the state from that time. That was primarily because of the fact that the method was new and non-established in practice and historical circumstances as well. Not long after this law was passed, II WW started. After the war there were political and social changes in Yugoslavia, so that the law was never fully implemented in practice.

Land readjustment was created by taking over and customization of basic principles of land consolidation of agricultural land which was already established tool and it was conducted along Europe and the world. Serbia has a long tradition of conducting land consolidation of agricultural land. The first land consolidations go back to 18. century in the time of Maria Theresa in Vojvodina area.

The biggest job in this area has been done since the 1960s until the 1980s when 1,700,000.00 ha of agricultural land was arranged by land consolidation (Soskic, M., 2010.). Although those were land consolidation of agricultural land within them, settlement areas were also arranged. Albeit there was no legal basis and specially designed system of land readjustment, existing legal options were used within land consolidation of agricultural land so that readjustment could be done in the building areas of the settlement (Mihajlovic, R. et al 2011.). Achievements of this system were limited and it ended up mainly on solving problems with property rights. Corrections of parcel boundaries and in some cases area for public needs were provided. Besides that, settlement area arrangement of this kind could have been conducted only on territories and cadastre municipalities which were covered by land consolidation of agricultural land, but not on greater urban areas where the need for this tool was much higher.

Characteristics of social political system were so called public property, i.e. importance was not given to the private property ownership over land (Mihajlovic, R. et al 2011.). After the II WW, Socialism was the political system in Serbia which lasted until the end of the last century. At the same time, urbane plans which could not have been realized in close future were developed. In the time period of great population migration from villages to cities occur. It led to an increase for living space. Non-existing of urbane plans or inability to realize existing ones mixed with violation of legislative procedure during construction of buildings, represent factors which have led to illegal construction of all types of buildings.

Civil war that erupted in the region in the 1990s just made the whole situation even worse. Those war years were linked with political uncertainty, sanctions and overall crisis of the society as a whole. As a consequence

of rapid impoverishment and fast standard decrease a great number of highly educated inhabitants migrate abroad and additional influx of rural population comes to cities.

General lack of laws and regulations reflected on already havoc in legislative system in the area of urban planning and construction. Due to those facts illegal construction occurred. The scope of illegal construction was vast. It started with single illegal objects, mass illegal up build and reconstruction and it continued to development of whole illegal settlements where thousands of people live. Additional characteristics of that period is spreading of so called 'kiosk/stall economy'. It reflected in setting prefabricated sales objects in major roads and other attractive locations.

### **3. NEED FOR LAND READJUSTMENT IMPLEMENTATION IN SERBIA**

Current situation in Serbia is that there is not enough arranged, not even formed building plots. It leads to great problems in various fields. On one side it negatively effects on construction industry development and unemployment in that and related fields, while on the other hand it makes hard for the cities and settlements in Serbia to develop properly (Mihajlovic, R. et al 2011.). It also disables population to have their homes easier and cheaper. Serbia needs appropriate solutions in order to solve anomalies from the past and to define better manners of efficient and applicable adjustment and protection of building land and the space in general. Thanks to its characteristics, land readjustment may be one of the measures which will significantly bring efficient arrangement of building land.

Up till now, usual manner of implementation of urbane plans in Serbia was mainly linked to forming and setting new boundaries of building plots in the areas where usually present structure of parcels, concerning size and shape was not in accordance with urbane plan, i.e. to building rules which were defined in the urban plan. In those situations, building plot forming required merging of several parcels parts which belonged to different owners. In practice, those were highly demanding obstacles in manner of solving issues concerning property rights.

It is clear that without forming a building plot which by its size and shape meets all requirements which were defined by urbane plan, building on it is not possible. In practice, it meant big problems for land owners, since they had to solve issues concerning property rights by individual court cases, if they wanted to have right to build on that parcel. Although that system is based on indisputable private property law, it is clear that the system is not at all suitable for individual owners on one side and for local government and country as a whole. Additional problem which brought further complication of situation is common case of nonconformity of actual boundaries of parcels on the ground with actual legal situation of parcel boundaries in cadastre.

Serbia can expect further increase of urbane population due to expected economic growth and also taking into account the fact that Serbia is at the bottom of the European countries list by the degree of urbanization. Degree of urbanization – share of the urban population in total population was 53% in the beginning of 1990s. At that time Serbia became predominantly urban society. Trend growth in urbanization degree was positive, so in 2002 it was 56.3%, in 2011 was 59.4%. Since the degree of urbanization in developed countries is 78%, it is clear that increase of urbanization trend will be continued in future as well (Soskic, M., 2016.).

Industrialization and technology development led to change of occupation for a great number of inhabitants all over the world. Fewer and fewer number of people is engaged in agriculture and more and more people are dealing with other activities that are linked with life in urban areas. Due to that fact, increase of urbanization degree should be observed as natural and logical process in human society development. Having all that in mind, paradoxically the fact that increase of degree of urbanization in Serbia resulted in many problems because of irresponsible and unorganized implementation of urbanization. As a result of that approach to urban planning there is so called city ruralisation. It is obvious if morphology of Serbian cities is taken into account and soci-professional qualification of population. As an addition to that claim it is obvious that situation in city infrastructure is miserable.

Professionals and competent institutions identified urbanization problems in contemporary Serbia and by plan documentation of many Serbian cities bad aspects of urban development has been defined. Those are (Master Plan of Belgrade, 2007.): uncontrolled illegal construction of residential and other buildings, semi legal residential construction, slow and scarce realization of urban plans, non-developed building land, forming poor city neighborhoods, industry closure in existing industrial zones, outdated traffic system, scarce development of infrastructure, unregulated city agriculture, illegal connection on infrastructural installations, creating a great number of unhygienic garbage dumps, etc.

Although professionals and competent institutions are coping with these problems for many years they are still significantly present and represent a huge barrier not just for urban development but economy and society development in a whole. It is clear that those problems are not simple and that they are not solvable over night, but it is also clear that certain mechanisms and tools are missing. Those mechanisms and tools could cope with present acute state much more efficient.

Taking into account described situation and problems in urbanism, conclusion is being imposed that it is required to have an urban development method update which will make a u-turn for a negative trend and lead to better situation in urbanism as soon as possible. Further on, those methods must be efficient, economically viable and applicable from the aspect of legislative system and democracy. Land readjustment may find a place in this process. It may even be one of the key tools that will be used for urban development measures implementation. Land readjustment meets necessary criteria in many aspects.

Basic characteristics of land development are: inexpensive and in some cases self-financing tool for implementation of urbane plans in short time period. Criteria of economy, efficiency and speed conducting are being met and all of that through active involvement of all interested parties, both land owners and authorities. Besides that, land readjustment may be a big help to the planners during urbane plan development. It gives them greater freedom in designing i.e. increases the number of possible solutions which leads to urban plans of higher quality.

#### 4. AREAS IN SERBIA WHERE LOCAL READJUSTMENT IS APPLICABLE

Point of land readjustment is implementation of urbane plans, but it can be seen as a tool of urban development as well since it can lead to the increase of urban plan quality. It can be said that land readjustment gives an opportunity to reallocate building land via democratic process through cooperation of individual owners and authorities. To establish preconditions for the construction of local public infrastructure so that the whole land readjustment area can be adjusted to the approved urban plan.

Land development may be implemented in various areas:

##### New building areas which had different purpose

Projects like this have the goal to bring to the functionality a land that is not building land but it was intended to be building land by approved urban plan. The most common case is agricultural land in city outskirts where the city is being spread. The goal of land readjustment is to provide land for public needs and parcel structure in accordance with urban plan. Effects of land readjustment are usually highest in this type of the project (figure 1).

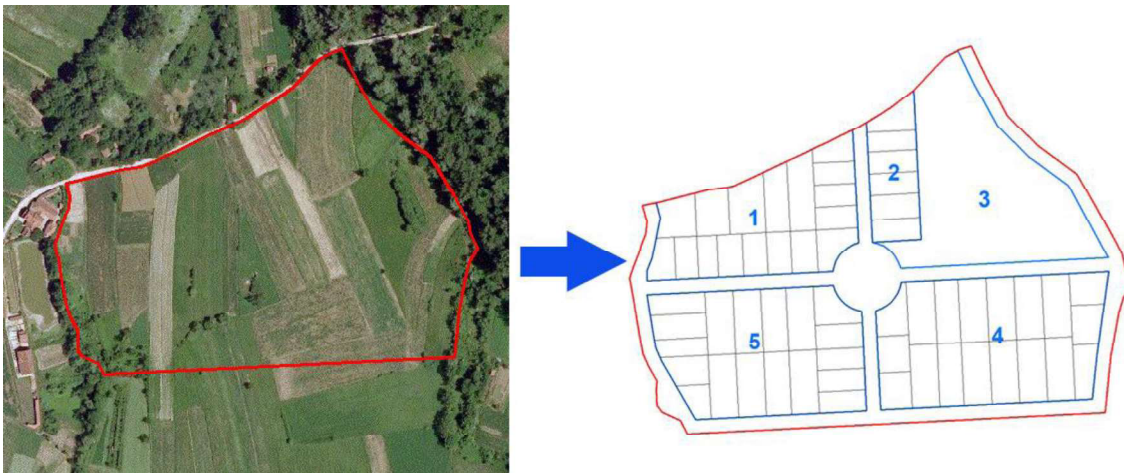


Figure 1: Urbanization of new building areas which had different purpose

##### Partially urbanized areas

Projects like this are being conducted in areas where construction has been started and a number of buildings are built, but during time a problem occurred. The mentioned problem is inability to provide complete public areas or required parcel structure of building plots (figure 2).



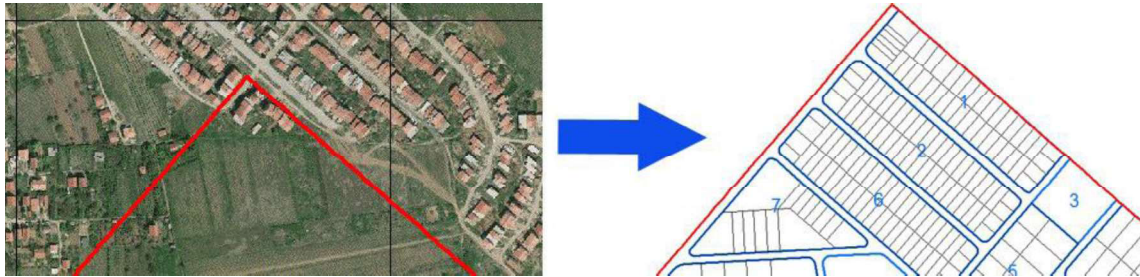


Figure 2: Arrangement of partially urban areas

#### Illegal settlements or settlements that were built as illegal

Unfortunately, there is a great number of illegal buildings in Serbia. There were numerous attempts through numerous laws and legislatives in order to legalize those objects. Certain number of objects is legalized, but it did not solve problems which that type of constructions brings. Goal of projects like this is primarily to solve infrastructural problems of those settlements by providing areas for public infrastructure. Effects of land readjustment are pretty limited here. In figure 3 part of one of the typical illegal settlement in Serbia is being depicted.



Figure 3: An example of illegal settlement – Kaludjerica, Belgrade (Geoserbia)

#### Dilapidated industrial complexes that are located in city areas

These specific projects have goal to integrate land that was a part of industrial complex into surrounding urban structure. There are various industrial complexes in Serbia that are out of operation and are located within city itself. In their surrounding there are residential and business complexes, so it is of prime importance for local community development to conduct planned conversion of that area in efficient manner. An example of one of such industrial complexes is given in figure 4.





Figure 4: An example of dilapidated industrial complex located between residential blocks – New Belgrade (Geosrbia)

#### Areas hit by natural disaster or war

Unfortunately, in its close past Serbia was exposed to both types of catastrophes, so this kind of projects could find its usage. Reaches of land readjustment are usually dependent from the damage in those areas as well as urgency for reconstruction and rebuilding.

#### **5. LAND READJUSTMENT BENEFITS**

Benefits from land readjustment are numerous for both individual land owners and the government, i.e. local authorities. Thanks to the concept of land readjustment which makes it cheap, efficient and justified measure, benefits are numerous. Main land readjustment benefits in Serbia are:

Implementation of urbane plans in much faster manner. It is known that the biggest obstacle in urban plan implementation is solving issues concerning property rights which are in this case easy to solve. Besides that, parcel structure, both building plots and public areas are being provided significantly faster.

Land value increase. Although the owners will have less area than before, its value is higher in general. Land value by the area unit which is structured in accordance with urban plan is significantly higher than the land that is not.

An option of object building. If the land is not parcelled in that manner that is set by the urban plan, building is not possible. It represents a problem to the owners who would like to have possibility to build an object, irrespective of land value.

The possibility of designing urban plans of higher quality. Knowing the fact that the land readjustment will be conducted on that area planners have much more options and freedom during urban plan making which leads to solutions of higher quality.

Providing a land for public needs. Usual procedure for obtaining a land for public needs would be expropriation which additionally complicates existing parcel structure. Besides that, expropriation alludes financial means which are not always available. By land readjustment, local authorities reach to public areas without any financial means.

Decrease in disputes concerning property rights. In the phase of determining factual situation, property rights are being determined on the basis of documentation and the law which has for the result elimination of possible court disputes/litigations.

Property tax fund increase. Land readjustment speeds up legal construction. Result is, increase in tax on the basis on newly build objects.

Faster construction of local public infrastructure of greater quality. With defining areas for public needs and by parcel distribution in accordance with building rules preconditions for faster construction of adequate infrastructure are being met, which will, among other things decrease cost of its future maintaining.

Having updated cadastre. By finalizing land readjustment, cadastre becomes updated in that area. Surveying data becomes of higher quality and all data are in digital form in accordance with valid legislation.

Construction industry operation support. By increasing construction of both buildings and infrastructure positive effects are achieved for construction industry and auxiliary operations. As a result unemployment decreases.

Keeping existing social structure. Since land owners are staying at the same area after land readjustment and that they are allowed to build, change of inhabitant social structure are being avoided, unlike other known tools.

## 6. CONCLUSION

Land readjustment is new tool which was recently introduced in Serbian legislation. It is undisputable that land readjustment has possibilities for wide usage, especially when we review problems that are in focus of Serbian urban planning society. The use of conducting the projects would be vast and would significantly contribute improving the situation in urban planning and economy and social progress. On the other hand, every new institute which is being introduced in already existing system is exposed to difficulties/danger not to be accepted despite its undisputable advantages. Difficulties which could jeopardize wider usage of land readjustment can be monitored from three points of view.

The first potential threat to successful usage of land readjustment is possible bad legislation. It is necessary to adopt not just laws but also certain bylaws on both state and local level. Those regulations should be carefully tailored so that they are not an obstacle to the entire process. The regulations should be one of the project starters and motivators to the both local authorities and individual land owners.

Second possible array of problems is scarce awareness and skill of employees in local government offices. Herein is meant on both administration staff and experts in bodies responsible for urban planning in local government offices. Employees who are in position to make decisions or recommendations about land readjustment must be educated about nature of complete process and benefits, but also about limitations which are brought by it. It would be dangerous to dismiss in advance possibility of conducting land readjustment just because of unfamiliarity with the process. It would be even more dangerous to overrate its achievements and opportunities.

Third threat is possible opposing stand point of land owners, i.e. potential land readjustment participants. In order to prevent those problems timely informing and education of land owners on planned land readjustment areas is necessary. This can be conducted via active campaigns, by organizing gatherings where experts could present all possibilities and benefits of land readjustment in a simple manner which is comprehensive to anyone. It can be expected that people would fear from anything that is new and not known and that is why it is necessary to present it in real light what they can expect in this process. This is a key thing for the success of land readjustment. Although there is an obligation by the law to participate in the process, i.e. approval from the land owner is not necessary in order to have land readjustment, their significant resistance to land readjustment would condemn the whole procedure on failure.

By perceiving from one side current situation in urban planning in Serbia and requirements to solve burning issues, and from the other side the concept of land readjustment, its goals and benefits that brings, it can be said that possibilities of its usage are great and that significant benefits would be achieved in the field of urban planning. It would also contribute to progress of both country and society as a whole.

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