

Economic feasibility for the cost of land use provided for construction: a case study of the Stavropolsky municipal district of Samara region

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Abstract. The value of a land plot or property rights to it is an important link in the investment and construction design. This paper considers a transparent, comprehensible and justified mechanism for the development of cost parameters using a case study of land plots provided for construction located on the territory of the Stavropolsky municipal district of Samara Region. The obtained cost indicators of the land use provided for construction are determined based on the analysis and examination of not only real lease agreements but also using alternative calculations. While calculating the indicators, the authors applied the principles taken from the Decree of the Government of the Russian Federation of July 16, 2009 No. 582 as well as the analysis of real land lease contracts for construction and calculations based on current standards and the development of construction costs based on aggregated indicators.

1. Introduction

The obligatory basis for any investment and construction process is a land plot. The favourable conditions development for attracting participants interested in the effective implementation of the investment and construction project is the main goal of the state land policy of municipalities. This paper considers the main provisions concerning the economic feasibility of the land use provided for construction located on the territory of the Stavropolsky municipal district of Samara Region.

Currently, the land policy of Samara Region municipalities is aimed at creating and improving legal, economic, social and organizational conditions for the development of land relations arising from the implementation of investment and construction projects. The basic legal acts in the land legislation of Samara region used in the implementation of investment and construction projects are (taking into account the adopted current changes of individual articles):

- Samara Region Act of 11.03.2005 No. 94-GD on Land;
- Samara Region Act of 13.04.2015 No. 37-GD on The procedure for registering citizens who have three or more children who wish to purchase state-owned or municipal land plots free of charge;
- Samara Region Act of 31.12.2014 No.137-GD on The procedure for municipal land control in Samara Region;
- Samara Region Act of 06.04.2009 No. 46-GD on The protection of environment and nature management in Samara Region;



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- Samara Region Act of 07.11.2007 No. 131-GD on The regulation of forestry affairs in Samara Region;
- Samara Region Act of 29.12.2014 No. 134-GD on The reauthorization between local and state authorities in the field of urban development and advertising in Samara Region.

In order to create conditions for the most rational and efficient land use, taking into account the interests of society and citizens, social and industry needs, the requirements of sustainable development and increasing investment attractiveness of Samara Region, as well as respect for the rights of all participants in land relations in Samara Region, it is necessary to actively carry out activities on the adoption of normative and legal acts within the powers granted to state authorities of the subjects of the Russian Federation and local governments under federal law.

The rules for development and land use provisions which are valid in the municipal territory also influence the regulation of land relations between the participants of the investment and construction process.

In addition, for the development of the Russian Federation Land Code, the Land Act of Samara Region, the local authorities promptly adopt the necessary municipal legal acts, which are the basis for the implementation of regulatory legal acts adopted by public authorities. The adopted normative legal acts are an integral part of the land legislation system of Russia [1-6].

2. Problem Statement

Land leases are regulated by the Land and Civil Codes of the Russian Federation. The procedure for determining the amount of lease, the procedure, conditions and lease payment periods for land plots are established by Articles 22 and 65 of the Russian Federation Land Code and Articles 606-625 of the Russian Federation Civil Code. The procedure, conditions and terms of lease payment periods for privately owned land plots are established by land lease agreements.

When implementing investment and construction projects, the format for providing a legal entity with a state or municipal land plot for integrated development of the territory is of particular interest. In this case, the indicated legal entity must conclude an agreement on the integrated development of the territory simultaneously with the conclusion of lease for such a land plot.

A land lease agreement provided for the integrated development of the territory, except when the land is provided to a non-profit organization created by citizens for the integrated development of the territory for individual housing construction, should entail obligations of the lease agreement parties for such a land plot, provide activities for the development of the territory (including construction and commissioning of capital construction facilities) in accordance with the schedules contained in the integrated development of the territory agreement, in respect of each provided activity, indicating the dates for the commencement and completion of the relevant work, as well as responsibility of the parties for failure to fulfill this obligation and the right of the parties to terminate this lease unilaterally in case of failure to comply with the decree obligation.

The procedure for determining the amount of lease, the procedure, conditions and lease payment periods for the land plots owned by the Russian Federation, constituent entities of the Russian Federation or municipal property, are established respectively by the Government of the Russian Federation, state authorities of the constituent entities of the Russian Federation and local authorities.

Nowadays, the Decree of the Government of the Russian Federation of July 16, 2009 No. 582 on The basic principles for determining lease for land plots owned by the state or municipal property, and on The rules for determining the amount of lease, as well as the procedure, conditions and lease payment periods for the land plots owned by the Russian Federation [7, 8] approved:

- basic principles for determining the amount of lease when leasing land plots owned by state or municipal property;
- rules for determining the amount of lease, as well as the procedure, conditions and lease payment periods for the land plots owned by the Russian Federation.

Thus, according to the Decree, lease payment for the land plots owned by the state (municipal) is determined based on the following basic principles:

- the economic feasibility principle (principle No. 1), by virtue of which the lease is set in the amount corresponding to the profitability of a land plot, taking into account the category of land which the land plot belongs to and its permitted use, as well as taking into account state regulation of tariffs on goods (work, services) of organizations engaged in economic activities on such a land plot, and subsidies provided to organizations engaged in activities on such a land plot;
- the predictability principle of calculating the lease (principle No. 2), by which the regulatory legal acts of state authorities and local authorities determine the procedure for calculating lease and cases in which it is possible to review the amount of lease unilaterally at the request of the lessor;
- the maximum permissible simplicity principle of calculating the lease (principle No. 3), by which the possibility of determining the lease based on the cadastral value is provided;
- the preventing deterioration principle of lessees and lessors economic condition (principle No. 4) when they re-register the rights to land plots, according to which the lease established in connection with the re-registration of rights to land plots should not exceed more than twice the size of the land tax in respect of such land plots;
- the accounting for the need principle to support socially significant activities (principle No. 5), which is respected by setting the lease in the range not exceeding the amount of land tax, as well as protecting the interests of persons exempted from paying land tax;
- the prohibition of unreasonable preferences principle (principle No. 6), according to which the procedure for calculating the lease for land plots assigned to the same land category, used or intended for the same activities and provided on the same grounds shouldn't vary.
- Taking into account the restrictions on rights, provided by the legislation of the Russian Federation, to acquire ownership of a land plot occupied by a building, structure, the owner of this building, structure, according to which the rent should not exceed the amount of land tax established for the intended similar purposes use and occupied by buildings, constructions of land for which there are no such restrictions on the right to acquire ownership (The principle №7).

According to the Decree of the Samara Region Government of 06.08.2008 No. 308 on Approval of the procedure for determining the amount of lease, payment terms and conditions for the use of land plots located on the territory of Samara Region, the state property of which is not delimited, Qu is a coefficient of land use approved by the legal act of a representative body of the municipality.

According to the prevailing judicial practice in Samara Region (administrative case No. 3a-1174/2018), by differentiating the lease depending on the terms of land use discriminatory conditions for entrepreneurial and other economic activities may be created, expressed in the establishment of different fees for land plots lease related to one type of permitted use, which contradicts the Federal Act of July 26, 2006 No. 135-FA on Competition protection and the principle of unreasonable preferences prohibition established by the Decree of the Russian Federation Government of July 16, 2009 No. 582 on The basic principles for determining the payment when leasing land owned by state or municipal property and on The rules for determining the lease rate, as well as the terms and conditions and deadlines to pay the lease for land owned by the Russian Federation, which assumes that the procedure for calculating land lease assigned to the same land category, used or intended for the same types of activities and provided on the same grounds should not differ. Therefore, the calculation of the percentage for the land use provided for construction was carried out without reference to the differentiation by years from the construction period [9, 10].

3. Economic feasibility for the cost of land use provided for construction

As of the first half of 2019, 206 land lease agreements were concluded in the Stavropolsky district. 92% are the plots of land among settlements, 4% are the plots of land among industry and 4% are plots of land intended for agriculture.

Land plots for individual housing construction and personal subsidiary plots lead in the provision

of land plots: there are 46% of such plots; in the second place there are land plots for commercial facilities (trade objects, communication facilities, roadside service facilities, etc.) - 21%, in the third place there are land plots for utilities (power lines, sewers, water, gas, transformer substations and others).

Lessees of the land plots provided for construction in the Stavropolsky district are mainly individuals - 71%, due to the fact that a large proportion of the land plots are provided for individual residential development. Legal entities lease 29% of land plots.

According to the lease term of land plots, the majority are leased for a period of 10 to 25 years - 38% and up to 5 years - 30%.

The area of land leased for construction varies from 4 m² to 591 255 m². Small plots of land are mainly provided for commercial purposes and for utilities. The largest section is also provided for utilities - the location of the gas pipeline. Most of the land plots leased for construction have an area from 1000 to 2000 m² - 39% and from 100 to 1000 m² - 27%. Large land plots with an area of over 100,000 m² are the least of all for lease: only about 1%.

3.1. Calculation of average construction period

The construction period is determined according to SNIIP (construction rules and regulations) 1.04-03-85 Norms of the construction period and the backlog in the construction of enterprises, buildings and structures. However, this period does not include the time necessary for the implementation of engineering surveys and the implementation of architectural and construction design. This deadline was determined according to the Decree of the Ministry of Construction Industry, Housing and Utilities Sector of the Russian Federation of February 27, 2015 No. 137 / pr on The establishment of the period necessary for the implementation of engineering surveys, the implementation of architectural design and construction of buildings, structures, and added to the construction period according to SNIIP.

3.2. Calculation of the percentage rate of cadastral value for land plots provided for construction

The lease for the land use is determined based on the cadastral value of the land and is calculated in percentage as applied to land plots located in Samara Region and provided for construction. State property is not delimited for these land plots.

$$A_p = Skad \times \% \quad (1),$$

Where A_p is a lease value for a land plot per year;

Skad – the cadastral value of a land plot as of January 1 of the target year;

% - percentage of the cadastral value of land plots in relation to the types of construction.

Thus, the percentage of the cadastral value of land plots value in relation to the types of construction is calculated by the formula:

$$\% = A_p / Skad \quad (2).$$

The calculations are summarized in Table 1.

We have provided summarized indicators of calculating the cost of land use provided for construction located on the territory of the Stavropolsky municipal district of Samara Region.

Thus, the obtained indicators of the cost of the land use provided for construction and located on the territory of the Stavropolsky municipal district of Samara Region are determined based on the analysis and examination of real lease agreements. As a result, the following relationships were identified that were used to justify the cost indicators:

- of the area;
- of the permitted use;
- of the lease period;
- of the category of land.

Table 1. Cost of land use provided for construction located on the territory of the Stavropolsky municipal district of Samara Region

No.	Types of Construction	Construction Period, Years	Cadastral Value, RUB./m2 (Skad)	Lease Payment for Land Plots Provided for Construction, RUB./m2./year	Percentage of the Cadastral Value of Land Plots in Relation to Types of Construction
1	Construction of garages and parking lots	1.58	604.01	26.00	4.3%
2	Construction of facilities providing the activities of organizations of education, health and social welfare, physical education and sports, culture and art, religious sites	3.08	1 672.48	49	2.9%
3	Construction of industrial facilities, utilities, logistics, food supply and communications facilities	2.92	646.19	22.00	3.4%
4	Construction of facilities to support the activities of administrative and public organizations, financial, credit, insurance organizations, pension organizations	1.83	2160.06	98.00	4.5%
5	Construction of facilities for the placement of research and development institutes, computer centres, academic centres, observatories, laboratories and pilot plants	4.92	1 672.48	43.00	2.6%
6	Construction of military facilities	-	451.5	22.00	4.9%
7	Construction of recreational and health-improving facilities	1.92	246.68	3.00	1.2%
8	Construction of facilities on agricultural land plots	1.75	2.89	10	346%

4. Conclusion

As a result of the study, close correlation dependencies of the cost of land use on factors were determined (area, permitted use, lease period, land category).

The obtained indicators of the cost of the land use provided for construction are determined based on the analysis and examination of not only real lease agreements but also using alternative calculations. While calculating the indicators, the authors applied the principles taken from the Decree of the Government of the Russian Federation of July 16, 2009 No. 582 as well as the analysis of real land lease contracts for construction and calculations based on current standards and the development of construction costs based on aggregated indicators.

References

- [1] Samara Region Act of 11.03.2005 No. 94-GD "On Land", available at: <https://base.garant.ru/8323242/>
- [2] Samara Region Act of 13.04.2015 No. 37-GD (ed. of 01.11.2019) "The procedure for registering citizens who have three or more children who wish to purchase state-owned or municipal land plots free of charge", available at: <https://base.garant.ru/8379146/>
- [3] Samara Region Act of 31.12.2014 No.137-GD (ed. of 01.11.2019) "The procedure for municipal land control in Samara Region", available at: <https://base.garant.ru/8375614/>

- [4] Samara Region Act of 06.04.2009 No. 46-GD (ed. of 01.11.2019) *"The protection of environment and nature management in Samara Region"*, available at: <https://base.garant.ru/8478997/>
- [5] Samara Region Act of 07.11.2007 No. 131-GD (ed. of 01.11.2019) *"The regulation of forestry affairs in Samara Region"*, available at: <https://base.garant.ru/8445889/>
- [6] Samara Region Act of 29.12.2014 No. 134-GD (ed. of 01.11.2019) *"The reauthorization between local and state authorities in the field of urban development and advertising in Samara Region"*, available at: <https://base.garant.ru/8375578/>
- [7] The Decree of the Government of the Russian Federation of July 16, 2009 No. 582 (ed. of 01.11.2019) *"The basic principles for determining lease for leasing land plots owned by the state or municipal property, and on the rules for determining the amount of lease, as well as the procedure, conditions and lease payment periods for the land plots owned by the Russian Federation"*, available at: <https://base.garant.ru/12168567/>
- [8] Bocharov V, Vaskina Y 2017 Estimation of social infrastructure condition in rural settlements as a factor of social well-being *PNRPU Sociology and Economics Bulletin* **2** 33-53
- [9] Didkovskaya O, Bocharov A and Gordeeva T 2017 A system of comprehensive technical and economic evaluation of standardized design documentation *MATEC Web of Conferences, International Science Conference SPbWOSCE-2016 «SMART City»* **106** 08017
- [10] Didkovskaya O, Bocharov A and Mamayeva O 2017 Formation of new methodological approaches to determining the cost of equipment for capital construction projects *MATEC Web of Conferences* **117** 00038