Assessment of land resources for the purposes of housing construction in suburban areas of Irkutsk city

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Abstract. The article examines the level of housing construction and the dynamics of its key indicators, the volume of the housing stock of the Irkutsk region. The objectives of the national project "Housing and urban environment" and the regional project "Housing" to increase the volume of housing construction are considered. The assessment of the provision of housing construction with land resources was made.

1. Introduction
One of the main tasks of the socio-economic development of Russia is to provide the population with comfortable housing. Having own housing is one of the basic values of human existence, its basic needs that ensure the health of the nation, the formation of a family and the preservation of family values, stabilization and positive development of the demographic situation.

2. Main part
More recently, housing construction in cities with a population of more than 500 thousand people is carried out in suburban areas. There is a need to resolve land issues. Accordingly, the research of mechanisms for organizing the involvement of land resources for housing construction in suburban areas is topical.

The construction industry has repeatedly experienced quite difficult, complicated times, and therefore the real estate market develops in waves: it is characterized by fluctuations, so the presence of recessions and rises. At the same time, such alternation does not have to be rhythmic or uniform.

During periods of fluctuation, the construction industry experiences different situations. Positive, negative, zero growth rates and crisis breaks are possible. Periods of "quiet" development of the construction industry are replaced by periods of impulsive development, free development alternates with difficult [1].

In turn, it should be remembered that the housing market consists of a combination of two interrelated markets: residential real estate and housing services. The difference between these two markets lies in the definition of housing rights: if the main subject of relations in the residential real estate market is the property rights to housing, then in the case of the second market it is the rights to use (rent) residential premises. Keep in mind that the residential real estate market cannot exist independently. T Ovsyannikova examines the structure of the housing market in relation to the land market and the non-residential real estate market, which together form the real estate market [2].
Russian experts in the field of real estate distinguish different types of housing presented on the residential real estate market, depending on the duration and nature of use: primary - place of permanent residence; secondary - suburban housing is used for a limited period; tertiary - intended for short-term residence [3].

The legislative consolidation of the procedure for granting land for housing construction plays an important role in solving the housing problem, however there are also problems here.

One of these problems of housing construction, which is at the junction of land, civil and town-planning legislation, is providing to interested individuals and legal entities of land plots for housing construction from the lands, which are in state or municipal ownership. Accordingly, a comprehensive review of the legal regulation of such provision of land plots is the most actual task of land law.

To promptly resolve housing construction issues at the level of the Government of the Russian Federation, the National Project "Housing and Urban Environment" was adopted, the key goals of which are providing affordable housing for families with average incomes, including creating opportunities for them to purchase (housebuilding) housing with using a mortgage loan, increase the volume of housing construction, increasing the comfort of the urban environment, creating a mechanism for the direct participation of citizens in the formation of a comfortable urban environment, ensuring a sustainable reduction in the housing stock unsuitable for living. The Federal Service for State Registration, Cadastre and Cartography of the Russian Federation on behalf of Prime Minister Mikhail Mishustin conducted an analysis of the efficiency of land using to determine the possibility of their involvement in housing construction. The work was carried out within the framework of achieving the target of the national project "Housing and urban environment", according to which by 2024 it is planned to involve land plots with a total area of 50.3 thousand hectares in housing construction. [4]

Table 1. The target of the national project «Housing and urban environment».

| The target                                                                 | The base value as of 01.01.2018 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---------------------------------------------------------------------------|--------------------------------|------|------|------|------|------|------|------|
| Increase the volume of housing construction to at least 120 million square meters per year, million square meters. | 79,2                           | 86   | 88   | 98   | 94   | 104  | 112  | 120  |

The regional project "Housing" was adopted on the territory of the Irkutsk region, aimed at increasing the volume of housing construction to at least 1.475 million square meters per year. [5]

Table 2. The target indicator of the regional project «Housing».

| The target                                                                 | The base value as of 01.01.2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---------------------------------------------------------------------------|--------------------------------|------|------|------|------|------|------|
| Increase the volume of housing construction to at least 120 million square meters per year. | 0,97                           | 1,0820 | 1,2050 | 1,1550 | 1,2780 | 1,3770 | 1,4750 |
In addition, the policy of the Government of the Russian Federation, is exposed in the Concept of long-term socio-economic development of the Russian Federation for the period until 2020, is approved by order of the Government of the Russian Federation of 17.11.2008 No. 1662-R, is based on solving the problem of expanding the territories of citizens residence. [6]

The implementation of the plans of the Russian Government is possible with the legislative provision of housing construction with a sufficient quantity of suitable land plots. The main source of filling the market for such plots is land in suburban areas, which are in state and municipal ownership. The territory of the Irkutsk region is 77.48 million hectares, of which 89.5% of the forest fund lands, 2.9% of lands under water, 3.9% of agricultural lands and only 3.9% of lands belong to lands of the settlement or industrial zones, which are 3.021 million hectares. [7]

![Geographical map of the Irkutsk region.](image)

As of the first of January 2020, 2 391 193 people live in Irkutsk region. The Irkutsk region is in 4th place in terms of population among the regions of the Siberian federal district after the Krasnoyarsk territory, Kemerovo and Novosibirsk regions. The total area of the housing stock of the Irkutsk region, according to Irkutskstat, at the end of 2019 is 60,181,400 sq. m. Housing stock in rural areas is only about 20% of the total. [8]

### Table 3. Housing fund of the Irkutsk region.

|                | 2014         | 2015         | 2016         | 2017         | 2018         | 2019         |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| The total area of the housing stock - thousand sq. m of the total area | 54899.5      | 55717.1      | 58185.2      | 59147.2      | 60392.7      | 60181.4      |
| including by ownership |              |              |              |              |              |              |
| private        | 48408.6      | 49516.1      | 52536.6      | 53605.2      | 54648.4      | 55059.6      |
| of it owned    |              |              |              |              |              |              |

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[6] Source of data.
[7] Source of data.
[8] Source of data.
On the territory of the Irkutsk Region, the implementation of the National project "Housing and urban environment" and the implementation of the regional project "Housing" are not possible without the development of new territories. Residents of the regional center strive to build housing in the suburb, but face many problems associated with finding and providing land plots, also face with engineering and social infrastructure problems.

The indicators of the study of the effective demand of the population of the city of Irkutsk indicate, that the most demanded housing in the next ten years may be in the suburban areas, including the Irkutsk district municipal, also neighboring areas. Thus, with the goal of satisfying of the effective demand of the population for housing, appropriate to the quality standards, can be provided for the implementation of integrated residential development projects in these territories. It also provides for the creation of conditions for the implementation of investment projects for housing construction, including projects for integrated development of the territory. It is worth noting that when building in rural areas, there is preferential mortgage lending, which makes construction in suburban areas more attractive.

| citizens       | 47408.2 | 48549.6 | 51798.6 | 52933.9 | 54007.4 | 54903.2 |
|----------------|---------|---------|---------|---------|---------|---------|
| legal entities | 982.3   | 966.4   | 732.5   | 654.3   | 641     | 156.4   |
| state          | 836.2   | 864.4   | 825.6   | 1054.5  | 1241.3  | 1279    |
| municipal      | 5158.8  | 4862.1  | 4378.3  | 4066.1  | 3942.1  | 3605.1  |
| other          | 495.9   | 474.5   | 444.7   | 421.4   | -       | -       |
| housing provision, sq. m of the total area per citizen | 22.7 | 23.1 | 24.2 | 24.6 | 25.2 | 25.2 |

Figure 2. Spatial planning scheme for the municipality - Irkutsk district.
The analysis of the development of the housing construction market in the Irkutsk region, also the existing problem of providing the population with housing and the presence of a large volume of dilapidated housing stock, indicates that it is necessary to take measures to increase the volume of housing commissioning in the region. In addition, the task of increasing the volume of housing construction in the region has been set by the Government of the Russian Federation.

The reasons constraining the growth of housing construction in the city of Irkutsk are limited territorial resources, as well as limited opportunities for financing housing construction. It is necessary to additionally involve in turnover the land plots are located in the suburban areas. For the purposes of housing construction, municipal, regional and non-demarcated state lands should be involved.

In addition, an important problem today is that the provided land plots are not provided with engineering and social infrastructure. The pendency of a solution of this problem, the lack of tools to overcome it, also the lack of funds restrain the development of land.

At that social and economic are indissoluble: both person, and nature always work for a trend to balance [9]. That's why the basis of the complex development of the territories must be the formation of environment for life-sustaining activity on the principles of ecologization of the housing field.

Results of the researches of the native and foreign scientists [10, 11] allow to suggest that Russian government and regional authorities take certain measures for ensuring of complex development of the territories for the purposes of housing construction.

Positive results should include: in general, completion of formation of the economic-legal base of functioning and development of the housing sector (adopted by the housing code of the Russian Federation [12] and the amendments to the town planning code of the Russian Federation [13]; development of housing mortgaging, amount of mortgage securities market reached almost 400 bln rub.; mortgage products for social priority categories of citizens are implemented: of military, certificate holders on maternal family capital, young teachers and scholars, etc.; positive dynamics of the annual quantities of housing commissioning [14]; active drawing into economic circulation of housing construction of bank capital and personal savings of citizens through the development of mortgage lending [15];

But the actual practice of enforcement of existing legislation in the Russian Federation in the field of housing testifies about high volatility of economic-legal field of this segment of the national economy and the low efficiency of functioning both new institutions of its development, and created in the post-reform period [16]. All of that largely destabilize functioning of the housing market and doesn't allow it to develop civilized, market participants (primarily investors and owners of the real estate units) haven't possibility to satisfy their economic interests and expectations.

Norm on distribution on of non-residential premises, parking spaces in apartment houses of the rules of the residential areas, including on payment for the room, calculation of the area of the building in the Housing Code of the Russian Federation. [17]

3. Conclusion
The implementation of the National Project "Housing and urban environment" and the implementation of the regional project "Housing" in the Irkutsk region do not fully solve the housing problem for the population at the moment. The growth of the housing stock is not high, and the natural disasters of 2018 made the situation in the region even worse. Housing in the border of Irkutsk city is unaffordable for a part of the population because of the cost. The solution of the problem is the construction of housing in suburban areas, but there are many problematic issues are related with the search and provision of land plots, also the problems of engineering and social infrastructure.

Thus, we can say with confidence that identifying problems, as well as studying and analyzing the current legislation in the area of providing land plots for housing construction are priorities and require deep and meaningful study with further development of practical recommendations on the
implementation of mechanisms for organizing the involvement of land resources for purposes of housing construction in suburban areas.

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