

# Analysis of the effectiveness of the implementation of regional housing programs in the context of globalization

*Galina Yurievna Novikova*<sup>1,\*</sup>, *Mikhail Konstantinovich Beliaev*<sup>1</sup>, and *Svetlana Evgenievna Karpushova*<sup>2</sup>

<sup>1</sup>Volgograd State Technical University, Department of digital economy and management technology in urban economy and construction, 400005, Volgograd, Lenin avenue, 28, Russia

<sup>2</sup>Volgograd State Technical University, Sebyakovsky branch, Department of Economics and Finance, 403342, Mikhailovka, Michurina str., 21, Russia

**Abstract.** Global trends have a significant impact on the state housing policy of Russia, which is aimed at solving the housing problems of socially vulnerable groups of the population. Evaluation of the effectiveness of housing programs will determine the most complete and sustainable end result of their implementation. The aim of the article is to analyze the effectiveness of regional housing programs in the context of globalization. As part of this work, an assessment was made of the effectiveness of the implementation of housing programs in the Volgograd region. The application of the selected criteria was carried out on the basis of an analysis of the situation in the field of housing policy and the provision of housing for citizens of the Volgograd region. Evaluation of the effectiveness of the housing programs of the Volgograd region is carried out in order to achieve the optimal ratio of the costs associated with their implementation and the results achieved in the course of implementation. The specificity of regional investment programs in the field of housing construction was determined, the emerging problems are revealed. Recommendations for improving the efficiency of the use of investment resources in the field of housing construction are given.

## 1 Introduction

Housing policy is an essential component of the economic strategy of States as a whole. It allows to solve a complex of tasks on improvement of living conditions of citizens, social improvement and stabilization of society, creation of the reliable tool of savings and liquid providing for the internal and external investors directing the resources to development of the housing sphere [1].

Global trends have a significant impact on the state housing policy of Russia [2]. The availability of opportunities to improve housing conditions is an important indicator of improving the welfare of the population, a prerequisite for social and economic stability of

---

\* Corresponding author: [volgalan@yandex.ru](mailto:volgalan@yandex.ru)

the state [3]. Therefore, the solution of the housing problem of citizens is one of the priorities of state policy in the Russian Federation [4-5].

The main objective of housing policy in a socially oriented economy is to create a comfortable living environment for people, which allows not only to meet housing needs, but also provides a high quality of life in General. The role of Public housing policy due to its high social importance, a significant share in the total volume of investments in the housing sector, as well as the expenditure budgets allocated to housing construction.

The methodological basis of the study was the methods of system analysis and synthesis, analogy and comparison, expert analysis, analytical and graphical modeling.

## 2 Analysis of regional housing policy in the context of globalization

Today, housing affordability is a key direction of housing development in the near future [6]. According to world practice, housing commissioning is estimated not by the number of square meters, but by the number of apartments built, since it is the apartment, not square meters, that is a commodity in the housing market (table 1).

**Table 1.** Number of apartments built and their average size.

	2014	2015	2016	2017	2018
From all sources of funding					
Number of apartments, thousand	817	929	1124	1195	1212
Average size of apartments, m2 total area	78,4	75,8	74,9	71,4	70,6
Population at the expense of own and borrowed funds					
Number of apartments, thousand	211	228	268	272	285
Average size of apartments, m2 total area	138,6	134,4	135,2	129,6	127,3

The achieved volumes of housing construction cannot meet the high demand of the population for housing, especially in the rapidly developing regions of Russia [7]. The scale of the potential housing market in Russia is determined by the high demand of the population for better housing conditions. The level of housing provision is still insufficient (on average 25 square metres per person) compared to many other Western countries.

One of the priorities of the development of both the Russian Federation and the Volgograd region is to increase the volume of housing construction and increase its accessibility for families with different income levels, as well as to stimulate demand for housing by improving the methods of state support of the population in improving housing conditions. In this regard, consider the state of housing construction in the Volgograd region and the city of Volgograd.

The peculiarity of housing construction in the Volgograd region is that the functions of the investor, customer and contractor are often performed by one organization, usually a large construction organization, which also performs the functions of an investment company. The main sellers of housing in the primary market are construction firms engaged in the construction of housing and acting on the principle of development companies, i.e. being both producers and sellers of housing. Housing prices are of great interest for the analysis of housing policy in the region. The level and dynamics of prices in the housing market are influenced by the overall economic situation, the standard of living of buyers in the region and other factors [8]. Prices fell not only in the secondary market (from 10 to 20 percent depending on the category of housing), but also in new buildings (this applies to objects included in the program "housing For the Russian family", implemented with the support of the state).

Increasing the volume of housing construction and increasing its accessibility for families with different income levels, as well as stimulating demand for housing by improving the methods of state support of the population in improving housing conditions is the main direction of development of the housing sector of the Volgograd region [9].

Global trends have had a significant impact on the predominance of this form of ownership in the housing stock, as private, with the main private owners are citizens [10-11]. Modern state housing policy is aimed at solving the housing problems of socially vulnerable groups of the population, as well as those groups of the population to which the state has a number of social obligations [12]. According to the legislation of the Russian Federation the main powers on providing with social housing of the citizens consisting on the housing account in the residence are assigned to Executive authorities of subjects of the Russian Federation, municipalities [13]. The main instrument for the implementation of housing policy are housing programs aimed at helping needy citizens to improve their living conditions. Since July 2014, the target program "Housing for Russian families" has been implemented in the Volgograd region.

The main advantages of the program:

- acquisition of housing of economy class in the city of Volgograd at an affordable price of 35 000 RUB / sq. m.;

- the apartment is fully finished and ready to move in;

- it is possible to obtain a preferential mortgage loan with state support;

- reimbursement of part of the cost of interest on the mortgage.

The program is a complex of financial, economic, technological, organizational, legal and other measures related to the resources, performers, terms of implementation and expected results, ensuring the improvement of living conditions of citizens of the Volgograd region [14].

### **3 Evaluation of the implementation of the effectiveness of housing programs**

At the same time, it should be noted that the process of evaluating the effectiveness of their implementation remains a weak link in housing programs [15]. Performance evaluation is an important element in the development of housing programs, allowing to determine the most complete and sustainable end result of their implementation. As part of this work, the effectiveness of the implementation of housing programs of the Volgograd region was assessed. The analysis was carried out on the basis of the study of measures to implement the current state program of the Volgograd region "providing affordable and comfortable housing for residents of the Volgograd region "for 2016 - 2020, which is a comprehensive system of measures aimed at improving the effectiveness of the state program of the Russian Federation"Providing affordable and comfortable housing and utilities for citizens of the Russian Federation".

Evaluation of effectiveness of implementation of the housing programmes of the Volgograd region is carried out to reach the optimal balance of costs associated with their implementation, and results achieved during the implementation, effective use of budget funds [16]. The proposed system of criteria for evaluating the effectiveness of housing programs in the Volgograd region includes five criteria formed from sub-criteria:

K1-compliance of the program with the main directions Of the strategy of social and economic development of the Volgograd region;

K2-compliance of the content of the program with the unified requirements for it; quality of reporting on the implementation of the program;

K3-implementation of the planned volumes of development, attraction of additional funds for the implementation of the program;

K4 - level of achievement of targets and indicators; implementation of program activities;

K5-coefficient of efficiency of implementation of programs, assessment of dynamics of efficiency of implementation of the program.

The degree of compliance of housing programs with CI sub-criteria is assessed on a scale from 0 to 10 points. The maximum score for sub-criteria corresponds to 10 points. In this case, the assigned score is justified by the relevant functional characteristics of the program, current parameters and indicators that reflect the progress of its implementation and the activities of state bodies to ensure the achievement of the goals and final results of the program. Assessment by sub-criteria

Ki criteria scores are calculated based on Ki sub-criteria scores and their weights.

The rating of efficiency of programs R is formed with the use of weight coefficients Pi criteria Ki:

$$R = K1 \times P1 + K2 \times P2 + K3 \times P3 + K4 \times P4 + 5 \times P5 \quad (1)$$

Based on the results of the effectiveness evaluation, the programs are assigned an efficiency rating (table 2).

**Table 2.** Rating of efficiency of implementation of housing programs, points.

Rating of efficiency, R	Quality characteristic
$R \geq 10$	effective
$8 \leq R < 10$	moderately effective
$5 \leq R < 8$	little effective
$R < 5$	inefficient

Based on the efficiency rating, decisions are made to change, adjust or terminate the implementation of the housing program [17].

We will assess the effectiveness of the implementation of the housing subprograms of the program of the Volgograd region "Providing affordable and comfortable housing for the residents of Volgograd region" for 2016 - 2020 table 3 presents the results of the evaluation.

**Table 3.** Evaluation of the effectiveness of the implementation of housing subprograms of the current state program of the Volgograd region "providing affordable and comfortable housing for residents of the Volgograd region" for 2016-2020.

Наименование подпрограммы	Rating of efficiency, R	Quality characteristic
1. Provision of living quarters for orphans and children left without parental care.	8,1	moderately effective
2. Young family-affordable housing	8,6	moderately effective
3. Fulfillment of obligations to provide housing for categories of citizens established by the legislation	8,4	moderately effective
4. Resettlement of citizens living in the territory of the Volgograd region from premises not suitable for living, and apartment buildings recognized as emergency	5,9	little effective
5. Stimulation of housing construction development in the Volgograd region	8,7	moderately effective
6. Formation of the market of hired houses of social use in the territory of the Volgograd region	2,3	inefficient

Analysis of the effectiveness of the implementation of housing subprograms of the current state program of the Volgograd region "providing affordable and comfortable housing for residents of the Volgograd region" for 2016-2020 showed that four of the six subprograms are moderately effective [18], one is ineffective and only one is ineffective.

The main problems in the implementation of the subprogram "Formation of the market of social purpose rental houses in the Volgograd region" are the lack of a system of rental houses, the presence of the shadow private sector in the rental market, the lack of interest of investors in the construction of rented houses.

The reason for the low efficiency of the subprogram "Resettlement of citizens living in the Volgograd region, from residential premises not suitable for living, and apartment buildings recognized as emergency" are the problems associated with insufficient resource support of the subprogram, a decrease in regional budget revenues, as well as the lack of housing market in the Volgograd region [19].

The scale of the problem does not allow to solve it quickly and requires the development of a certain approach that will gradually, during the implementation of the program, find opportunities to ensure safe living of Volgograd residents [20].

Some concern the absence in the Volgograd region formed the municipal temporary housing Fund provided to citizens, which is the only dwelling became unfit for habitation in the result of extraordinary circumstances (fires, explosions, collapses, floods, natural disasters, etc.). The reasons for this problem are: the lack of available residential premises of the municipal housing stock, suitable for permanent residence; deficit of budget financing both for the purchase (construction) of municipal housing and for the repair of the vacated housing stock; significant reduction of the municipal housing stock as a result of privatization of housing, including the authorized privatization of residential premises in municipal dormitories [21].

## **4 Conclusion**

Based on the study of the experience of the state program of the Volgograd region "providing affordable and comfortable housing for residents of the Volgograd region" for 2016-2020, it can be concluded that the implementation of the program allowed to achieve certain positive results, but a number of problems were identified:

- first, the underfunding of the state housing program, and as a consequence, the inability to take into account all areas of socio-economic development of the Volgograd region, as well as the inability to achieve immediate and final results of the program [22].

- second, the cumbersome structure of the program. The presence of subprograms, main activities, the presence of direct and final performance indicators complicates the development and monitoring of the implementation of program activities.

-thirdly, ensuring the housing rights of citizens cannot be implemented only within the framework of the main activities of local governments. The nature of the problem requires a long-term strategy and the use of organizational and financial mechanisms of interaction, coordination of efforts and concentration of resources of structural units of the administration of the Volgograd region and the subjects of the economy.

In this regard, one of the most important directions in the housing sector is the creation of an effective system of interaction on the basis of public-private partnership mechanisms between Executive authorities, local governments and investors for the implementation of investment projects [23]. In order to increase the efficiency of the use of investment resources in housing construction, it is necessary to ensure the development of mortgage lending, the involvement of private investors, the population, banks, financial institutions in the housing sector, as well as investment infrastructure, which contains a significant potential for enhancing housing construction [24].

## References

1. A. Muftakhova, L. Kozyreva, Housing Stratification in the European Union. *Journal of Economic Sociology – Ekonomicheskaya Sotsiologiya* **19**, 1, 116-142 (2018)
2. M. Ermilova, V. Kookueva, J. Tsertseil, Factors of Development of Foreign Housing Markets and Opportunities for Russia. *International Conference on Actual Economy – European Discourse on Global Challenges (ACE-EU)*, Paris, FRANCE, NOV 27-29, **24**, 9, 6332-6334 (2017)
3. G. H Popescu, I.E. Petrescu, O.M. Sabie, M. Muşat, Labor-displacing technological change and worldwide economic insecurity: How automation and the creation of innovative tasks shape inequality, *Psychosociological Issues in Human Resource Management* **6**, 80–85 (2018)
4. V. Moiseev, E. Karelina, O. Sudorgin, Social Policy of Russia: Yesterday and Today. *RPTSS Irkutsk, RUSSIA*, APR 26-28, **50**, 817-830 (2018)
5. M. Malkina, Spatial wage inequality and its sectoral determinants: The case of modern Russia, *Oeconomia Copernicana* **10**, 69–87 (2019)
6. X. Cai, Determinants of affordable housing allocation: Common perspectives from local officials. *Regional Science Inquiry* **10**, 227-237 (2018)
7. M. Gunko, P. Bogacheva, A. Medvedev, and authors, Path-Dependent Development of Mass Housing in Moscow, Russia. *Housing estates in Europe: Poverty, Ethnic Segregation and Policy Challenges*, 289-311 (Urban Book Series, 2018)
8. E. A. Khurami, O. B. O. Sari, An Investigation of the Effects of Housing Production Performance on Housing Affordability. *Planlama-Planning* **29**, 1, 23-32 (2019)
9. B. Randolph, L. Troy, V. Milligan, R. Van Den Nouwelant, Paying for affordable housing in different market contexts. *AHURI Final Report (293)*, 1-96 (2018)
10. M.A. Fox, Drive-in theatres, technology, and cultural change, *Economics, Management, and Financial Markets* **13**, 24–39 (2018)
11. M. Udell, V. Stehel, T. Kliestik, J. Kliestikova, P. Durana, Towards a smart automated society: Cognitive technologies, knowledge production, and economic growth, *Economics, Management, and Financial Markets* **14**, 44–49 (2019)
12. C. Average, Low income housing problems and low-income housing solutions: opportunities and challenges in Bulawayo. *Journal of Housing and the Built Environment* **34(3)**, 927-938 (2019)
13. P. Kostrikin, The effectiveness of housing renovation programs in the Russian Federation. *International Scientific Conference on Business Technologies for Sustainable Urban Development (SPbWOSCE)*, St Petersburg, DEC 20-22, RUSSIA, **170**, 01088 (2017)
14. M. A. Pechenskaya, D. G. Ilinskii, Regional Housing Construction Savings as a Tool for Improving Housing Affordability for the Population. *Economic and Social Changes- Facts Trends Forecast* **10**, 6, 192-206 (2017)
15. L. G. Seliutina, K. O. Bulgakova, Basics of investment projects selection for the implementation of regional investment programs in the sphere of social house building. *Espacios* 39(26) (2018)
16. Y. S. Berdova, N. B. Panchenko, D. V. Aryasova, S. V. Ovchinnikova, Effective implementation of the housing policy as one of the main factors in the development of regional economy. *International Journal of Civil Engineering and Technology* 9(10), 1124-1130 (2018)

17. G. Novikova, M. Lukyanitsa, L. Chizho, Program-oriented approach to resource saving issues in construction materials industry. *SHS Web of Conferences, (ICIE-2017)* **35**, 01034 (2017)
18. J. F. Fernández Rodríguez, E. De Manuel Jerez, Towards more sustainable social housing projects: Recognizing the importance of using local resources. *Cuadernos Geográficos* **57**(2), 237-260 (2018)
19. G.C. Galster, Neighborhoods and National Housing Policy: Toward Circumscribed, Neighborhood-Sensitive Reforms. *Housing Policy Debate* **29**(1), 217-231 (2019)
20. I. V. Bogomolova, V. S. Borovik, L. S. Mashentseva, Methodological aspects of the construction of the innovative model of a sustainable development of cities in the imperatives of contemporary policy of the Organization of the United Nations: essence and modernization. (*CSSDRE 2018*), Ser.: *AEBMR, April 18-20, 2018, Volgograd*, **39**, 5 (2018)
21. X. Gan, J. Zuo, P. Wu, (...), R. Chang, T. Wen, How affordable housing becomes more sustainable? A stakeholder study. *Journal of Cleaner Production* **162**, 427-437 (2017)
22. I.V. Bogomolova, D.A. Vishnyakov, T.V. Solovyeva, Sustainable Development of Large Cities in Strategic Planning Imperatives: Actualization of Approaches to Assessment. *Regionalnaya ekonomika. Yug Rossii [Regional Economics. South of Russia]* **7**, 3, 73-82 (2019)
23. J. Reece, M.Z. Gough, Planning for regional sustainability and justice: The role of collective impact. *Community Development* **50**(3), 368-386 (2019)
24. S. Hajduk, Efficiency evaluation of urban transport using the DEA method, *Equilibrium. Quarterly Journal of Economics and Economic Policy* **13**, 141–157 (2018)