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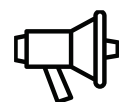


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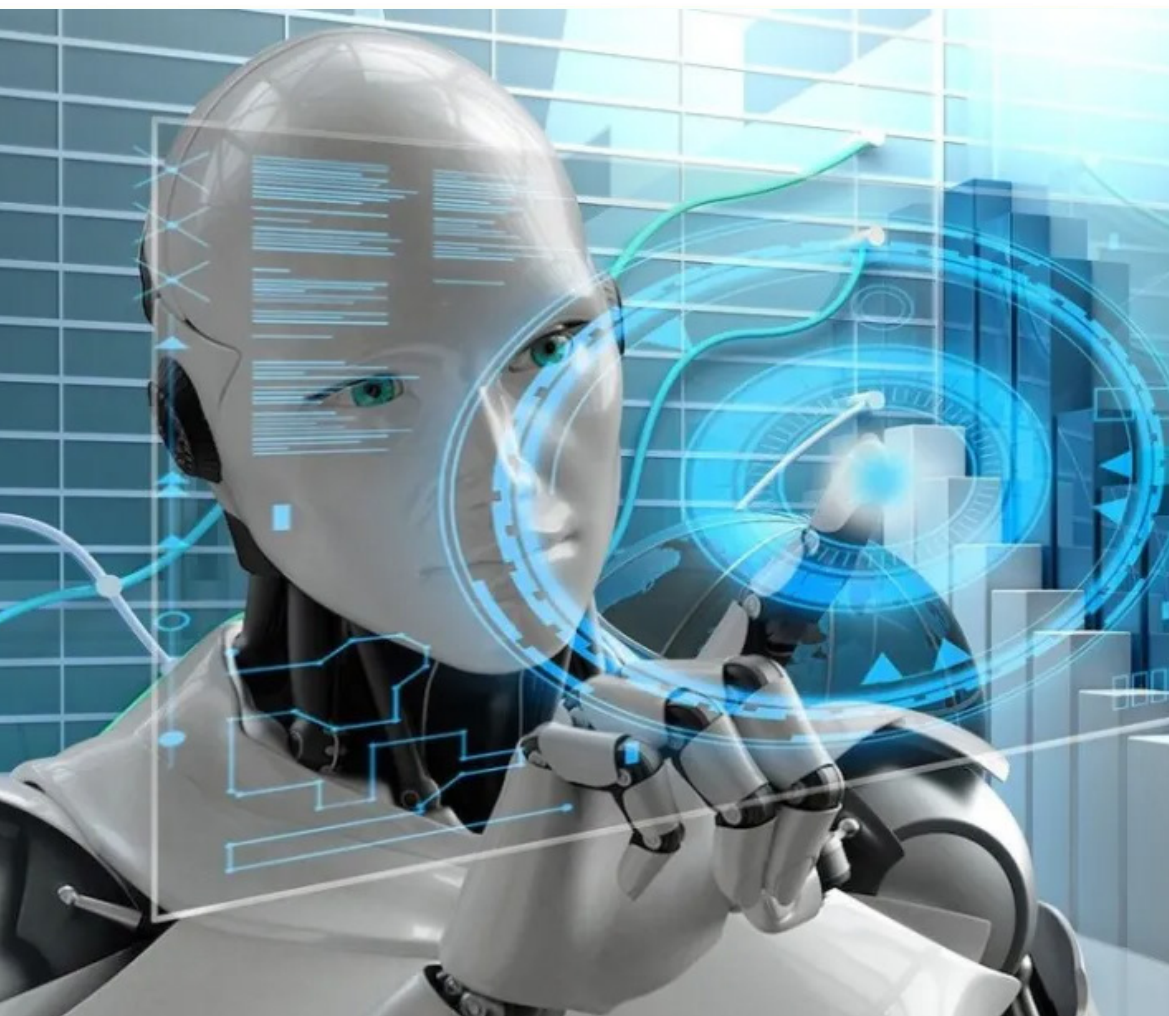
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MECHANISMS FOR INSTITUTIONAL REGULATION OF THE RESIDENTIAL REAL ESTATE SECTOR IN NAMANGAN REGION

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Abstract: This article provides a comprehensive analysis of the theoretical and practical aspects of the mechanisms of institutional regulation of the residential real estate sector in Namangan region. The study studies the relationship between the territorial characteristics of the construction sector and the development of the housing market, investment flows, the institutional environment and regulatory instruments on a scientific basis. It also assesses the effectiveness of state policy, the land allocation system, mortgage mechanisms and infrastructure development in the residential real estate sector. Based on empirical analysis, differences in capital concentration, imbalances and levels of development across regions are identified. As a result of the study, scientifically based proposals and practical recommendations are developed aimed at institutionally improving the residential real estate sector. This approach is of great importance in ensuring the sustainable development of the construction sector in the regional economy and reducing territorial imbalances.

Key words: residential real estate, institutional mechanism, construction sector, regional development, investment flows, mortgage system, land resources, imbalance, capital concentration, spatial economy, regional policy.

INTRODUCTION

The residential real estate sector in the modern economic system is not only a social mechanism for providing housing, but also a strategic sector that shapes regional economic development, capital accumulation, and investment flows. In the scientific literature, this sector is interpreted as a multiplicative driver of economic growth, based on its inextricable connection with the construction, financial, industrial, and service sectors [1]. At the same time, the level of development of the housing market is considered one of the main indicators determining territorial equality, population well-being, and labor market mobility [2]. These aspects indicate the need to study residential real estate not as a simple market segment, but as a complex institutional and economic system.

In the analyses of international organizations, the housing sector is recognized as an important element of economic stability and macroeconomic balance. In particular, World Bank reports note that the expansion of housing infrastructure has a significant impact on economic growth by increasing investment activity, expanding employment and stimulating domestic demand [1]. OECD studies prove that housing policy and institutional regulatory mechanisms are directly related to labor market flexibility, territorial mobility and economic efficiency [3]. At the same time, insufficiently developed institutional environment in the housing market can lead to price instability, increased investment risks and increased territorial imbalances.

The development of the residential real estate sector and its institutional regulation in the Republic of Uzbekistan has been established as one of the priority areas of state economic policy. In particular, it plays an important role in improving the institutional regulation of the residential real estate sector. Within the framework of this document, the mechanisms for allocating mortgage loans were revised, measures were defined to expand the volume of financing, improve the system of subsidies, and support the population in need of housing. [4]. In recent years, a number of regulatory legal acts have been adopted aimed at expanding the mortgage lending system, simplifying land allocation mechanisms, and digitizing construction processes. During 2021–2024, state programs were implemented aimed at increasing the volume of housing construction, meeting the population's need for housing, and attracting private investment. In the strategic directions planned until 2025, expanding the housing stock, reducing territorial disparities, and improving institutional management were identified as priority tasks.

In the case of Namangan region, these processes are manifested as an important factor in regional economic development. In 2016–2024, a sharp increase in the volume of construction, the formation of new residential areas and increased investment activity increased the economic importance of the residential real estate sector. However, the concentration of construction capital in certain regions, the uneven distribution of investment flows and disparities in housing supply indicate that institutional regulatory mechanisms are not sufficiently effective. This creates the need for comprehensive improvement of land resource management, permitting procedures, financial instruments and infrastructure policy.

In this context, it is of great importance to study the mechanisms of institutional regulation of the residential real estate sector on a scientific basis. This article is aimed at analyzing this sector based on institutional economics approaches, determining its impact on regional development processes, and developing scientifically based proposals and recommendations aimed at increasing its efficiency.

LITERATURE REVIEW

The issues of institutional regulation of the residential real estate sector have been formed at the intersection of several approaches in economic theory, among which institutional economics, urban economics and new economic geography occupy a special place. According to the theory of transaction costs put forward by Coase, the clarity of property rights and the efficiency of contractual relations determine the efficiency of the use of economic resources [6]. This approach justifies the importance of land allocation, property rights protection and permitting processes in the residential real estate sector, but does not sufficiently explain the differences in territorial development. Williamson, on the other hand, distinguishes hierarchical levels of institutional structures and shows that the efficiency of economic activity depends on the combination of formal and informal institutions [7], which is of great importance in explaining the balance of state and market mechanisms in the residential sector.

Within the framework of urban economics, the land rent model developed by Alonso explains the higher land values and house prices in areas close to the city center [8]. This model accounts for the spatial differentiation of residential real estate, but does not sufficiently take into account institutional factors. Glaeser and Gyourko's studies show that house price growth is more dependent on regulatory constraints and the elasticity of land supply [9], which confirms the direct impact of the institutional environment on economic outcomes. However, these approaches are based on the experience of more developed countries and may not be fully relevant to the conditions of developing regions.

In macroeconomic studies, Kiyotaki and Moore link housing assets to credit cycles, arguing that financial constraints have a strong impact on economic change [10]. This approach suggests that the residential real estate sector is intrinsically linked to the financial system. Aoki, Proudman, and Vlieghe have interpreted the housing market as an important channel for the transmission mechanism of monetary policy [11]. However, these studies do not adequately address regional disparities and institutional differences.

In the field of spatial economics, Krugman explains the effects of territorial concentration and agglomeration of economic activity through the theory of new economic geography [12]. This approach is an important methodological basis for explaining the centralization of capital in the residential real estate sector and the formation of territorial differences. Spatial econometric models developed by Anselin allow us to determine the interaction between regions [13], which indicates the need to take into account the effect of neighboring regions in the construction and housing markets.

The practical aspects of institutional regulation have been covered in many empirical studies. Quigley analyzes the relationship between the degree of regulation of the housing market and prices, showing that excessive regulation leads to an increase in prices by restricting supply [14]. Fischel argues that land use policies and local government decisions affect the development of the housing market [15]. These approaches demonstrate the need to ensure institutional balance for the effective development of the residential real estate sector.

Thus, the analysis of the existing literature shows that the issues of institutional regulation of the residential real estate sector are widely covered in various theoretical approaches. However, most of them focus on individual aspects and do not pay enough attention to a comprehensive analysis of institutional, territorial and economic factors, integrating them. Especially in developing regions, including the Namangan region, the empirical study of these issues is not sufficiently developed. Therefore, this study aims to analyze the mechanisms of institutional regulation of the residential real estate sector based on an integrated approach.

RESEARCH METHODOLOGY

This study is aimed at a comprehensive assessment of the mechanisms of institutional regulation of the residential real estate sector, which uses the integration of theoretical and empirical approaches. The

theoretical basis is a synthesis of the concepts of institutional economics (transaction costs, property rights theory), urban economics and spatial development. Methodologically, the study is carried out in several stages: in the first stage, the institutional structure of the residential real estate sector, its main elements and functional dependencies are identified through abstract-logical and systematic analysis methods; in the second stage, the differences and similarities between international and national institutional mechanisms are identified through comparative analysis; in the third stage, regional data are systematized based on statistical and economic analysis methods, and the interrelationship of construction volume, investment flows and housing supply indicators is studied. This approach allows analyzing the economic and institutional aspects of the residential real estate sector in a single system.

At the empirical stage, territorial differentiation and institutional efficiency are assessed based on data for 2010–2024 for the Namangan region and its districts. In this case, the dynamics of construction volume, territorial share, growth coefficients, housing supply level and investment indicators are used as the main indicators. To determine inter-regional imbalances, statistical indicators such as the Gini and Theil indices, variation coefficient are used, through which the level of spatial distribution and concentration of capital is assessed. Also, alternative specifications, relative indicators and dynamic comparative analysis methods are used to ensure the reliability of the results. This methodology allows for a deep analysis of the residential real estate sector not only through economic indicators, but also as a system inextricably linked with the institutional environment, regional development and capital flows.

ANALYSIS AND RESULTS

This section systematically covers the institutional regulatory mechanisms of the residential real estate sector in the Namangan region and its districts based on empirical data. The tables formed in the section reflect the interrelationship of the volume of capital investments, the dynamics of the construction industry, the level of distribution across regions, and the main indicators of the housing market. Based on these tables, growth coefficients, share indicators, relative intensity and territorial differentiation indicators are calculated, and through them the development rates of the construction sector and the level of institutional efficiency are determined. As a result, this section forms an analytical framework that allows for a comprehensive assessment of the economic and institutional characteristics of the residential real estate sector.

The data used were formed on the basis of official data from the Namangan regional statistics department and relevant regional organizations for the period 2017–2024. These data include construction volumes, investment flows, housing supply per capita, new housing per 1,000 inhabitants, and the dynamics of economic activity by region. The selected period also provides a sufficient empirical basis for determining the interrelationship between regional development processes and institutional changes. In this regard, this section serves as a scientific basis for summarizing the development of the residential real estate sector in terms of macroeconomic, territorial, and social indicators (table 1).

Table 1. Analysis of the volume of capital investments in the economy of the Republic of Uzbekistan

Investment areas	Capital investments, billion soums			Return on capital investment, %	
	2020	2021	2022	2022/2021	2022/2020
Total	12007	12982	13644	105.10	113.63
Agriculture, forestry and fisheries	1170.8	978.5	1028.4	105.10	87.84
Industry	4022	4542	4773.1	105.10	118.67
Construction	925.4	1838	1931.9	105.10	208.76
Wholesale and retail trade; repair of motor vehicles and motorcycles	1166.2	1015	1066.4	105.10	91.44
Transport, warehousing, postal and courier activities	785.3	614.3	645.6	105.10	82.21
Temporary accommodation and meals	94.1	86.2	90.6	105.10	96.28
Information and telecommunications	62.7	80.4	84.5	105.10	134.77
Financial and insurance activities	26.6	32.2	33.8	104.97	127.07
Real estate transactions	95.1	83.4	87.7	105.16	92.22
Professional, scientific and technical activities	123.1	143.1	150.4	105.10	122.18

Activities in the field of administrative and support services	75.2	86.2	90.6	105.10	120.48
Public administration and defense; compulsory social insurance	138.9	147.2	154.7	105.10	111.38
Education	318.3	499.8	525.3	105.10	165.03
Healthcare and social assistance	332.9	763.1	802.2	105.12	240.97
Arts, sports, entertainment and recreation	42.3	86.8	91.2	105.07	215.60
Providing other types of services	2628.3	1986	2087.7	105.10	79.43

Source: Author's development based on data from the analysis of construction activity of the Statistics Committee of the Republic of Uzbekistan

In 2020–2022, the volume of capital investments directed to the economy of Uzbekistan increased from 12,007 billion soums to 13,644 billion soums, showing an overall growth of 13.63%. The highest growth in terms of sectors was observed in the construction sector, where investments increased from 925.4 billion soums to 1,931.9 billion soums, an increase of 208.76%, which indicates that this sector has become a priority in the economic system. Investments in the healthcare sector increased from 332.9 billion soums to 802.2 billion soums, an increase of 240.97%, and in the arts and recreation sector, from 42.3 billion soums to 91.2 billion soums, an increase of 215.60%. The increase in the education sector from 318.3 billion soums to 525.3 billion soums represents an increase of 165.03 percent. At the same time, the industrial sector has developed relatively steadily, reaching 4,773.1 billion soums from 4,022 billion soums, an increase of 118.67 percent. On the contrary, agriculture has shown a decreasing trend of 87.84 percent, transport - 82.21 percent, and other services - 79.43 percent.

These indicators indicate an uneven distribution of investment flows across sectors and a reshaping of economic priorities. The more than doubling of investments in the construction sector indicates that residential real estate and infrastructure projects have become a priority in economic policy, which strengthens the connection of capital accumulation with the real sector. High growth in social sectors, in particular in healthcare and education, indicates that public investments are directed towards the development of human capital. At the same time, a decrease in investment in transport, agriculture and some service sectors reflects the redistribution of resources and the transformation of the economic structure. As a result, investment policy is being directed towards supporting sectors that create high added value and have a multiplier effect in the economy, which further strengthens the role of the residential real estate sector in economic growth (table 2).

Table 2. Analysis of the volume of capital investments in the economy of Namangan region

Investment areas	Capital investments, billion soums			Return on capital investment, %	
	2020	2021	2022	2022/2021	2022/2020
Total	12007	12982	13644	105.1	113.6
Agriculture, forestry and fisheries	1170.8	978.5	1028.4	105.1	87.8
Industry	4022	4542	4773.1	105.1	118.7
Construction	925.4	1838	1931.9	105.1	208.8
Wholesale and retail trade; repair of motor vehicles and motorcycles	1166.2	1015	1066.4	105.1	91.4
Transport, warehousing, postal and courier activities	785.3	614.3	645.6	105.1	82.2
Temporary accommodation and meals	94.1	86.2	90.6	105.1	96.3
Information and telecommunications	62.7	80.4	84.5	105.1	134.8
Financial and insurance activities	26.6	32.2	33.8	105.0	127.1
Real estate transactions	95.1	83.4	87.7	105.2	92.2
Professional, scientific and technical activities	123.1	143.1	150.4	105.1	122.2
Activities in the field of administrative and support services	75.2	86.2	90.6	105.1	120.5
Public administration and defense; compulsory social insurance	138.9	147.2	154.7	105.1	111.4
Education	318.3	499.8	525.3	105.1	165.0

Healthcare and social assistance	332.9	763.1	802.2	105.1	241.0
Arts, sports, entertainment and recreation	42.3	86.8	91.2	105.1	215.6
Providing other types of services	2628.3	1986	2087.7	105.1	79.4

Source: Author's development based on data from the «Analysis of Regional Construction Activity» of the Namangan Regional Statistics Department

In 2020–2022, the volume of capital investments directed to the economy of Namangan region increased from 12,007 billion soums to 13,644 billion soums, showing an overall growth of 13.6%. The highest growth in terms of sectors was observed in the construction sector, where investments increased from 925.4 billion soums to 1,931.9 billion soums, an increase of 208.8%, which indicates the priority of residential real estate and infrastructure projects. Investments in the healthcare sector increased from 332.9 billion soums to 802.2 billion soums, an increase of 241.0%, and in the arts and recreation sector, from 42.3 billion soums to 91.2 billion soums, an increase of 215.6%. In the education sector, the increase from 318.3 billion soums to 525.3 billion soums was 165.0 percent. In the industrial sector, the increase from 4,022 billion soums to 4,773.1 billion soums represents a steady growth of 118.7 percent. On the contrary, agriculture showed a downward trend of 87.8 percent, transport - 82.2 percent, and other services - 79.4 percent.

These results indicate a structural reorientation of investment policy at the regional level and a shift in economic priorities. A sharp increase in investments in the construction sector is strengthening the strategic importance of residential real estate development in economic growth, ensuring the integration of capital with the real sector. High growth in social sectors, in particular in healthcare and education, indicates an intensification of state policies aimed at developing human capital. At the same time, a decrease in investment in some sectors reflects the redistribution of resources and the transformation of the economic structure. As a result, capital investments are being directed to sectors with a high multiplier effect, which further strengthens the role of the residential real estate sector in regional economic development (table 4).

Table 3. Dynamics of construction industry production volume in Namangan region (billion soums)

	2017	2018	2019	2020	2021	2022	2023	2024
Namangan region	1,475.2	2,257.6	3 471.0	4,678.2	5,556.7	10,564.7	11,732.9	13,234.7
Namangan city.	292.4	520.4	873.1	1,411.4	1,529.8	2,050.6	2,784.6	2,602.8
Mingbulak	46.1	93.0	158.6	134.7	260.9	288.8	412.4	397.6
Kasonsoy	122.0	196.8	359.8	386.4	470.7	581.1	597.9	561.3
Namangan	175.5	197.1	270.7	372.6	442.1	530.3	502.3	484.7
Narin	65.4	93.3	142.7	224.9	216.9	373.7	316.1	371.6
Pop	106.1	181.3	252.8	364.4	385.3	584.8	396.1	613.8
Turaqurgan	134.5	189.3	229.0	243.7	295.9	448.0	361.9	416.8
Housekeeper	139.0	221.1	364.7	485.9	640.8	952.4	994.4	1,299.2
Uchkurgan	113.6	176.7	205.0	274.3	278.5	514.3	469.6	530.3
Attic	78.6	138.3	220.6	311.5	431.4	564.5	610.6	622.7
Chust	103.2	137.3	215.6	249.8	315.8	425.2	458.2	503.1
Yangikurgan	98.8	113.1	178.4	218.8	288.5	353.2	399.5	445.3
						2,897.9	3,429.1	4,385.7

Source: Author's development based on data from the «Analysis of Regional Construction Activity» of the Namangan Regional Department of Statistics

In 2017–2024, the volume of construction industry production in Namangan region increased from 1,475.2 billion soums to 13,234.7 billion soums, showing an increase of almost 9 times. In particular, in 2021–2022, the volume increased sharply from 5,556.7 billion soums to 10,564.7 billion soums, showing an almost two-fold increase, and in 2024, reaching 13,234.7 billion soums, the growth rate continued. In terms of regions, Namangan city increased from 292.4 billion soums to 2,602.8 billion soums, maintaining its leadership, while Uychi district showed one of the highest growth rates, reaching 1,299.2 billion soums from 139.0 billion soums. Chartok district showed high dynamics, increasing from 78.6 billion soums to 622.7 billion soums, and Pop district from 106.1 billion soums to 613.8 billion soums. At the same time, unevenness was observed in some regions, for example, in Namangan district, a decrease was observed from 530.3 billion soums in 2022 to 484.7

billion soums in 2024, and in Kosonsoy district, a decrease was observed from 597.9 billion soums to 561.3 billion soums.

These dynamic processes indicate that the construction sector has become the main growth driver in the regional economy, but its development is uneven across regions. High growth rates are concentrated mainly in regions with high economic and infrastructural potential, in particular in the city of Namangan and the Uychi district, which increases the territorial concentration of capital. On the contrary, the slowdown or decline in growth rates in some districts indicates that investment flows are not sufficiently stable and there are institutional constraints. As a result, the construction industry is, on the one hand, the main sector accelerating economic growth in the regional economy, and on the other hand, it is a factor that increases the imbalance in the spatial distribution of capital (table 4).

Table 4. Indicators of the effectiveness of institutional regulation of the residential real estate sector in Namangan region

Area	Construction volume (billion soums, 2023)	Growth rate (2017–2024)	Housing per capita (m ²)	Housing per 1000 inhabitants (m ²)	Level of institutional development
Namangan city.	11,732.9	high	—	—	high
Namangan city.	2,784.6	high	17.8	520	high
Mingbulak	412.4	middle	15.2	310	medium-low
Kasonsoy	597.9	middle	16.1	355	middle
Namangan	502.3	low-medium	16.5	340	middle
Narin	316.1	low	14.9	295	low
Pop	396.1	low	15.8	320	low
Turaqurgan	361.9	low	15.6	305	low
Housekeeper	994.4	high	16.9	410	high
Uchkurgan	469.6	middle	15.7	330	middle
Attic	610.6	high	16.3	360	medium-high
Chust	458.2	middle	15.9	335	middle
Yangikurgan	399.5	low	15.4	315	low

Source: Author's development based on the monitoring of construction activities by district of the Namangan Regional Department of Economics

This table shows that the development of the residential real estate sector in Namangan region is significantly differentiated by region. In 2023, the construction volume in the region amounted to 11,732.9 billion soums, the bulk of which fell on the city of Namangan with 2,784.6 billion soums and Uychi district with 994.4 billion soums, indicating that these regions have formed the main “growth poles” of the sector. Chartok district with 610.6 billion soums, Kosonsoy with 597.9 billion soums and Uchkurgan with 469.6 billion soums forms the middle-high segment. On the contrary, lower development is observed in Naryn with 316.1 billion soums, Turakurgan with 361.9 billion soums and Yangikurgan with 399.5 billion soums. The variation in the housing supply per capita from 14.9 m² to 17.8 m², and the indicators of new housing per 1,000 inhabitants from 295 m² to 520 m², indicates the uneven development of housing infrastructure between regions. At the same time, the concentration of growth coefficients in high regions empirically confirms the concentration of capital in certain areas.

These results indicate that institutional regulatory mechanisms in the residential real estate sector do not work equally across regions. In highly developed regions, the efficiency of land use, infrastructure provision, and a relatively favorable investment climate stimulate construction activity and attract capital flows. On the contrary, in less developed regions, institutional constraints, including bureaucratic obstacles to land allocation, insufficient infrastructure development, and limited financial instruments, slow down the development of the construction sector.

CONCLUSION AND SUGGESTIONS

The results of this study empirically and theoretically substantiate the direct impact of institutional regulatory mechanisms for the residential real estate sector in Namangan region on economic development and regional disparities. In 2020–2022, capital investments in the regional economy increased from 12,007 billion soums to

13,644 billion soums, an increase of 13.6 percent, while in the construction sector this indicator increased from 925.4 billion soums to 1,931.9 billion soums, an increase of 208.8 percent. This indicates that the residential real estate sector has become a priority area in the economic system. At the same time, the increase in the production volume of the construction industry from 1,475.2 billion soums to 13,234.7 billion soums in 2017–2024 confirms the high growth rates of the sector.

Analysis by region showed an uneven distribution of construction activity. In 2023, Namangan city stood out as the leading regions with 2,784.6 billion soums and Uychi district with 994.4 billion soums, while Naryn had lower indicators at 316.1 billion soums and Turakurgan at 361.9 billion soums. The difference in the housing supply per capita from 14.9 m² to 17.8 m², and the volume of new housing per 1,000 inhabitants from 295 m² to 520 m² indicates the presence of regional imbalances. These differences indicate the concentration of construction capital in certain regions and the different effectiveness of institutional mechanisms across regions.

Investment analyses have shown that, although resources directed to the construction sector have a high multiplier effect, their uneven distribution across regions limits economic efficiency. In particular, the increase in investments in the healthcare sector from 332.9 billion soums to 802.2 billion soums represents a 241.0 percent increase, and in education from 318.3 billion soums to 525.3 billion soums represents a 165.0 percent increase. However, the decrease in investment in sectors such as transport and agriculture to 82.2 percent and 87.8 percent, respectively, indicates an imbalance in the distribution of resources. This situation reinforces the need to ensure institutional balance in the development of the residential real estate sector.

First, it is necessary to comprehensively improve institutional mechanisms for the development of the residential real estate sector, reducing transaction costs by simplifying the systems for land allocation, permitting, and property rights protection. This will stimulate construction activity and expand investment flows.

Secondly, it is necessary to introduce a differential investment policy to reduce regional disparities. Capital flows can be rebalanced by targeting targeted infrastructure projects, tax breaks, and subsidy mechanisms to less developed regions.

Third, it is necessary to introduce a spatial planning system in the residential real estate sector. Allocation of resources based on economic models that take into account interregional interdependence will limit excessive concentration of capital and ensure balanced development.

Fourth, it is necessary to strengthen the institutional framework of the housing market through the development of mortgage and financial instruments. This will support the population's demand for housing and ensure the sustainable development of the construction sector.

Fifth, it is necessary to introduce digital monitoring and management systems in the residential real estate sector. Real-time monitoring of construction volumes, investment flows, and housing supply indicators will allow for effective economic policy formulation.

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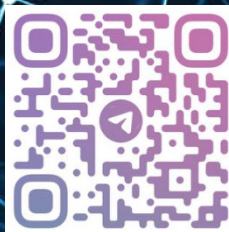
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