



IMPROVING THE METHODOLOGY FOR ASSESSING THE EFFECTIVENESS OF ORGANIZATIONAL- ECONOMIC MECHANISMS FOR MANAGING THE QUALITY OF UTILITY SERVICES IN MULTI- APARTMENT BUILDINGS

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ABSTRACT

This paper examines the evaluation of organizational and economic mechanisms for managing the quality of communal services in multi-apartment buildings. The study analyses the existing service quality management mechanisms, including tariff-subsidy schemes, billing systems, cluster management, public-private partnerships, homeowners' participation, and supervisory mechanisms. A multi-criteria evaluation approach based on economic, organizational, financial, social, and digital indicators was applied to assess the effectiveness of service quality management. The evaluation process relied on expert survey results and statistical data. The findings made it possible to identify the strengths and weaknesses of the existing mechanisms. In addition, an improved methodological approach aimed at enhancing the effectiveness of communal service quality management was developed.

In the context of deepening market relations and the acceleration of institutional reforms in the housing and communal services system, the issue of effective management of the quality of communal services in apartment buildings is becoming increasingly relevant. The quality of utility services is an important indicator reflecting not only the level of meeting the daily needs of the population but also the performance of management entities, the efficiency of infrastructure utilization, and the financial stability of the sector. Therefore, there is a need to scientifically evaluate and improve the effectiveness of the organizational and economic mechanisms used in service quality management.

Practice shows that the quality of utility services is often assessed through individual indicators, and comprehensive methodological approaches covering all structural elements of the management system are not sufficiently applied. As a result, the possibilities of determining clear priorities in management decision-making, the rational use of available resources, and the identification of factors that reduce the quality of services are limited. In

particular, there is a growing need to integrate indicators such as the activities of management service companies, tariff policy, funding sources, digitalization levels, and consumer satisfaction into a unified evaluation system.

From this perspective, improving the methodology for assessing the organizational and economic mechanisms for managing the quality of utility services in apartment buildings is one of the important scientific and practical directions for the development of the industry. This section analyses existing approaches to assessing the effectiveness of service quality management and develops an improved methodological approach based on the integral quality index, multi-criteria assessment methods, expert assessments, and efficiency indicators. This will increase the validity of management decisions, increase the efficiency of resource use, and consistently improve the quality of utility services provided to the population.

The institutional foundations of public utilities in apartment buildings and the factors affecting service quality were analysed. This section systematizes the organizational and economic mechanisms used in quality management and evaluates their effectiveness based on quantitative and qualitative indicators. A scientifically grounded assessment of the effectiveness of mechanisms allows for the identification of priority areas for reforming the sector and the rational allocation of resources.

In economic literature, the concept of efficiency is interpreted as the ratio between the result and the resources expended to achieve it. M. Farrell created the theoretical foundations for measuring production efficiency and distinguished between the concepts of technical and allocative efficiency. Based on these ideas, the Data Envelope Analysis (DEA) method, developed by A. Charns, W. Cooper, and E. Rhodes, allows for the evaluation of the relative efficiency of homogeneous objects based on multiple input and output indicators [2].

The concept of "new public management" (New Public Management) plays an important role in assessing the effectiveness of public and communal services. This approach, based on K. Hud, promotes the principles of effectiveness, performance indicators (KPIs), and accountability in public service management [3]. When evaluating the effectiveness of utility quality management mechanisms, these approaches rely on a set of economic, organizational, financial, and social criteria.

In Uzbekistan, the quality management of utility services in apartment buildings is carried out through a number of organizational and economic mechanisms within the framework of current legislation. In particular, it is stipulated in regulatory documents that the management of apartment buildings shall be carried out through a billing system, and that mandatory contributions for each house shall be accounted for separately [4]. The main organizational and economic mechanisms of quality management are systematized in Table 1.

Table 1

Key Organizational and Economic Mechanisms for Managing the Quality of Public Utilities

№	Mechanism	Content and function
1	Tariff-Subsidy Mechanism	Establishing service prices and covering the difference resulting from low tariffs with budget subsidies

Nº	Mechanism	Content and function
2	Billing / Digital Mechanism	Digitalization of accounting, voting, and monitoring through the "Mening Uyim" and "Turar-joy" systems
3	Cluster Mechanism	Dividing houses into categories, consolidating them into large lots, and consolidating management (2026–2030)
4	Public-Private Partnership (PPP)	Modernization of services and infrastructure by involving the private sector
5	Owner Participation Mechanism	Decision-making, selection, and control of the manager through a general meeting
6	Oversight and Inspection Mechanism	Monitoring contributions and service quality through regional housing and communal services inspections

Figure 1 shows the interconnection of the mechanisms as a single system. These mechanisms complement each other: for example, the tariff-subsidy mechanism serves to ensure the financial basis, the billing mechanism serves to ensure transparency, and the cluster mechanism serves to ensure the efficiency of the management scale. A set of economic, organizational, financial, social, and digital criteria was used to evaluate their effectiveness.

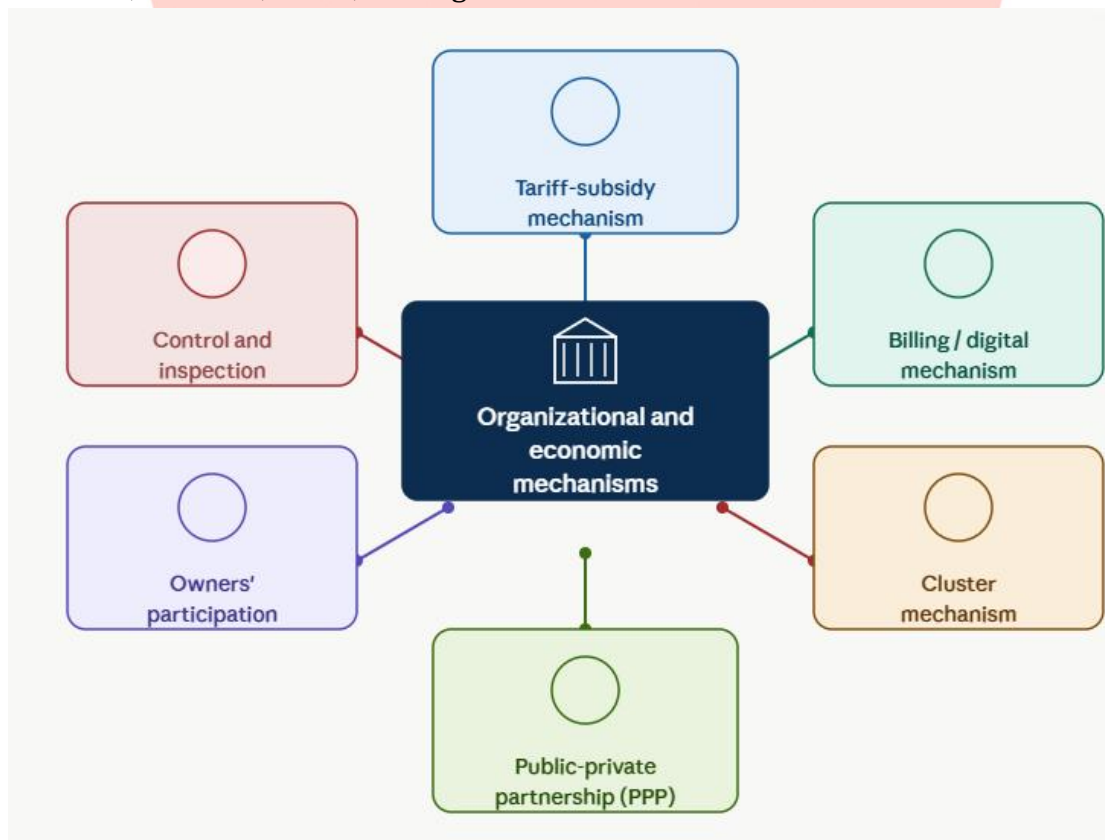


Figure 1. The system of organizational and economic mechanisms for managing the quality of public utilities

A multi-criteria approach was used to evaluate the effectiveness of the mechanisms. An expert survey was conducted with the participation of 15 industry specialists. Each mechanism was evaluated on a 5-point scale according to five main criteria (economic, organizational, financial, social, and digital), and the results were summarized based on average values. Weighting coefficients were assigned to the criteria based on their relative significance. The evaluation criteria and their indicators are presented in Table 2.

Table 2

Criteria and indicators for evaluating the effectiveness of mechanisms

No	Criterion	Indicator	Unit
1	Economic	Cost-benefit ratio, payback rate	%
2	Organizational	Management scope, level of consolidation	%
3	Financial	Financial independence, dependence on subsidies	%
4	Social	Public Satisfaction and Engagement	Point
5	Digital	Degree of process digitalization	Point

These criteria are used to identify the strengths and weaknesses of each mechanism. Below, the effectiveness of the main mechanisms is evaluated sequentially based on statistical data.

This mechanism is based on the regulation of service prices and the compensation of the difference arising from the application of low tariffs to the population. However, its efficiency remains low: the population covers only 18% of the basic heat supply tariff, the rest is financed by the budget, and in Tashkent alone in 2024, subsidies amounted to 1.97 trillion soums [5]. This indicates the low efficiency of the mechanism in terms of economic and financial criteria. Therefore, there are plans to gradually phase out subsidies and bring tariffs closer to an economically justified level by 2030..

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