

**CRITERIA FOR EVALUATING THE EFFICIENCY OF SPECIAL
ECONOMIC ZONES AND DIRECTIONS FOR THEIR
IMPROVEMENT**

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ABSTRACT	KEYWORDS
This article analyzes the theoretical and practical aspects of evaluating the efficiency of Special Economic Zones (SEZs) and highlights priority directions for their improvement. In the global economy, special economic zones are recognized as a crucial tool for attracting investment, expanding export volume, developing industrial production, stimulating innovation activities, and creating new jobs. The study systematically examines the primary criteria used in evaluating SEZ efficiency, including the volume of foreign direct investment (FDI), export potential, production output, employment levels, tax revenues, innovative activity, infrastructure quality, and the overall impact on regional economic development. Furthermore, the operational practices of Special Economic Zones in Uzbekistan were comparatively assessed against international experience. Based on the research findings, it is substantiated that implementing a comprehensive indicator system for efficiency evaluation, developing digital monitoring mechanisms, enhancing the management system, improving institutional conditions for investors, and supporting innovative projects will directly serve to increase the performance and effectiveness of Special Economic Zones.	Special economic zones, efficiency, evaluation criteria, investments, foreign direct investment, exports, industrial development, innovations.

Introduction

In the context of globalization, ensuring sustainable economic development, improving the investment climate, and bolstering industrial capacity constitute priority directions of state economic policy. In achieving these objectives, Special Economic Zones (SEZs) are recognized as a vital institutional mechanism. By offering favorable legal, tax, and customs environments for investors, SEZs serve to attract foreign direct investment, expand the production of export-oriented goods, introduce advanced technologies, and generate new employment opportunities. Consequently, establishing Special Economic Zones and enhancing their operational efficiency have become integral components of economic development strategies across many countries worldwide.

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In recent years, Uzbekistan has also significantly expanded its network of Special Economic Zones (SEZs) to enhance the investment climate, foster regional industrial capacity, and boost export volumes. However, the lack of a fully developed, unified, and comprehensive system of evaluation criteria for assessing their operational performance, alongside disparities in investment project efficiency and production capacity utilization across certain zones, underscores the urgent need for in-depth scientific research into this subject.

Assessing the efficiency of Special Economic Zones entails not only determining quantitative economic indicators but also conducting a comprehensive analysis of the efficacy of state-provided incentives, the impact of investment policy, contributions to regional development, and the degree of innovative activity. Therefore, enhancing evaluation criteria based on international best practices and developing a system of modern indicators holds critical scientific and practical significance.

Analysis and Results

During the study, the primary criteria for evaluating the efficiency of Special Economic Zones (SEZs) were thoroughly analyzed. The results demonstrate that evaluating SEZ performance solely on the volume of attracted investment is insufficient. A comprehensive assessment of efficiency necessitates accounting for the interplay between foreign direct investment volume, export capacity, total production output, job creation, labor productivity, tax revenues, innovative activity levels, and infrastructure development.

The analysis reveals that in highly successful Special Economic Zones, the increase in investment volume is consistently paralleled by higher export performance and a greater share of high-value-added products. Conversely, in several zones, economic efficiency falls short of expectations due to underutilized production capacities, extended project implementation timelines, and a predominant focus of certain enterprises on the domestic market. This underscores the necessity of incorporating qualitative indicators alongside quantitative metrics within the evaluation framework.

Based on the research findings, it was determined that implementing a comprehensive system of indicators is highly expedient for evaluating SEZ efficiency. This system should encompass return on investment (ROI), export shares, the volume of newly created jobs, the proportion of innovative products, capacity utilization rates, and environmental sustainability metrics. Furthermore, deploying digital management platforms that enable real-time monitoring of zone operations and enhancing information exchange between government agencies and investors will significantly contribute to boosting overall performance.

The results indicate that applying modern, comprehensive mechanisms for efficiency assessment enhances the operational transparency of Special Economic Zones, enables an accurate evaluation of the economic return on state-provided incentives, and serves as a reliable analytical foundation for refining investment policies. Consequently, this constitutes a pivotal factor in elevating the international competitiveness of Uzbekistan's Special Economic Zones, expanding export potential, and ensuring sustainable socio-economic development across the regions.

The table below systematizes the primary criteria that facilitate a comprehensive evaluation of Special Economic Zone (SEZ) efficiency. These criteria encompass economic, social, institutional, and environmental factors, thereby enabling a multifaceted analysis of overall SEZ performance. In assessing efficiency, the interplay between key indicators—such as investment volume, export potential, production metrics, employment levels, innovative development, and infrastructure

quality—holds critical importance. This table serves as a methodological foundation for monitoring SEZ activities, identifying existing bottlenecks, and formulating strategic decisions aimed at their mitigation

Table 1 Comprehensive Criteria for Evaluating the Efficiency of Special Economic Zones and Their Economic Significance

№	Evaluation Criterion	Key Indicators	Evaluation Method	Directions for Improvement
1	Investment Efficiency	Attracted investment volume, investment growth rate	Dynamic and comparative analysis	Introducing additional incentives for investors
2	Export Efficiency	Export volume, export share, geographic distribution of exports	Export coefficient	Supporting expansion into new foreign markets
3	Production Efficiency	Output volume, added value, capacity utilization rate	Economic analysis	Increasing the share of high-value-added products
4	Employment Indicators	New jobs created, labor productivity, average wage	Statistical analysis	Developing a skilled workforce training system
5	Tax Efficiency	Tax revenues, funds contributed to the budget	Cost-Benefit Analysis (CBA)	Regularly assessing the effectiveness of tax incentives
6	Innovative Development	Number of patents, R&D expenditures, share of innovative products	Innovation index	Fostering cooperation between scientific centers and industry
7	Infrastructure Quality	Energy, transport, logistics, and digital infrastructure	Comprehensive (integral) evaluation	Implementing "Smart Zone" technologies
8	Environmental Sustainability	CO ₂ emissions, waste recycling, share of green energy	ESG indicators	Widely implementing "Green Economy" principles
9	Institutional Efficiency	Quality of public services, time required to obtain permits	Expert assessment	Developing digital governance and the "Single Window" system
10	Integral Efficiency Index	Weighted aggregate sum of all criteria	Composite index	Evaluating SEZ activities based on a comprehensive rating system

The analysis of the table demonstrates that evaluating the efficiency of Special Economic Zones (SEZs) requires a multi-factorial approach. Investment efficiency serves as a primary indicator determining a zone's economic attractiveness, quantified through the volume of attracted investments and their growth rates. Export efficiency reflects the international competitiveness of the manufactured goods. Meanwhile, production efficiency highlights output volume, added value, and capacity utilization rates. While employment indicators measure the social efficiency of SEZs, tax efficiency allows for determining the economic yield of state-provided incentives. The innovative development criterion assesses the extent of scientific research, patent acquisition, and the deployment of new technologies. Infrastructure quality stands as a key factor ensuring the continuity of production and logistical processes. Furthermore, environmental sustainability metrics highlight the rising importance of green growth principles in the modern economy.

Institutional efficiency reflects the quality of public services and the efficacy of the administrative framework. Evaluating all criteria through a unified composite index facilitates comparative analyses among different SEZs, determines their developmental maturity, and provides a scientifically grounded basis for managerial decision-making.

The table-based analysis underscores that SEZ performance evaluation must not be limited to a single economic metric. The true efficacy of SEZs can only be determined when factors such as investment, exports, production, employment, innovative development, infrastructure quality, environmental sustainability, and institutional governance are evaluated synthetically. A comprehensive evaluation framework enables the identification of strengths and weaknesses within zone operations, optimizes resource utilization, and measures the economic efficacy of government incentives.

Concurrently, deploying modern digital monitoring systems, utilizing composite indices, and adopting evaluation methodologies aligned with international standards significantly enhances SEZ management efficiency. Consequently, this fosters a more favorable business environment for investors, expands the output of high-value-added products, increases export potential, and ensures sustainable socio-economic development across regions.

Thus, the comprehensive system of criteria outlined in the table serves as a vital scientific and practical tool for the systematic monitoring of SEZ performance, enhancing their competitiveness, and refining development strategies. This approach provides an essential methodological foundation for boosting SEZ efficiency in Uzbekistan and ensuring the sustained growth of the national economy.

The table encapsulates critical indicators for evaluating Special Economic Zone (SEZ) efficiency based on a comprehensive and integrated framework. It systematically presents indicators across key dimensions of economic development, along with their units of measurement, weighting coefficients, and evaluation metrics. The integral evaluation method enables a multifaceted analysis of SEZ performance, identifies existing opportunities and bottlenecks, and supports evidence-based managerial decision-making. Furthermore, this system of indicators constitutes a vital methodological tool for refining investment policy, enhancing regional economic capacity, and driving sustainable development.

Table 2 Indicators for the Integral Assessment of Special Economic Zone Efficiency

Indicator Group	Indicator	Unit of Measurement	Weighting Coefficient	Evaluation Criterion
Investment Development	Volume of attracted investments	Billion UZS / Million USD	0,25	Higher value indicates higher efficiency
Industrial Development	Volume of manufactured products	Billion UZS	0,20	Evaluated based on growth rate
Export Potential	Share of exports	%	0,15	50% and above indicates high performance
Employment	Newly created jobs	Persons (People)	0,10	Increase in the number of jobs
Innovation Activity	Share of innovative products	%	0,10	Share of high-tech production
Budget Efficiency	Tax revenues	Billion UZS	0,08	Contribution to state revenues
Infrastructure Quality	Utility and communication support	Score (1–5)	0,07	Based on expert assessment

The data in the table indicate that investment development holds the highest weighting coefficient (0.25) in evaluating the efficiency of Special Economic Zones (SEZs). This confirms that attracting investments remains one of the primary objectives of SEZ operations. The second most critical indicator is industrial development, with a weight of 0.20, which enables the assessment of production volume and the growth rate of industrial capacity. Export potential, weighted at 0.15, reflects the international competitiveness of manufactured goods.

Employment and innovation activity indicators each carry a weighting coefficient of 0.10, defining the role of SEZs in social and technological advancement. While budget efficiency (0.08) allows for measuring the economic yield of state-provided incentives, infrastructure quality (0.07) reflects the level of conditions created for investors.

Applying these indicators in a weighted manner enables an accurate assessment of each metric's contribution to the overall outcome. Consequently, this establishes a reliable analytical framework for benchmarking SEZ performance, determining development dynamics, and making strategic managerial decisions.

The table-based analysis demonstrates that the integral assessment system for SEZ efficiency allows for a comprehensive determination of both economic and social outcomes. The weighting coefficients of the indicators reflect the priority of factors influencing SEZ performance, underscoring investments and industrial development as the most critical criteria. Concurrently, metrics such as export potential, employment, innovation activity, budget efficiency, and infrastructure quality emerge as key drivers ensuring the long-term sustainable development of the zones.

The integral evaluation model enables an objective assessment of overall SEZ performance by unifying individual indicators into a cohesive framework. This approach equips governing bodies with the analytical insights necessary to identify existing bottlenecks in a timely manner, allocate resources effectively, and refine development strategies. Furthermore, utilizing indicators aligned with international best practices serves to enhance the competitiveness, investment attractiveness, and export potential of Uzbekistan's Special Economic Zones.

Thus, the system of integral evaluation indicators presented in the table carries significant scientific and practical value for effectively monitoring SEZ activities, improving their performance, and supporting the sustainable development of the national economy.

Conclusion

Within the scope of this study, the comprehensive criteria and integral indicator system for evaluating the efficiency of Special Economic Zones (SEZs) were analyzed from both theoretical-scientific and practical perspectives. The analysis reveals that in the modern economic context, evaluating SEZ performance solely through the volume of attracted investments or production output is insufficient. Assessing their efficiency demands a multi-factorial approach. Therefore, it is imperative to evaluate indicators such as investment efficiency, export potential, production volume, employment levels, innovation activity, fiscal contributions, infrastructure quality, environmental sustainability, and institutional governance within a unified framework.

The findings from the first table demonstrate that applying comprehensive criteria to assess Special Economic Zone performance enhances the quality of managerial decision-making. Each criterion characterizes a specific dimension of SEZ operations, and their harmonious interplay shapes the zone's overall economic efficiency. Specifically, an increase in investment volume drives growth in production and export metrics, while the development of innovative activities contributes to expanding the share of high-value-added products. Concurrently, a skilled labor force, advanced infrastructure, and a favorable institutional environment positively influence the long-term operations of investors.

The system of integral evaluation indicators proposed in the second table establishes an effective methodological foundation for the quantitative assessment of SEZ activities. The weighting coefficients of the indicators reflect their degree of impact on economic development, with investment development (0.25) and industrial production (0.20) emerging as the primary factors. Meanwhile, export potential, innovation activity, and employment metrics represent strategic drivers that ensure the sustainability of economic growth. This approach enables benchmarking across various Special Economic Zones, determining development dynamics, and evaluating resource-use efficiency.

Based on the research findings, several scientific and practical recommendations can be put forward to further improve Special Economic Zone operations in Uzbekistan. In particular, it is advisable to develop a unified national methodology for SEZ evaluation, implement a composite (integral) efficiency index in practice, widely adopt digital monitoring and analysis platforms, foster result-based management, and strengthen the weight of environmental and innovation metrics within the evaluation framework. Additionally, systematically monitoring the economic effectiveness of state-provided tax and customs incentives and revising them based on clear performance criteria will further serve to boost SEZ efficiency.

Overall, the comprehensive criteria and integral evaluation indicator system developed in this study serve as an essential scientific and methodological foundation for objectively assessing SEZ

performance, enhancing their competitiveness, and strengthening their investment attractiveness. Implementing this approach in practice will contribute significantly to refining state investment policy, fostering regional industrial potential, diversifying exports, and ensuring the long-term sustainable growth of the national economy. Therefore, utilizing comprehensive and integral approaches in evaluating SEZ efficiency should be regarded as a priority direction within Uzbekistan's economic development strategy.

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