

PERFORMANCE AUDIT OF MASS SPORTS DEVELOPMENT IN THE REPUBLIC OF KAZAKHSTAN

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Abstract. This article presents the results of an assessment of the effectiveness of mass sports development in the Republic of Kazakhstan from a government audit perspective. The relevance of the study stems from the need to improve the effectiveness of state policy in physical education and sports, and achieve the targets set forth in the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029. The objective of the study is to assess the effectiveness of mass sports development in the country. The assessment is based on an analysis of population engagement indicators, staffing in the industry, the development of youth sports, and the achievement of key state policy indicators. The study utilized statistical, comparative, and analytical methods, as well as a method for assessing the degree of achievement of target indicators. The obtained results can be used to improve the mechanisms of state audit, monitoring the effectiveness of state programs and forming strategic directions for the development of mass sports in the Republic of Kazakhstan.

Key words: state audit, performance audit, mass sports, state policy, physical education and sports, target indicators, sports industry.

Introduction. The development of mass sports is considered a priority by the state social policy of the Republic of Kazakhstan, because increasing the level of involvement of the population in regular physical education and sports is considered an important factor in strengthening public health, developing human capital, and improving the quality of life of the population. Addresses by the President of the Republic of Kazakhstan have repeatedly emphasized the need to create conditions for the development of mass sports, increase the availability of sports infrastructure, and engage citizens in a healthy lifestyle [1, 4].

In accordance with the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029, one of the key target indicators is to increase the proportion of the population regularly engaged in physical education and sports to 50% by 2029 [1]. To achieve set goals, the state is implementing measures to develop sports infrastructure, support children's and youth sports, improve the system for training sports reserves, and develop state sports procurement.

However, the sufficiency of public resources does not always ensure consistent results in sports development across different regions of the country. Regional differences in the availability of sports facilities, human resources, and public engagement demonstrate the need for rigorous evaluation of the effectiveness of implemented public policies.

In the current environment, public audit is instrumental for both monitoring the use of budgetary funds, and assessing the performance and effectiveness of government agencies. Performance audit is particularly important, allowing us to determine the extent to which strategic

goals are achieved and the effectiveness of public resource use in specific economic and social sectors [5, 6, 12].

The aim of the study is to evaluate the effectiveness of mass sports development in the Republic of Kazakhstan based on an analysis of indicators of population engagement, staffing in the industry, the development of youth sports, and the achievement of state policy targets.

To achieve this goal, the following **research objectives** were defined:

- analyze the level of population involvement in systematic physical education and sports;
- assess the staffing of the mass sports system of the Republic of Kazakhstan;
- study the main indicators of the development of children’s and youth sports and sports reserves;
- assess the achievement of key indicators provided for by the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029;
- determine directions for increasing the effectiveness of state policy in the field of development of mass sports.

The scientific novelty of the study lies in the development and testing of a integrated index of the achievement of key indicators of mass sports development, which allows for the assessment of the effectiveness of the implementation of state policy in the sports industry.

Materials and Methods. The study was based on official data from the Ministry of Tourism and Sports of the Republic of Kazakhstan, the Bureau of National Statistics of the Republic of Kazakhstan, as well as materials from state programs and strategic documents regulating the development of physical education and sports [1–4].

The study utilized indicators of population engagement in physical education and sports, data on staffing in the sports industry, indicators of youth sports development, the sports reserve, and the target indicators of the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029.

To achieve this goal, statistical, comparative, and analytical methods were used. The effectiveness of mass sports development was assessed by comparing actual and target values of key indicators using the target indicator achievement coefficient.

Data processing and visualization were performed using Microsoft Excel and Python software.

Study Results. Analysis of Population Engagement in Mass Sports.

One of the key indicators of the effectiveness of mass sports development is the level of population engagement in regular physical education and sports. This indicator reflects the effectiveness of state sports policy, the availability of sports infrastructure, the level of provision of sports services, and the prevalence of a healthy lifestyle among the population.

To assess the regional characteristics of mass sports development, an analysis was conducted of the population size, the number of people regularly involved in physical education and sports, and the level of population engagement in sports activities by region of the Republic of Kazakhstan for 2025.

Table 1 - Population Participation in Mass Sports by Region of Kazakhstan (2025)

Region	People Engaged in Sports	Participation Rate (%)
Astana	601,200	39.3
Almaty	955,710	41.7
Shymkent	544,946	43.3
Akmola Region	329,823	41.8
Aktobe Region	407,916	43.0
Atyrau Region	320,649	45.1
Almaty Region	642,276	41.1
West Kazakhstan Region	285,941	41.0
Zhambyl Region	503,317	41.1
Karaganda Region	442,048	38.9
Kostanay Region	368,573	44.6
Kyzylorda Region	342,223	40.4

Mangystau Region	328,020	40.7
Turkistan Region	885,485	41.1
Pavlodar Region	296,747	39.5
North Kazakhstan Region	225,088	43.1
East Kazakhstan Region	311,708	43.0
Abai Region	244,096	40.4
Zhetysu Region	292,504	42.1
Ulytau Region	77,943	35.2
<i>Note: Compiled by the authors based on data from the Ministry of Tourism and Sports of the Republic of Kazakhstan [2] and the Bureau of National Statistics of the Republic of Kazakhstan [3].</i>		

Population involvement in regular physical education and sports is a key indicator of the effectiveness of state policy for the development of mass sports [1, 7]. An analysis of regional data for 2025 reveals significant differences in the level of population participation in sports activities across the regions of the Republic of Kazakhstan.

The average population involvement in physical education and sports across the studied regions was 41.6%. The highest levels of involvement were recorded in Atyrau Region (45.1%), Kostanay Region (44.6%), and North Kazakhstan Region (43.1%). High values for this indicator are also observed in East Kazakhstan and Aktope Regions, where the population participation in sports activities reaches 43.0%.

The lowest rates were found in Ulytau Region (35.2%), Karaganda Region (38.9%), and Astana City (39.3%). The gap between the leading and the worst performing regions is 9.9 percentage points, demonstrating significant regional differentiation in the development of mass sports.

To assess the homogeneity of regional development, the coefficient of variation was calculated and found to be approximately 5.6%, reflecting a relatively low level of variation in population involvement across regions. This indicates that, overall, the level of population participation in sports activities remains fairly stable across the country, despite persistent regional differences.

These results suggest that further improvement in the effectiveness of mass sports development requires consideration of regional specifics and an analysis of the factors influencing the level of population involvement. Therefore, the next stage of the study is an analysis of the staffing of the mass sports system as a key factor in its sustainable development [7, 8].

Analysis of Coaching Staff Availability. One of the key factors for the effective development of mass sports is the availability of sufficient human resources to support the organization of the training process, the development of sports reserve, and the implementation of state programs in the field of physical education and sports. The level of coaching qualifications directly impacts the quality of athletic training, the results of sports selection, and the level of public engagement in systematic sports [1, 5].

As of 2025, 15,684 coaches were working in sports schools in the Republic of Kazakhstan, of which 10,228 were full-time employees. A significant portion of the coaching staff has specialized training and relevant qualifications, demonstrating the existence of a well-established system for staffing the sports industry.

To assess the staffing potential of sports schools in the Republic of Kazakhstan, we examine the key indicators of the coaching staff (Table 2).

Table 2 – Coaching Staff Characteristics in Sports Schools of Kazakhstan (2025)

Indicator	Value
Total coaches	15 684
Full-time coaches	10 228
Coaches with physical education qualification	10 203
Coaches with higher education	9 081
Highest coaching category	1 382
First coaching category	1 358
Second coaching category	3 071
Share of coaches with higher education (%)	57.9

Note: Compiled by the authors based on data from the Ministry of Tourism and Sports of the Republic of Kazakhstan [2]

An analysis of the presented data shows that over 65% of the coaching staff at sports schools are full-time employees, ensuring the sustainability of the sports training system. A significant proportion of specialists have higher education and specialized physical education training, which positively impacts the quality of the educational and training process.

At the same time, the relatively low proportion of coaches of the highest qualification category indicates the need for further improvement of the professional development system, advanced training for coaches, and the expansion of continuing professional education programs.

Thus, the staffing potential of the sports industry in the Republic of Kazakhstan is generally characterized by a sufficient level of availability. However, further improvement of the effectiveness of mass sports development requires strengthening the staff and increasing the proportion of highly qualified specialists.

Analysis of the development of children's and youth sports. Children's and youth sports are the foundation for the formation of the sports reserve of the country and a crucial element of state policy in the field of physical education and sports. The effectiveness of the sports training system is determined, alongside the number of participants, by the results of sports selection expressed in the assignment of sports categories and qualifications.

According to data from sports schools in the Republic of Kazakhstan, 393,842 people were involved in regular sports training in 2025. On average, there were 25 athletes per coach, indicating a relatively favorable level of human resources for the training process. The development of the sports reserve was carried out with the participation of 15,684 coaches, supporting the educational and training process at various stages of athletic development [1, 4].

An important indicator of the effectiveness of the sports training system is the number of athletes who have reached qualification standards. By the end of 2025, sports schools in the Republic of Kazakhstan had trained 12,222 first-class athletes, 25,115 Candidate Masters of Sport (CMS), 1,691 Masters of Sport (MS), and 288 Masters of Sport of International Class (MSIC).

To assess the structure of the sports reserve, we will examine the distribution of athletes by athletic qualification level.

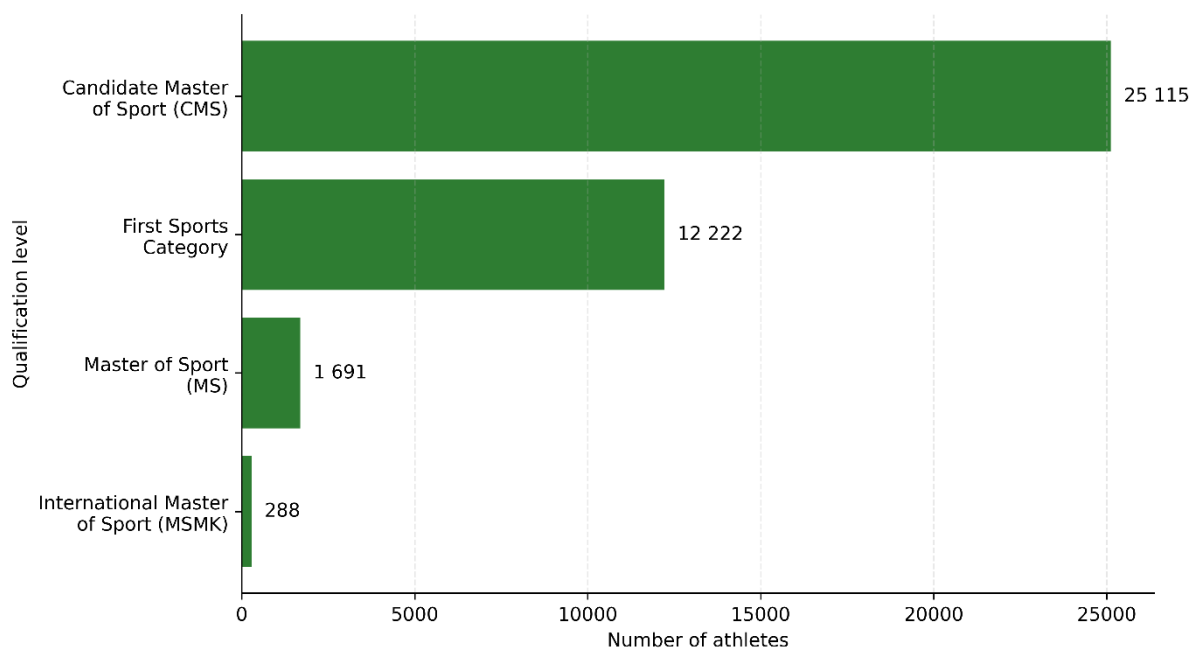


Figure 1 – Structure of Sports Reserve by Qualification Level in Kazakhstan (2025)

Note: Compiled by the authors based on data from the Ministry of Tourism and Sports of the Republic of Kazakhstan [2]

An analysis of the structure of the sports reserve shows that the largest proportion is made up of Candidate Masters of Sports, numbering 25,115 individuals. The significant number of first-class athletes also indicates a broad base for further development of the sports reserve.

However, the number of Masters of Sports and International Masters of Sports is significantly lower, reflecting the natural selection process of athletes at higher stages of athletic training. The decrease in the number of athletes as their qualification level increases indicates the existence of a competitive training system and the concentration of resources on the most promising athletes.

These results allow us to conclude that the youth sports system in the Republic of Kazakhstan ensures the sustainable development of the sports reserve and creates the necessary preconditions for the development of high-class athletes. However, further improvement of the effectiveness of the system requires improved selection mechanisms, enhanced coaching support, and refined sports infrastructure.

Evaluation of the Effectiveness of Mass Sports Development in the Republic of Kazakhstan.

The effectiveness of mass sports development was assessed by comparing the actual values of key indicators with the targets established by the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029 [1]. These indicators were defined as involvement of the general population in systematic physical education and sports, and the participation of children and adolescents in sports activities.

To determine the degree of achievement of target benchmarks, a target achievement coefficient was used, calculated using the following formula [5, 6]:

$$AR = \frac{AV}{TV} * 100 \quad (1)$$

where:

AR – target indicator achievement rate, %;

AV – actual indicator value;

TV – target indicator value.

To comprehensively assess the effectiveness of public policy, an integrated index of key mass sports development indicators was additionally calculated, representing the arithmetic mean of the individual target indicator achievement rates.

The integrated index was calculated using the formula:

$$KPIi = \frac{\sum AR}{n} \quad (2)$$

where:

KPIi – the integrated index of key performance indicators (KPIs), in %;

AR – the rate of achievement of an individual target indicator (KPI), in %;

n – the number of indicators being assessed.

The assessment results are presented in Table 3.

Table 3 – Achievement of Key Sports Development Indicators in Kazakhstan

KPI	2025	Target 2029	Achievement Rate (%)
Population participation (%)	44.5	50.0	89.0
Children participation (%)	34.6	45.0	76.9
Integrated KPI Achievement Index	-	-	83.0
<i>Note: Compiled by the authors based on the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029 [1] and data from the Ministry of Tourism and Sports of the Republic of Kazakhstan [2]</i>			

Based on the calculated target achievement rates, the integrated KPI achievement index was determined to be 83.0%. This value characterizes the high effectiveness of the state policy implementation in the field of physical culture and sports and demonstrates the progressive achievement of the strategic benchmarks outlined in the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029. According to the applied methodology, an integrated index value above 80% can be interpreted as a high level of target achievement.

For a visual comparison of the actual and target values of key indicators, the results are presented in Figure 2.

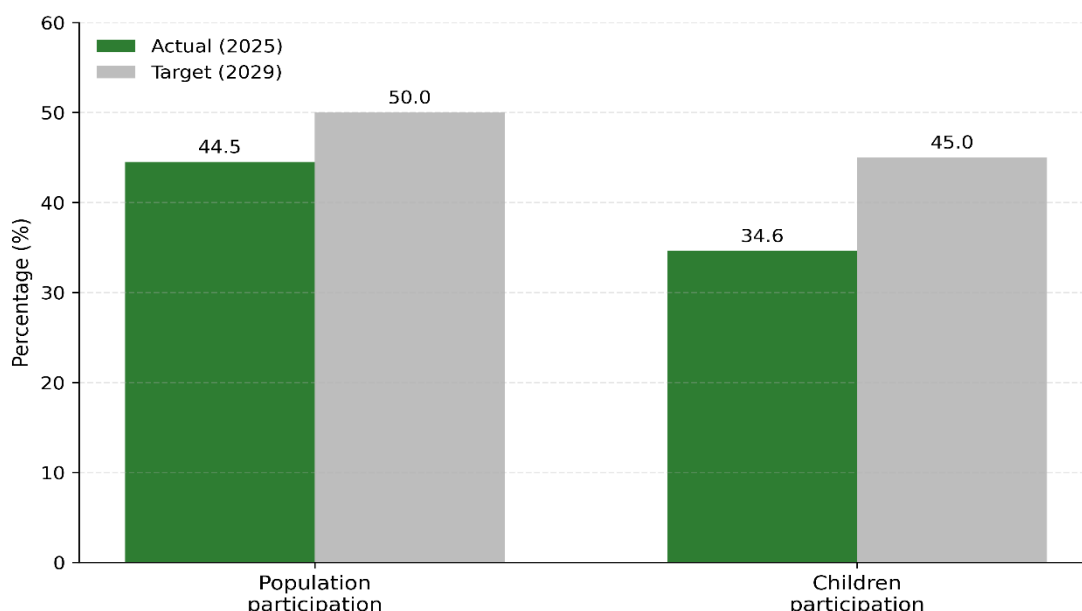


Figure 2 – Achievement of Key Performance Indicators of Sports Development in Kazakhstan

Note: Compiled by the authors based on the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029 [1] and data from the Ministry of Tourism and Sports of the Republic of Kazakhstan [2]

The analysis results show that, as of 2025, the rate of population participation in physical education and sports reached 44.5%, which corresponds to 89.0% of the target value set for 2029. This demonstrates a high degree of achievement of strategic guidelines of state policy and sustainable positive dynamics in the development of mass sports.

The participation rate of children and adolescents in systematic sports reached 34.6%, which comprised 76.9% of the target value. Such correspondence shows the need for further expansion of the sports section network, improvement of state sports procurement mechanisms, and increased accessibility of sports infrastructure for children and youth.

These results are supported by the development of resource potential of the sports industry. As of 2025, 26,518 sports facilities and 922 children's and youth sports clubs were operating in the Republic of Kazakhstan, and the number of coaches exceeded 68,000. These indicators confirm the formation of the necessary organizational and infrastructural conditions for the further development of mass sports and increased physical activity among the population.

Thus, the results of the assessment demonstrate a high degree of achievement of key indicators for the development of mass sports. The overall target achievement rate was 83.0%, confirming the effectiveness of implemented public policy measures and the positive dynamics of the development of sports sector. However, the lower achievement rate for the indicator of children and adolescents' involvement in sports indicates potential for further improvement of state support mechanisms and the development of mass sports.

Discussion. The results of the study demonstrate positive dynamics in the development of mass sports in the Republic of Kazakhstan. As of 2025, the level of population involvement in systematic physical education and sports reached 44.5%, significantly exceeding the figures for previous years and confirming the effectiveness of the implemented state policy measures.

The analysis showed that the development of mass sports is supported by the combined influence of several factors, among which the key ones are staffing potential in the industry, the development of youth sports, and the expansion of sports infrastructure. The presence of over 68,000 coaches, the functioning of 922 youth sports clubs, and over 26,000 sports facilities create necessary conditions for further growth of population participation in sports.

The development of the sports reserve system is particularly important for the sustainable development of the industry. The high number of athletes in the mass sports categories and candidate masters of sports demonstrates the existence of a broad base for the further development of high-class athletes and the competitiveness of Kazakhstani sports on the international stage. At the same time, the results of the study revealed a number of problematic aspects. Despite positive trends, the level of children and adolescents' involvement in sports remains below established targets. This highlights the need for further improvement of state sports procurement mechanisms, increased accessibility to sports clubs, and strengthening the material and technical infrastructure of sports organizations.

From a state audit perspective, the obtained results demonstrate the need for further development of the system for monitoring the effectiveness of state sports programs. Priority should be given not only to the level of funding for the sector but also to achieving specific social outcomes, such as increased public participation, expanded participation of children in sports, and improved utilization of sports infrastructure [5, 6].

Conclusion. The study assessed the effectiveness of mass sports development in the Republic of Kazakhstan based on an analysis of population engagement indicators, staffing levels in the industry, development of youth sports, and achievement of state policy targets.

It was found that by the end of 2025, the level of population engagement in systematic physical education and sports reached 44.5%, which is 89.0% of the target value envisaged by the Concept of Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029 [1]. The obtained results indicate positive dynamics in the development of mass sports and a high degree of implementation of strategic state policy guidelines.

An analysis of regional indicators revealed differences in the level of population engagement in sports. The highest values were recorded in the Atyrau, Kostanay, and North Kazakhstan

regions, while the lowest rates were observed in the Ulytau region, Karaganda region, and the city of Astana. This demonstrates the need to consider regional specifics when implementing sports development programs. The study revealed that the training system of the sports reserve of the Republic of Kazakhstan possesses significant potential. In 2025, more than 393,000 people were enrolled in sports schools, training over 25,000 Candidate Masters of Sports, 1,691 Masters of Sports, and 288 International Masters of Sports. A well-developed sports training system creates the preconditions for further enhancing the competitiveness of domestic sports.

From a government audit perspective the effectiveness of mass sports development is assessed in terms of funding levels and achievement of specific social outcomes, which include the level of public engagement, the participation of children and adolescents in sports activities, the availability of staff in the industry, and the effectiveness of training the sports reserve.

To further enhance the effectiveness of state policy in physical education and sports, it is advisable to improve the system for monitoring the achievement of target indicators, expand the participation of children and adolescents in sports programs, strengthen the staffing capacity of the industry, and develop mechanisms for evaluating the effectiveness of state programs. The implementation of these measures will contribute to achieving the strategic goals of mass sports development and improving the effectiveness of public administration in the sports sector.

ГОСУДАРСТВЕННЫЙ АУДИТ ЭФФЕКТИВНОСТИ РАЗВИТИЯ МАССОВОГО СПОРТА В РЕСПУБЛИКЕ КАЗАХСТАН

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Аннотация. В статье представлены результаты оценки эффективности развития массового спорта в Республике Казахстан с позиции государственного аудита. Актуальность исследования обусловлена необходимостью повышения результативности государственной политики в сфере физической культуры и спорта, а также достижения целевых ориентиров, предусмотренных Концепцией развития физической культуры и спорта Республики Казахстан на 2023–2029 годы. Целью исследования является оценка эффективности развития массового спорта на основе анализа показателей вовлеченности населения, кадрового обеспечения отрасли, развития детско-юношеского спорта и достижения ключевых индикаторов государственной политики. В исследовании использованы методы статистического, сравнительного и аналитического анализа, а также метод оценки степени достижения целевых показателей. Полученные результаты могут быть использованы при совершенствовании механизмов государственного аудита, мониторинга результативности государственных программ и формировании стратегических направлений развития массового спорта в Республике Казахстан.

Ключевые слова: государственный аудит, аудит эффективности, массовый спорт, государственная политика, физическая культура и спорт, целевые индикаторы, спортивная отрасль.

ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ БҰҚАРАЛЫҚ СПОРТТЫ ДАМУ ТИІМДІЛІГІНІҢ МЕМЛЕКЕТТІК АУДИТІ

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Аңдатпа. Мақалада Қазақстан Республикасындағы бұқаралық спортты дамытудың тиімділігі мемлекеттік аудит тұрғысынан бағаланды. Зерттеудің өзектілігі дене шынықтыру және спорт саласындағы мемлекеттік саясаттың нәтижелілігін арттыру, сондай-ақ Қазақстан Республикасында дене шынықтыру мен спортты дамытудың 2023–2029 жылдарға арналған тұжырымдамасында белгіленген мақсатты индикаторларға қол жеткізу қажеттілігімен айқындалады. Зерттеудің мақсаты – халықтың спортпен шұғылдануға тартылу деңгейін, саланың кадрлық әлеуетін, балалар мен жасөспірімдер спортын дамыту көрсеткіштерін және мемлекеттік саясаттың негізгі индикаторларына қол жеткізу деңгейін талдау негізінде бұқаралық спортты дамытудың тиімділігін бағалау. Зерттеу барысында статистикалық, салыстырмалы және аналитикалық талдау әдістері, сондай-ақ мақсатты көрсеткіштерге қол жеткізу деңгейін бағалау әдісі қолданылды. Зерттеу нәтижелерін мемлекеттік аудит тетіктерін жетілдіруде, мемлекеттік бағдарламалардың нәтижелілігін мониторингтеуде және Қазақстан Республикасында бұқаралық спортты дамытудың стратегиялық бағыттарын қалыптастыруда пайдалануға болады.

Түйінді сөздер: мемлекеттік аудит, тиімділік аудиті, бұқаралық спорт, мемлекеттік саясат, дене шынықтыру және спорт, мақсатты индикаторлар, спорт саласы.

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