

AN INNOVATIVE MODEL OF PUBLIC-PRIVATE PARTNERSHIP IN THE DEVELOPMENT OF SPORTS INFRASTRUCTURE: THE "3-2-10" CONCEPT**Azatov Inomjon Akhmed o'g'li**

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<https://doi.org/10.5281/zenodo.20465825>

Abstract.

This article examines the challenge of developing sports infrastructure in Uzbekistan not as a burden on the state budget, but as an economically sustainable and profitable independent system. The study introduces an entirely new innovative model of public-private partnership (PPP) for the design, construction, and operation of sports facilities: the "3-2-10" model. This model is founded on annuity payments, a differentiated allocation of facility usage time (divided into social and commercial hours), and a long-term guaranteed partnership agreement. The results of financial modeling, based on the example of a mini-football stadium (with an investment of 750 million UZS), scientifically substantiate that the facility's monthly net profit is 21 million UZS, its annual profitability rate is 33.6%, and the investment payback period is 35-36 months. The article also provides a comparative analysis of the proposed PPP model's advantages over traditional public management and demonstrates its compliance with current regulatory and legal acts.

Keywords. public-private partnership (PPP), sports infrastructure, "3-2-10" model, annuity, financial efficiency, sports management, investment attractiveness, Uzbekistan

Аннотация. В данной статье рассматривается проблема развития спортивной инфраструктуры в Узбекистане не как бремя для государственного бюджета, а как экономически устойчивая и самостоятельная система, генерирующая доходы. В рамках исследования была разработана инновационная модель государственно-частного партнерства (ГЧП) "3-2-10" для проектирования, строительства и эксплуатации спортивных объектов. Эта модель основана на выплате аннуитетов, дифференцированном распределении времени (социальные и коммерческие часы) и долгосрочных гарантированных партнерских соглашениях. Финансовое моделирование на основе мини-футбольного стадиона (750 млн сумов инвестиций) научно обосновало, что ежемесячная чистая прибыль объекта составляет 21 млн сумов, годовая норма рентабельности - 33,6%, а срок окупаемости инвестиций - 35-36 месяцев. Кроме того, в статье представлен сравнительный анализ преимуществ предлагаемой модели ГЧП перед традиционным государственным управлением и показано ее соответствие действующим нормативным документам.

Ключевые слова: государственно-частное партнерство (ГЧП), спортивная инфраструктура, модель "3-2-10," аннуитет, финансовая эффективность, управление спортом, инвестиционная привлекательность, Узбекистан.

Introduction. In recent years, the volume of state investments directed to the field of physical culture and sports in the Republic of Uzbekistan has been steadily growing. In order to attract the population, especially young people, to mass sports, hundreds of sports facilities are being built in all regions of the republic. However, practice shows that a significant portion of facilities constructed using purely state funds subsequently cease to be financially self-sufficient and constantly require state budget subsidies. According to official statistics, more than 90% of major sports arenas and stadiums are state-owned, and their maintenance and maintenance expenses (OPEX) create a significant financial burden on local budgets [1].

The root of the problem often lies at the stage of designing the facility and selecting a management model. The traditional approach does not sufficiently account for the future commercial potential and economic sustainability of the facility. As J. Beech and S. Chadwick emphasize in their research, modern sports arenas must function not only as venues for competitions but also as "multi-purpose social and entertainment complexes." The reason is that it is economically impossible to cover the operating costs of large complexes solely through free sports services or periodic events [2]. In this regard, the country adopted Resolutions of the President of the Republic of Uzbekistan No. PP-155 and No. PP-201, which created a legal framework for the introduction of public-private partnership (PPP) mechanisms in the field. However, in practice, clear, functional, and attractive for investors economic mechanisms for implementing this strategic policy have not yet been fully formed. The primary objective of this research is to develop an innovative "3-2-10" model to address economic gaps in sports infrastructure financing and to substantiate its financial efficiency through practical calculations.

Literature review and research methodology. The concept of public-private partnership (PPP) has been fundamentally studied in international sports economics literature. In their scientific works, G. Hodge and C. Greve describe PPP models as "synergistic cooperation between the public and private sectors based on the distribution of financial risks and managerial responsibility," paying special attention to its role in improving the quality of public services [3].

In the context of sports economics, C. Gratton and P. Taylor justify the participation of the private sector in the management of sports facilities with two main economic motives. First, a private investor is constantly looking for ways to reduce operating costs (for example, by investing in innovative energy-efficient technologies). Secondly, it maximizes the revenue potential of the facility through the diversification of customer-oriented services (sports + commercial + entertainment services cluster) [4].

In his fundamental work on sports event management, G. Masterman promotes the "time-sharing" strategy. According to him, the financial core of PPP models is that one sports facility serves different social strata at different times of the day (for example, for schoolchildren during the day, for paid amateur teams in the evening) [5]. In his research, local scientist A. Abdullaev noted that when designing sports facilities in Uzbekistan, their structural enrichment (adding training centers, fitness clubs, commercial areas) increases the return on investment (ROI) several times over [6].

Summarizing these theoretical views, we rely on the principle proposed by R. Hoye and A. Smith: in the PPP model, the state should act as a "social guarantor and customer," while the private sector should act as an "effective operational manager." Statistical analysis shows that with such an approach, the cost of maintaining the facility is saved by up to 25-35% compared to traditional state facilities [7].

Research Results and Analysis. Conceptual Interpretation of the "3-2-10" Model. To actively attract private investment into sports infrastructure, we have developed the innovative "3-

2-10" management model. These numbers embody the three most important financial and legal guarantees of the project:

"3" – Investment Payback Period: The full recoupment of capital invested by a private investor within a maximum of 3 years. From an economic standpoint, this period serves as the optimal "psychological and financial threshold" that protects investors from long-term inflationary and commercial risks in a developing economy like Uzbekistan.

"2" – Mutual Benefit (Win-Win): The model fully and simultaneously ensures the interests of both the state and the entrepreneur. The state is relieved of infrastructure construction costs and guarantees the fulfillment of its social function (free sports clubs for youth). The entrepreneur, in turn, achieves high commercial profits through the rational use of the facility.

"10" – Partnership Term: The term of the legally guaranteed operational management agreement between the state and the entrepreneur will be at least 10 years. This long-term guarantee enables the investor to attract targeted loans from banks and create a strategic business plan.

Time-sharing mechanism. The successful operation of the model is based on a strict division of the facility's daily usage into two distinct periods.

Social Sector (08:00–16:00). During this time frame, the facility provides completely free services to schoolchildren, local unorganized youth, and individuals with disabilities. This is considered a state social order, for which the state pays the entrepreneur a monthly "annuity" (a guaranteed fixed payment).

Commercial Sector (17:00–23:00): The evening hours are designated for commercial use, during which the facility is available to the public, corporate clients, and amateur teams on a paid rental basis. This segment serves as the primary source for covering the entrepreneur's investment costs and generating net profit.

This system serves as a practical mechanism for fulfilling the requirements of the Decrees of the President of the Republic of Uzbekistan No. PQ-155, PQ-201, and PQ-5282, specifically "creating free bases for sports activities in mahallas" and "adapting infrastructure to standards on a PPP basis."

Financial modeling and efficiency analysis. To demonstrate the viability of the proposed model, economic calculations were performed based on a standard project: a mini-football stadium with artificial turf, evening lighting, and changing rooms, with an initial investment cost of 750 million soums.

Table 1. Key financial indicators of the project based on the "3-2-10" model

Indicator	Unit of measurement	Value
Capital Expenditures (CAPEX)	UZS million	750,0
Monthly State Subsidy (for social hours)	UZS million	6,25
Monthly Commercial Revenue (17:00–23:00)	UZS million	18,0
Operating Expenses (OPEX - taxes, utilities, salaries)	UZS million	3,25
Monthly Net Profit	UZS million	21,0
Annual Net Profit	UZS million	252,0
Annual Rate of Return (ROI)	%	33,6
Payback Period	month	35–36

Formula for financial calculation:

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Calculation formulas: $D_{total} = D_{commercial} + D_{annuity} = 18 + 6.25 = 24.25$ million UZS/month

$F_{monthly} = D_{total} - OPEX = 24.25 - 3.25 = 21$ million UZS/month

$T_{payback} = CAPEX / F_{monthly} = 750 / 21 = 35.7$ months ≈ 3 years

$R = (F_{annual} / CAPEX) \times 100 = (252 / 750) \times 100 = 33.6\%$

Traditional public administration vs. PPP: A comparative analysis

The calculations above demonstrate that the entrepreneur will fully recoup their investment within 3 years and will operate at a net profit for the remaining 7-year contract period.

Table 2. A comparative analysis of traditional public administration and PPP models

Tahlil mezonl	Davlat boshqaruvi	Taklif etilgan DXSH modeli
Moliyalashtirish manbai	To'liq davlat byudjeti yuki	100% xususiy investitsiya jalb etiladi
Xizmat turlari va sifati	Qoliplangan, faqat sport xizmati	Innovatsion: Sport + tijorat + xizmatlar klasteri
Energiya resurslaridan foydalanish	Byudjet cheklovlari sababli past tejamkorlik	Innovatsion texnologiyalar hisobiga xarajatni 30-40% gacha kamaytirish
Moliyaviy va tijorat xatarlari	Barcha xatarlar davlat byudjeti zimmasida	To'liq investor (xususiy sektor) zimmasida
Iqtisodiy barqarorlik	Tashqaridan qilinadigan dotatsiyaga to'g'ridan-to'g'ri bog'liq	Inshoot o'zini-o'zi moliyaviy ta'minlaydi va rivojlantiradi

Social Multiplier Effect and Risk Management. According to R. Kaplan and D. Norton's "Balanced Scorecard" theory, a project's success is measured not only by financial figures but also by its indirect benefits to society [8]. In addition to economic benefits, the "3-2-10" model creates the following social multiplier (chain reaction) effects:

Social protection of the population. During free social hours, young people are kept away from negative street influences and are directly engaged in sports.

Creation of new jobs. Each medium-sized sports facility will create 3-5 permanent new jobs (coach, administrator, technical staff).

Health economics. The mass involvement of the population in sports will drastically reduce future state healthcare expenditures (treatment of diseases).

Potential Risks and Mitigation Measures. Like any financial model, this approach carries certain risks.

Decrease in commercial load (Drop in demand). In areas with low purchasing power, the facility's occupancy rate during evening hours may be lower than expected.

Solution: Introduce reduced monthly subscription fees for socially vulnerable groups in the contract and index the base rate of the state annuity accordingly.

Shortage of qualified personnel. Many entrepreneurs in the private sector may lack professional knowledge of sports management and technical facility operation. Solution: Strictly include qualification requirements compliant with international ISO 41001 (Facility Management) standards in the contract with the private partner.

Conclusion and Practical Recommendations. In Uzbekistan, the traditional system of building and managing sports infrastructure solely through state budget funds has reached its limit of economic efficiency. Introducing modern corporate governance into the sector and gradually

transitioning to Public-Private Partnership (PPP) mechanisms is not merely a desire but a strategic necessity.

The "3-2-10" model, developed as part of our research, resolves practical gaps in the economy, frees the state budget from large operational expenditures, and guarantees an average annual return of 33.6% for entrepreneurs (a competitive figure compared to the profitability of the commercial real estate market). Furthermore, through an annuity payment mechanism, the state transitions from being merely a building owner to a "guaranteed purchaser of social sports services" for its citizens.

To implement the model widely on a national scale, the following practical measures are recommended:

Formulating a tax incentive package. Introduce a mechanism for private partners engaged in sports activities under PPPs to be fully exempt from property and land taxes, and partially (50%) exempt from profit tax, during the first 3 years of a facility's operation.

Easing credit policy. Open long-term preferential credit lines for entrepreneurs to construct sports facilities through commercial banks, with an annual interest rate not exceeding 6-8% (instead of the usual 15-20%).

Creating a talent pool. Systematically establish training programs for national professional personnel in the "Sports Facility Manager" specialization at the republic's higher education institutions (including the National University of Uzbekistan), based on international standards.

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