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Analysis of investments in the expansion of social university infrastructure facilities and student dormitories in Kazakhstan

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Abstract

Relevance. Providing comfortable living conditions for its population is the main purpose of any state. Students are one of the most vulnerable social groups since they are limited in financial opportunities to provide themselves with housing while studying at universities and other educational institutions. Student dormitories are designed to solve this issue and provide all students with places for comfortable living.

Purpose. The purpose of the study was to analyze the development system of social university infrastructure facilities and student dormitories in Kazakhstan within the framework of investment activities, as well as state policy in this area.

Methodology. General logical and statistical methods were applied to conduct the research. In the course of the study, the mechanism of public-private partnership in the field of education was characterized, namely, the issues related to the shortage of dormitory places and the basic concepts associated with this relationship form between the state and private entrepreneurship were considered.

Results. The data on the required number of places in dormitories for the regions of Kazakhstan were also studied. Thus, it was discovered that the leader in this indicator is Almaty city, which requires 36% new beds for students (85 thousand places). It was concluded that today the scheme of cooperation between the state and the business sector does not meet expectations. During the three years of the public-private partnership program, not even half of the required places for accommodation were provided, since the project has low investment attractiveness for numerous reasons.

Conclusions. The practical value of the study lies in the fact that recommendations were developed to improve the current program.

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Keywords: public-private partnership; education; investment; improvement of living conditions; business.

Introduction

In recent years, the state policy of Kazakhstan in all areas, including education, has been aimed at improving and modernizing the living conditions of the population to improve the quality of its well-being in various aspects. First, European standards are a reference point, since these are countries with a high living standard and a lot of innovative and progressive ideas, so it is important to analyze and evaluate the international experience in expanding social university infrastructure facilities and student dormitories [1-4]. The need to distribute residential premises for students is primarily due to the university population growth in recent decades, and now there is the following trend: increased access to universities, the spread of universities at the local level, the expansion of training offers, the mobility of students, researchers, and teachers promoted at the national and international level, the constant presence of students in the areas of study which require assessment system and obtaining academic credits throughout the entire course [5-7].

The facilities of social university infrastructure are considered as a complex of buildings and facilities aimed at ensuring the social protection of students and all employees of a higher educational institution by providing all the services necessary for full-fledged activity within the university [8]. The social infrastructure of the university is created to complete several tasks: strengthening the health of students and employees of the university, comprehensive development (both physical and creative, personal, cultural, etc.), promoting the socialization of students, especially the first-year ones, helping out-of-province students (dormitories), etc. Such facilities include libraries, sports halls, halls for various types of leisure, catering establishments (on the territory of the university), cultural institutions, park territory, as well as dormitories and other residential buildings [10-13]

A student dormitory is a building or a complex of buildings intended for the residence of students of universities or any other educational institutions and related services. In addition to the general definition used in the regulatory environment, the terms that frequently accompany “student dormitory” and determine its essence are “social residence” and “temporary residence” [14-18]. The sociality of this special type of housing is associated with the function of collective service, the manifestation of which is motivated not only by such factors as raising the demand for training, improving student mobility, increasing the period of study (continuous training) and training levels (specialization) but primarily by the need to meet the housing needs of economically weak categories of the population, for example, university students, through controlled rent. In fact, to eliminate the economic and social obstacles that restrict access to higher education, the government should adhere to the principles and guiding criteria, including “determining the types of residential buildings intended for university students and their specific characteristics”.

Currently, Kazakhstan has a policy aimed at improving the level and quality of education not only within the educational process but also in all other aspects related to

educational activities. Thus, by the end of 2022, it is planned to stabilize an uneven distribution of dormitories and the number of places to stay for university students throughout Kazakhstan [19]. The achievement of this purpose is possible with the use of the public-private partnership (PPP) scheme, which involves attracting investors to the construction of dormitories, whose funds the state undertakes to compensate in about eight years, while the constructed building will remain in the possession of the investor, but with an important condition – for 20 years the dormitory must be used for its intended purpose. The expediency of this scheme is questionable, since, on the one hand, it will allow solving the issue of providing housing places to all students and university staff in a short time, on the other hand, when the period of a property encumbrance is over, there will be no guarantees that the owner will not convert the building into a facility of another purpose.

Thus, the purpose of the study is to analyze the development system of social university infrastructure facilities and student dormitories in Kazakhstan within the framework of investment activities, as well as state policy in this area.

Materials and Methods

When conducting research, it is important to choose the appropriate methods of cognition so that the completion of all the tasks set is as accessible as possible and the results obtained meet expectations. Therefore, for that purpose, the following research methods were chosen: logical (analysis and synthesis) and statistical analysis. Analysis and synthesis are mutually dependent methods of cognition. An analysis is the division of a subject into its components for the purpose of their comprehensive study. This analytical method is aimed at determining the internal trends and capabilities of the subject, it is widely used in all sciences: in chemistry – quantitative and qualitative analysis of the matter, in geology – physical and chemical analysis of soil, in the sociology – qualitative analysis of economic and other social phenomena. Synthesis is the opposite of analysis, that is, the divided object of research is combined into one whole scientific organism and now its study focuses on the interaction of all components. This combination of scientific methods was applied to examine “public-private partnership”, “investment”, “facilities of social university infrastructure”, “student dormitory”, etc.

Statistical methods are adapted to different stages of statistical research and correspond to their purpose. Thus, at the first stage, methods of mass statistical observation are widely used, at the second – summary and grouping, calculating generalized indicators, at the third – methods of calculating relative and average values, studying variations, relationships, dynamics, the index method, etc. The feature (specificity) of statistical methods lies in their complexity, which is due to the variety of forms of statistical patterns and the complicity of the statistical research process itself. The specificity of the methods is conditioned by the content of the study related to certain socio-economic phenomena. In this study, statistical

methods were used to compile a chart with the percentage of the required number of dormitory places by region.

The theoretical and material basis of the research was primarily the regulations of the Republic of Kazakhstan for the activities of the state in the field of education and ensuring the social security of students and employees of the university. This basis includes the Order of the Minister of Education and Science of the Republic of Kazakhstan No. 66 “On Approval of the Rules for the Allocation of Places in Dormitories of Educational Organizations” [20], which controls the rules for the distribution of dormitory places of educational organizations and establishes the procedure for such an activity. The order contains a form that must be filled out when applying for a place in a dormitory, as well as a number of Public Service Standards related to the provision and distribution of places in dormitories.

The Law of the Republic of Kazakhstan No. 319-III “On Education” [21] also has in its structure provisions concerning the organization of work within dormitories of educational institutions. Thus, Article 5 of this Law establishes the Competence of the authorized body in the field of education, which is obliged to develop, approve, and place a state order for the accommodation of students, magisters, doctoral degree students, and university employees in dormitories; regulates the procedure for paying for a place in a dormitory; specifies the conditions under which students, magisters, doctoral degree students, and university employees can get a place in a dormitory.

The Law of the Republic of Kazakhstan No. 379-V LRK “On Public-Private Partnership” [22] regulates the rules for the introduction of this relationship form between the business sector and the state, establishes the procedure for these relationships and defines the basic concepts. It is also essential to mention the address of Nursultan Nazarbayev to the people of Kazakhstan “Five social initiatives of the President” [19], which became the impetus for the implementation of the program to reduce the shortage of places in dormitories. In his third initiative titled “Improving the accessibility and quality of higher education and enhancing students' living conditions”, Nazarbayev emphasizes that it is important to provide at least 75 thousand new places in dormitories throughout the country by the end of 2022.

Results and Discussion

Investment is an economic term that has several related meanings, such as savings, the location of the capital, and the postponement of consumption. This term is used in the field of business management, finance, and macroeconomics. The word “investment” conveys the idea of using resources to achieve a certain benefit, whether it is economic, political, social, personal satisfaction, etc. In the context of a business, an investment is an action by which certain assets are used for the purpose of generating income over time. Investment refers to the use of capital in any type of economic activity or business in order to increase it [23-26]. In other words, it consists in abandoning current and certain consumption in exchange for receiving future benefits distributed over time. In a broad sense, investment is any materialization of financial resources in goods that will be used in the production within a company or an economic unit and will include the

purchase of both capital goods, raw materials, and services, etc. In the strict sense, investments are allocations of financial resources intended for production tools that the company will use for several economic periods [27-30].

Investment is an activity that consists in allocating resources for the purpose of making a profit of any kind. In economics, resources are generally referred to as associated costs. The main resources are land, time, labor, and capital. Therewith, everything connected with the use of any of these four resources for the purpose of making a profit is an investment [31, 32]. When investing, opportunity costs are considered due to the abandonment of these resources in the present to obtain future benefits that are uncertain. Thus, when investing, a certain risk is assumed. To obtain money to invest, it is necessary to have an income and set aside a part of it. A person who is engaged in investment activities is called an investor, that is, an individual or legal entity who invests part or all of the possessed capital in the purchase of financial securities to make a profit. Thus, an investor is an individual or a company that allocates money for their placement on the financial market; that person buys and sells stocks, bonds, futures contracts, currency, raw materials, and much more. Notably, investors may have different purposes, such as raising funds for children's education, creating a reserve for retirement, or simply accumulating capital [19, 33-36].

A common form of interaction between investors and the state to solve various social issues is a public-private partnership. PPP is a form of service provision in which the public and private sectors participate. A project can arise as part of a state initiative or a private organization. In the latter case, the company (or consortium) submits a public infrastructure project and/or derivative services to the relevant sector. If the party declares interest, an exhaustive analysis of the plan is performed and alternatives are sought to find a competitor. Otherwise, the project is awarded to the company that submitted the original proposal.

PPP differs from community service since it is a long-term investment, which implies contractual relations that do not end with the completion of work but are extended for a certain period. The State authorizes the private sector to be responsible for the implementation, use, and management of a project or for the provision of certain public services. Similarly, PPP should not be confused with service outsourcing or privatization, which has other aspects and conditions for a public institution and participating private companies. In the case of some PPPs, the state makes financial contributions for work or services; therefore, they are also called co-financed concessions. The participation of state resources can take various forms: subsidies in addition to the rates paid to the counterparties, through the transmission of rights to use land and purchase obligations, among other things [10, 13-14, 37].

Public-private partnership can act as a tool that allows developing or improving energy, water supply, transport, telecommunications, technological information, education and related facilities through the joint participation of private and public structures. In cases where the government owns old infrastructure or requires more efficient services, partnership with the private sector can help promote new solutions that make it possible to use

innovative technologies. Public-private partnerships combine the skills and resources of both sectors in such a way that risks and responsibilities are shared between them, which allows the government to benefit from the experience of the private sector. By delegating day-to-day operations, the government can focus on developing laws, planning, and approving regulations. To achieve a successful partnership, it is important that both parties conduct a thorough analysis of how to achieve their purposes and distribute long-term risk. In addition, the legal framework should adequately support this new model of service provision, as well as monitor and regulate the results of the services provided. A well-drafted public-private partnership agreement should take into account both the country's laws and international leading practices in order to clearly distinguish risks and responsibilities [9; 27].

In 2018, the Ministry of Education and Science of the Republic of Kazakhstan made a decision that the construction of dormitories and social university infrastructure facilities should take place within the framework of a public-private partnership [19]. The experience of the last few years has shown that full targeted funding from the state is an inefficient way to solve the issues related to a shortage of places in dormitories and a limited number of social infrastructure facilities that should be located on the territory of each educational institution to provide a full range of services to students for a comfortable learning process.

A student dormitory is considered to be a building the purpose of which is to provide non-resident and foreign students with housing for the period of their studies. The duties of an educational institution – a university, college, technical school, etc. include, first of all, providing comfortable living conditions for students, the list of which includes:

- compliance with sanitary and fire safety standards;
- maintaining the dormitory in accordance with the established procedure;
- providing the premises with furniture and other necessary equipment;
- performing repair activities if necessary;
- improving living conditions;
- taking planned disinsection measures, etc.

However, the dormitory maintenance also depends on the students living in it, they are obliged to comply with the following rules: notify the dormitory administration about the unsuitability for the use of any provided household item; inform the administration about non-compliance with the general rules by any of the residents or employees; adhere to the general rules – do not make noise, do not drink alcoholic beverages on the territory of the dormitory, do not spoil the property of the university, etc.

According to the Bureau of National Statistics [38], there are 125 universities in Kazakhstan, most of which – 66 – are located in the capital of the country Astana, the second city in terms of the number of universities is Almaty – 41 universities, Shymkent is the last in the top three with 10 higher educational institutions. Accordingly, the number of students in these cities is greater than in the rest combined. Thus, there are about 330 thousand students in Astana, 160 thousand in Almaty, and 107 thousand in Shymkent. In addition, dormitories are necessary for students of specialized secondary school (SSS), of which there are 740 in the country with a total number of about 475 thousand students. According to the Organisation for Economic Co-operation and Development [39], as of the 2020 academic year, at least 85 thousand places for a living are lacking in dormitories of Kazakhstan for students in need, of which about 64 are university students and about 21 thousand are college students and other SSSs (Figure 1).

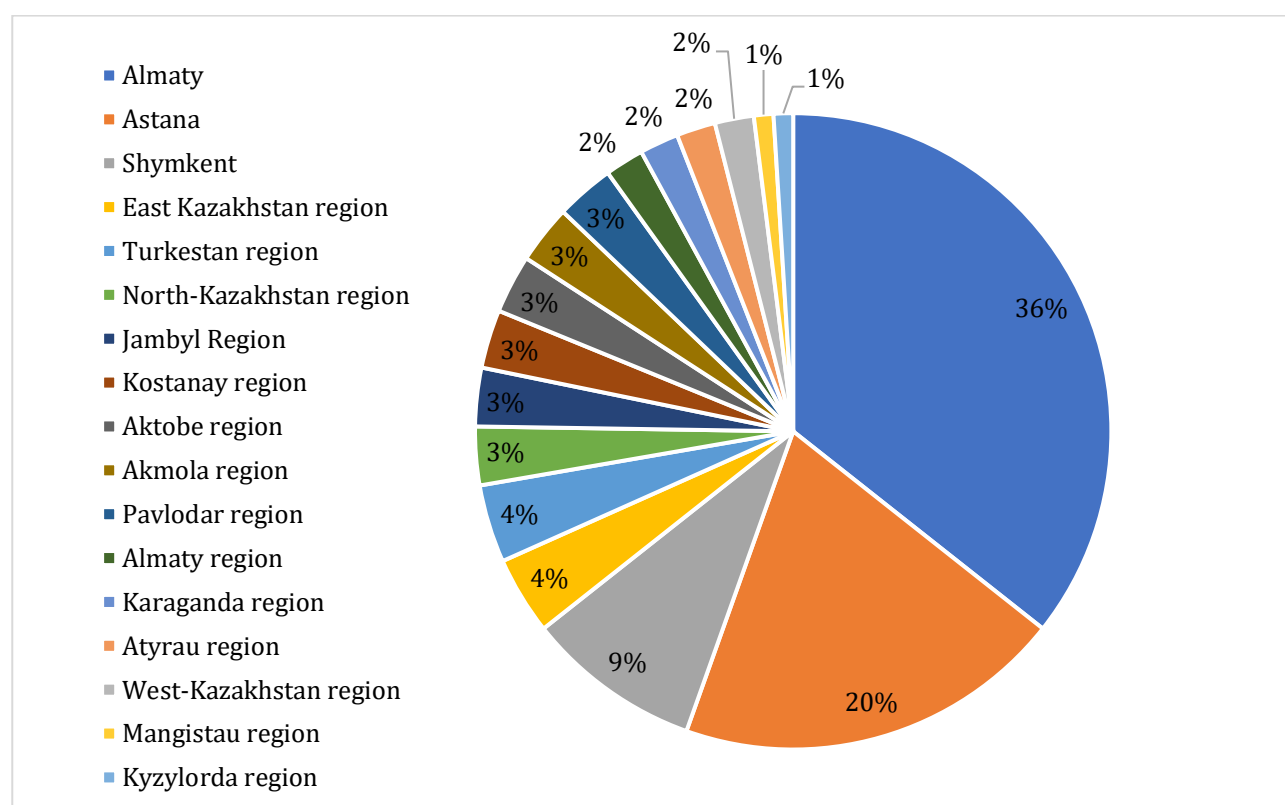


Figure1. The current requirements for places in dormitories from the total number (85 thousand) by region
Source: compiled by the authors based on [39]

At the moment, places in the dormitory are distributed in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan No. 66 [20], according to which first-year students who have received a grant have an advantage in obtaining places. While second-year and above students may not even get their previously occupied places, since they are not in priority. According to the Organisation for Economic Co-operation and Development [39], about 70 thousand grants were allocated in the 2020 academic year, and about 170 thousand students' study at grant places in Kazakhstan. However, starting from 2023, such a system will be levelled, and places in dormitories will be distributed regardless of any priorities and special circumstances, since according to the plan, by the end of 2022, there should be enough places in dormitories for everyone.

Investments in the framework of public-private partnership are aimed at reducing government expenditures on the construction of dormitories and the improvement of the campus with new buildings, however, at the moment there are several issues that lower the level of investment attractiveness. Thus, in accordance with the scheme developed by the first President of the Republic of Kazakhstan, Nursultan Nazarbayev, and the Ministry of Education and Science of the Republic of Kazakhstan in 2018 [19], the shortage of places in dormitories under PPP should be eliminated by the end of 2022, nevertheless, the business sector sees little benefit for itself in this plan. According to the adopted mechanism, the state will reimburse its part of the costs only in the next 8 years, and the amount to be paid is fixed at the time the building is commissioned. That is, the amount paid after 8 years may not correspond to the economic conditions of that time, and the business sector will suffer losses from the implementation of this project. The second issue is the bureaucratic costs for registration of building plots, as well as obtaining a construction permit, each of the procedures can last for months, which considerably hinders construction work and the implementation of the plan.

When properly planning the construction of dormitories and the distribution of places in them among students, it is crucial to consider the experience of other countries that managed to create comfortable living conditions for their students. One of these countries is Poland, where the university authorities prioritize providing comfortable living conditions for their students. As a rule, the dormitories there are divided into lodging units, which consist of two to four rooms with one, two, or three beds. The unit also includes a toilet and shower (for each room separately) and a shared kitchen with all the necessary equipment for cooking. As a rule, the rooms have everything for the convenience of students: the basic set of necessary furniture and free Internet access. Some dormitories also have a laundry room, a gym, and other special rooms for leisure activities. The monthly fee for a room is on average about 350-500 PLN per month (80-95 USD). Private dormitories are more expensive by at least 100 PLN, and their fee depends on the city, the level of universities, the number of people in the room [18, 40]. However, it should be noted that for such a fee, the student

receives a comfortable, renovated room, which is located in a relatively new building, so the residence fee is reasonable.

Another country with a developed university infrastructure is the Czech Republic, where students are provided with small rooms, which include a kitchen with a refrigerator. The rooms are generally equipped with the necessary set of furniture – a bed, a desk, a chair, a wardrobe, a bedside table, etc. Among the inconveniences – the toilet and shower are located on the floor, that is, in common use, but this does not violate the overall comfort. The average fee for a two-bedded room is 240 USD per month. It is also worth mentioning Germany, where rooms in dormitories are considerably comfortable, the fee is relatively low compared to other European countries, and the price corresponds to quality. Thus, the residence fees their amount to about 300 USD. For this price, students are provided with a room with western standard renovation, furniture, and Internet, the cost of which is included in the payment for the room. The approximate area of the room is 25-32 m². Since such conditions are very favorable, sometimes there is a lack of places for everyone [41-43].

Although in France dorm rooms do not have such a large area as in the above countries, these small rooms have a shower and toilet, while the shared kitchen is located on the floor. It is known that many innovative ideas are originated in France, which refers not only to creative spheres of life but also to urban constructions, including student dormitories. An example is the Cité A Docks student housing, located in the city of Le Havre. Its feature lies in the fact that the creators of the building transformed old cargo containers into a four-floor accommodation. The facility includes 100 rooms with access to the garden, the square area of each room is 24 m², each of which has a shower and a toilet. The Parisian student housing in the La Chapelle area also has its own feature – there is a park inside the building, providing 150 rooms with fresh air and a place for leisure activities for residents. Moreover, the dormitory has rooms that are equipped for people with disabilities, which can also be considered as a feature of this building, since currently, not all dormitories can provide such a service [8, 17].

Another example of a campus organization is one of the leaders in quality education around the world – England. This country has a lot of dormitories with distinctive quality and, above all, comfort for students. For example, the University of Nottingham (Nottingham, United Kingdom) contains a system of dormitories consisting of 30 facilities. The distinctive feature is that each of the buildings has its own style, shape, and even a name, there is also a park or courtyard near each dormitory, where students can spend their leisure time in fine weather. The tallest dormitory in the world, the height of which is 112 meters, is located in the capital of United Kingdom – London. The building accommodates more than a thousand students, who are provided with comfortable rooms with all necessary furniture, Internet access, and technical equipment, including air conditioners. Furthermore, students have a laundry room and a bicycle parking lot on the street [2, 9].

It is obvious that the living conditions in Kazakh dormitories do not meet the general requirements in all respects: the lack of hot water and repairs, old furniture, cockroaches, etc., the disadvantages force students to search for other accommodation options during their studies. A great example to follow is the ability of the administration in European universities to find non-standard solutions to problematic situations, such as a shortage of places, a small area, insufficient funding, etc. However, it is necessary to consider that comfort and convenience require appropriate payment, which may not correlate with the capabilities of Kazakh students. Therefore, it is essential to establish a balance between amenities and the residence fees based on the experience and errors of other countries in organizing student campuses to successfully implement a plan aimed at solving issues related to the expansion of social university infrastructure facilities and the creation of comfortable places to live by building new dormitories.

At the moment, there are many issues in the Kazakh dormitories, such as:

- a shortage of places, taking into account the number of non-resident and foreign students, as well as other students in need;
- non-compliance with the general standards for comfortable living;
- non-correspondence of prices with accommodation quality;
- violation of sanitary standards, etc.

Therefore, many students, for whom the dormitories are the only opportunity to continue their studies, are not able to pay for a room due to inflated prices. Until 2019, the residence fees for the dormitories were set by the state and amounted to no more than 15% of the total amount of the scholarship per year. However, now each university sets a fee independently, which does not at all cases correlate with students' scholarships and their financial capabilities. The lack of places is confirmed by the fact that in some dormitories 10 people live in one room of 30 m², while in accordance with the standards, each student should have at least 6 m² of personal space. These and other issues should be solved by the planned public-private partnership program until 2023.

Conclusions

According to the results of the study, it can be concluded that despite all the efforts of the state aimed at solving the

issues related to the development of university infrastructure and providing the necessary number of places in student dormitories, they are still urgent. After almost three years since the introduction of the public-private partnership program for the construction of the necessary facilities, the shortage of places remains the same, namely, their number is about 85 thousand for the whole of Kazakhstan. From the private partnership part, the developed scheme has many disadvantages, which reduce the investment attractiveness of this project. These disadvantages include: the repayment period for the construction of a dormitory by the state is eight years, the repayment takes place only after accommodating students, with the money that will be collected from residence fees; a ban on using the building for any other purposes for 20 years; a complex mechanism for the disposal of funds allocated by the state for construction; strict requirements for the site on which the future dormitory will be constructed – it should be located near the institution so that students can comfortably attend classes, however, such land plots are now profitable for commercial purposes, therefore, they have a high cost and may simply not be repaid, since they require to set higher residence fees, which will not be appropriate for students, etc.

Thus, it is obvious that the investment in the construction of dormitories is not a priority area of the business sector. When summing up the results of the work performed over three years, it should be noted that the mechanism for reducing the shortage of places in dormitories is underdeveloped, since it does not fully meet the purposes set. It is necessary to establish a more effective and mutually beneficial “state-business” scheme so that both parties benefit from this cooperation, then the 2018 program will be successfully implemented and achieve its purpose – providing the necessary number of places for students in dormitories of all universities.

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Conflict of Interest

None.

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Аналіз інвестицій у розширення об'єктів соціальної інфраструктури університетів та студентських гуртожитків у Казахстані

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Анотація

Актуальність. Забезпечення комфортних умов життя для свого населення є головною метою будь-якої держави. Студенти є однією з найбільш вразливих соціальних груп, оскільки вони обмежені у фінансових можливостях забезпечити себе житлом під час навчання в університетах та інших навчальних закладах. Студентські гуртожитки покликані вирішити цю проблему та забезпечити всіх студентів місцями для комфортного проживання.

Мета. Метою дослідження є аналіз системи розвитку об'єктів соціальної інфраструктури університетів та студентських гуртожитків в Казахстані в рамках інвестиційної діяльності, а також державної політики в цій сфері.

Методологія. Для проведення дослідження були застосовані загальнологічні та статистичні методи. У ході дослідження було охарактеризовано механізм державно-приватного партнерства у сфері освіти, а саме розглянуто питання, пов'язані з дефіцитом місць у гуртожитках та основні поняття, пов'язані з цією формою взаємовідносин між державою та приватним підприємництвом.

Результати. Досліджено дані щодо необхідної кількості місць у гуртожитках по регіонах Казахстану. Так, було виявлено, що лідером за цим показником є місто Алмати, яке потребує 36% нових ліжко-місць для студентів (85 тис. місць). Було зроблено висновок, що на сьогоднішній день схема співпраці між державою та бізнес-сектором не відповідає очікуванням. За три роки дії програми державно-приватного партнерства не було забезпечено навіть половини необхідних місць для проживання, оскільки проект має низьку інвестиційну привабливість з багатьох причин.

Висновки. Практична цінність дослідження полягає в тому, що розроблено рекомендації щодо вдосконалення чинної програми.

Ключові слова: державно-приватне партнерство; освіта; інвестиції; поліпшення житлових умов; бізнес.