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4. Развитие инфраструктуры и социальной сфера: Внедрение инноваций может способствовать развитию инфраструктуры в сельской местности, включая транспортную, коммуникационную и энергетическую инфраструктуру, а также улучшению доступа к образованию, здравоохранению и другим социальным услугам.

5. Содействие устойчивому развитию: Инновации в сельском хозяйстве могут способствовать устойчивому развитию сельских территорий, помогая селу адаптироваться к изменяющимся климатическим условиям, экономическим вызовам и социальным потребностям.

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THE CURRENT STATE OF INNOVATIVE DEVELOPMENT IN KAZAKHSTAN

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In a rapidly changing global economic environment, innovative development is becoming one of the key factors determining economic progress, the development of society and the competitiveness of the country. Innovative development is the process of systematic and sustainable introduction of innovations into the economy in order to stimulate economic growth, increase competitiveness and improve the quality of life of the population.

Innovative development not only contributes to solving existing problems and challenges, but also creates new opportunities for the development of the economy and society. It is a key factor for ensuring the sustainable and long-term development of the country in a rapidly changing global economic and technological landscape. Innovative development usually includes the creation of a favorable environment for innovation, the development of scientific and technical potential, support for innovation and infrastructure, as well as measures to stimulate investment in innovation [1].

Kazakhstan, striving to strengthen its position on the world stage and ensure sustainable economic growth, has been paying special attention to innovations in recent decades. However, despite the efforts of the government and the business community, the issues of efficiency and potential of innovative development remain in the focus of attention of researchers and experts.

The historical context of Kazakhstan's innovative development shows that the country has gone through a number of stages and challenges in the development of its innovation sphere [2]. Currently, Kazakhstan is actively working to create a favorable environment for innovation and stimulate innovation, which allows it to introduce modern technologies and improve the competitiveness of its economy.

The innovation infrastructure in Kazakhstan is developing in order to create a favorable environment for the growth of innovations, startups and technological development. Technoparks are one of the elements of the innovation infrastructure in Kazakhstan. The country has a two-tier system of technoparks - national and regional technoparks.

Among the national science and technology parks, the following technological formations can be distinguished: Information Technology Park, Alatau; National Industrial Petrochemical Technopark, Atyrau; Tokamak Nuclear Technology Technopark, Kurchatov; space monitoring Technopark, Almaty, Astana and Priozersk.

National technology parks are focused on the creation of new industries in Kazakhstan, which should contribute to ensuring the future competitiveness of the Kazakh economy.

Regional technoparks, including Almaty Technological Park, Almaty; Technopark "Algorithm", Uralsk; Technopark "Business City", Karaganda, are created in order to identify, disclose and develop the innovative potential, innovative ability of the region, to meet the needs of the regional economy in innovative products [3].

Astana Hub, the largest international technopark of IT startups and an innovation cluster in Central Asia, plays an important role in the innovative development of Kazakhstan. The technopark was opened as part of the fifth direction of the state program "Digital Kazakhstan" – the development of an innovative ecosystem.

The main task of Astana Hub is to develop Kazakhstan's startup culture and support promising high-tech IT projects. To do this, startups in the technopark are provided with modern infrastructure for free, support for finding investors and access to foreign markets is provided.

Examples of successful start-ups of the Technopark include: *Tastamat* round-the–clock mail terminals for delivering parcels from online stores, *Kid security* GPS bracelets that allow parents to track the location of a child, a project of legal assistance to Kazakhstanis who have debts on online loans - *antidolg.kz* .

The indicator characterizing the susceptibility of the economy to innovations is the innovative activity of enterprises – this is a complex characteristic of the degree of intensity of the actions carried out to transform an innovation into a new or improved product, technology, marketing or organizational service.

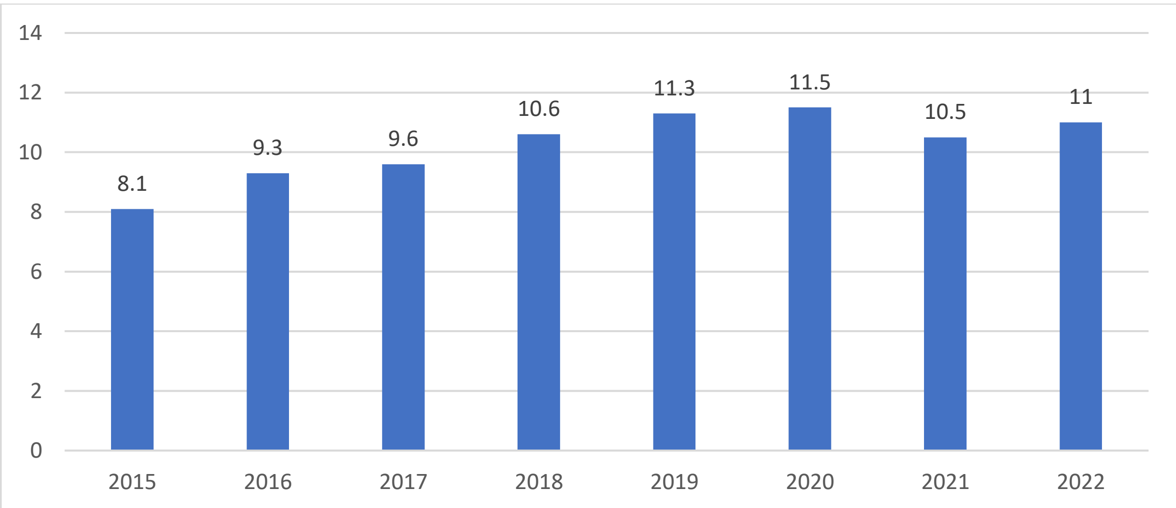

Figure 1. The level of innovation activity in Kazakhstan in 2015-2022.
Note: compiled by the author according to the source [4]

As can be seen from Figure 1, the current situation of innovative development in Kazakhstan is characterized quite positively. Key indicators are growing: the share of innovative and active enterprises in 2022 amounted to 11%, which is 0.5 percentage point higher than last year's level, and the volume of innovative products reached 1.9 trillion tenge in 2022.

Table 1. Main indicators of innovative activity of enterprises of the Republic of Kazakhstan

Indicators	2021	2022
The level of activity in the field of innovation, %	10,5	11,0
The total volume of innovative products (goods and services), billion tenge	1438,7	1879,1
The volume of innovative products (goods and services) sold, billion tenge	1318,1	1739,8
The volume of innovative products (goods and services) sold, exported, billion tenge	214,5	286,3
The amount of costs for the implementation of innovations, billion tenge	800,1	1453,3
Note: compiled by the author according to the source [5]		

As can be seen from Table 1, enterprises of Kazakhstan produced innovative products worth 1,879.1 billion tenge. Compared to the previous year, there was an increase in the production of innovative products by more than 30%. The volume of innovative products sold increased by 32% and amounted to 1739.8 billion tenge.

In total, in 2022, 3,390 organizations out of 30,750 that participated in the study of innovative activity of organizations were engaged in innovation activities. 513 enterprises carried out the creation of innovations using R&D conducted inside the enterprise.

Support for innovation in Kazakhstan is one of the priorities of the state policy in the field of innovation and entrepreneurship. In recent years, the government of Kazakhstan and a number of non-profit organizations have been actively working to create conditions for the development of the startup ecosystem in the country.

Kazakhstan has various government programs and investment funds aimed at financing and supporting startups. For example, QazTech Ventures JSC offers many financing programs, both in the form of grants and direct investments, Kazyna Capital Management JSC is a private equity fund created to promote the sustainable development of the national economy, Centras Venture Fund JSC is one of the first venture funds in Kazakhstan, which was It was created jointly by the Sentras Group and the National Innovation Fund of Kazakhstan.

It is important to note the role of MOST Ecosystem in the development of an ecosystem for startups and venture investors in Kazakhstan. MOST Ecosystem is a corporate media platform about the venture capital industry, technologies and startups, creative spaces and people changing the current reality. The work of the ecosystem unites the community of angel investors "UMAY", the venture fund "MOST Ventures", the business incubator "MOST Business Intelligence", the community of technology startups MOST Hub Almaty.

The venture fund "MOST Ventures" has its own acceleration program for startups from Central Asia. Following the results of previous programs, the following domestic startups received investments:

- online service for finding hourly workers in the retail and HoReCa sectors - easytap received investments in the amount of $ 300,000;
- a technological solution for trips inside the city on comfortable minibuses – "UvU Shuttle" received an investment of $ 270,000;
- innovative fintech company OneVision – $200,000.

The experience of business incubation in our country is still small, but nevertheless this process is undergoing a period of intensive development. There are a number of incubators and accelerators in the country that provide startups with mentoring support, training, work spaces, as well as investment opportunities. JSC "National Agency for the Development of Innovations

"Qazinnovations" - the National Institute of Innovative Development is actively working in this direction. Qazinnovations implements government support mechanisms for business incubation, startup acceleration, commercialization and technology transfer, and strengthening the human, managerial and production potential of innovation entities.

Also, innovation grants are one of the important instruments of state support for innovation activities in Kazakhstan. An innovation grant is understood as budgetary funds provided to subjects of innovative activity on a gratuitous basis for the implementation of their innovative projects within the framework of priority areas for the provision of innovative grants.

They are issued in 3 key areas:

• Innovative grants for commercialization;
• Innovative grants for the technological development of existing enterprises;
• Innovative grants for the technological development of industries.

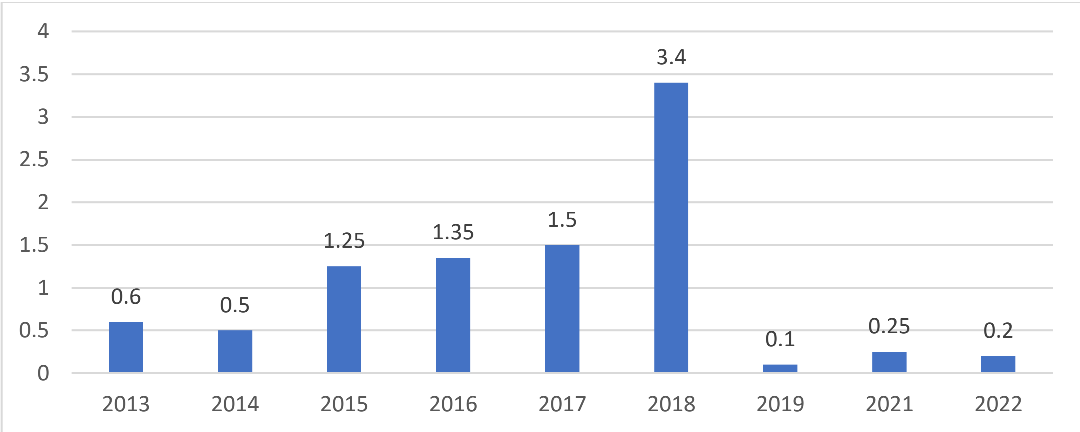

Figure 2. Funds allocated for innovation grants, billion tenge
Note: compiled by the author according to the source [6]

As can be seen from Figure 2, from 2011 to 2022, 338 grants worth 13.3 billion tenge were issued. The issued innovative grants, as practice shows, have a positive multiplier effect on the country's economy. For example, grantees have produced products worth more than 270 billion tenge. Thus, for every 1 tenge of grant products, more than 20 tenge were produced. At the same time, innovators have paid taxes in the amount of more than 30 billion tenge to the country's budget, they have created more than 6,000 jobs.

Within the framework of the project "Stimulating productive Innovations", important activities were successfully implemented within the framework of grant programs for production consortia, competence centers and social innovations. This year, three rounds of competitions were held on the programs Consortia of the manufacturing sector and Consortia of Inclusive Innovations, 13 subprojects were financed for a total amount of about 3 billion tenge. Also, thanks to the project, the Tumar Ventures early financing venture fund was created, and an acceleration program was conducted in Silicon Valley with Draper University.

The issue of innovative development in Kazakhstan has become relevant in recent decades, however, there are still a number of challenges and problems in the country that hinder the full development of innovations. Firstly, despite the development of venture capital, the volume of investments in innovative projects is still insufficient. Many investors prefer more conservative investments, which makes it difficult for many startups and innovative enterprises to access financing.

Secondly, the lack of the necessary infrastructure and ecosystem makes it difficult to develop innovations and put them into practice. Despite the presence of technology parks, incubators and accelerators, the infrastructure to support innovation is still not fully developed. For example, technoparks, instead of performing their main functions, usually act as business centers, where premises for offices, laboratories, exhibitions and trainings are provided for rent. As a result, these technoparks do not use the scientific potential necessary for the development and implementation of innovative projects.

Thirdly, the private sector in Kazakhstan is still not actively involved in innovation processes. The lack of sufficient demand and interest from private companies limits the development of innovations.

Also, the lack of qualified personnel capable of working in the field of innovation is a serious problem. It is necessary to develop an education and training system that will be able to provide the country with highly qualified specialists in the field of innovation and technology.

Overcoming these challenges requires joint efforts by the State, the private sector and society as a whole, as well as the development of comprehensive strategies and programs to support innovation.

The following measures can be taken to strengthen investment activity and finance innovations in Kazakhstan:

1.The introduction of tax incentives for investors investing in innovative projects can stimulate capital inflows into this area.

2.Support for the development of venture funds and investment platforms helps to increase available investments for innovative projects and startups. For example, in the West, the standard is when each corporation has its own venture division, its startup garden. It's not about growing startups from scratch, but about helping them to have access to promising technological projects.

3.Development and implementation of government financing programs for innovations and start-ups providing subsidies, grants, loans under preferential conditions or loan guarantees.

4.Development of banking products, that is, banks can develop special products and services to finance innovations, such as loans secured by intellectual property or conditions for startups.

5.Promoting the development of crowdfunding platforms and regulating this sector to ensure transparency and investor protection.

6.Stimulating private investment, conducting campaigns to attract private investors to innovative projects, including through tax incentives or other motivational measures.

The implementation of these measures will strengthen investment activity and ensure financing of innovations in Kazakhstan, which contributes to economic growth and competitiveness of the country.

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ИННОВАЦИОННЫЙ ПОДХОД ПРОЗРАЧНОЙ СИСТЕМЫ ОПЛАТЫ ТРУДА КАК СТРАТЕГИЯ УПРАВЛЕНИЯ ПЕРСОНАЛОМ НА ПРЕДПРИЯТИИ

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