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# Х А Б А Р Ш Ы С Ы

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## ВЕСТНИК

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК  
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## **IMPROVEMENT OF ORGANIZATIONAL-ECONOMIC MECHANISMS OF THE NATIONAL INNOVATION SYSTEM OF THE REPUBLIC OF KAZAKHSTAN**

**Abstract.** Effective development of the mechanism in conditions of transformation of the national economy requires a clear and justified innovation strategy. The construction and effective functioning of the innovative mechanism for ensuring development are necessary conditions for the implementation of strategic goals and objectives at the regional level. In the innovation strategy, a situational model of regional management should be synthesized, focused on financing, both in high-tech projects and in human development. State development institutions are endowed with budgetary financial resources necessary to finance investment and innovation projects, as well as to participate in statutory funds of newly created and modernized enterprises in manufacturing and infrastructure. They are called to perform the role of "locomotive" for the purpose of economic growth and the formation of an export-oriented model for the development of the national economy, supporting those investment and innovation projects that the private sector, for various reasons, can not finance and implement independently.

**Key words:** strategy, potential, intellectual nation, innovation, prosperity, education.

**Introduction.** In the period of globalization, the quality and potential of human resources are becoming one of the fundamental criteria for the competitiveness of the state. In this regard, the key to the innovative development of the Kazakh economy is to improve the quality of human capital. The quality of the formation of human resources directly depends on the level of development of the country's education system. Therefore, Kazakhstan pays priority attention to the development of human capital and allocates significant financial resources for the development of education – over one trillion tenge in 2012. "Equal opportunities for education are created in Kazakhstan. Over the past 15 years, spending on education has grown 9.5 times. The State Program for the Development of Education for 2011-2020 is being implemented, aimed at radically modernizing all levels of education, from preschool to higher education. Thanks to the policy of long-term investments in the development of human capital, we have formed the current talented generation of youth ... "[1, p.1-8]. Practically all the topical issues of the national education system are supposed to be solved in the light of the world development trends in a positive way, since a good economic base has been created in our country.

**Methods of research.** The main methods of research are a method of deduction and induction, as well as a comprehensive approach and a method of scientific abstraction. The variety of goals, objectives and areas of activity in agriculture predetermines various criteria for assessing the effectiveness of economic entities.

**Results.** By 2020, the proportion of universities that have received independent national accreditation according to international standards will be 30%. Up to 5% the share of universities that carry out innovation activities and introduce research results into production will increase. At least two higher educational institutions will be noted in the ranking of the world's best universities [3].

The next most important factor in the development of innovations is the systemic modernization of the economy of the republic, which implies a withdrawal from raw dependence, the achievement of a high level of industrial production, a radical change in the structure of the economy. At the same time, the

ultimate goal of modernizing the economy is to increase the well-being of the population, increase the country's competitiveness in the world market, ensure rapid spread of innovations, rationalize financial flows, and efficiently locate production.

The need for innovative development in Kazakhstan is especially evident against the background of the key challenges facing the national economy today. Reduction of available labor resources, low labor productivity and low energy efficiency, raw material dependence of the economy – all this, of course, means that stimulating innovation is really a key task for the economy and society today. At the same time, it is impossible to achieve positive results without the support of the state, without a purposeful innovation policy.

The acquisition of new knowledge and technologies and their effective application in social and economic development determine decisively the role and place of the country in the world community, the standard of living of the people and ensuring national security. In industrialized countries 80-95% of GDP growth falls to the share of new knowledge embodied in technology. This transition to an innovative development path was made possible through the creation of national innovation systems (NIS), which, according to research conducted in the United States, is the main achievement of the XX century. Being a natural result of the previous industrial development, NIS as an effective system of institutions allowed highly developed countries to provide brilliant technological breakthroughs and maintain the competitiveness of their economies at the highest level.

In general, with the adoption of the strategy and program for the formation of NIS of Kazakhstan, the government established the main institutes that provide innovative development:

- National Fund, which ensures stable social and economic development of the country;
- JSC "Fund Samruk-Kazyna", the main activity of which is assistance in the modernization and diversification of the national economy;
- Development institutions that promote the implementation of innovative projects;
- Technological parks of national and regional levels, special economic zones. Also, within the framework of improving investment policy, a legislative framework was established that defines the legal and economic bases for stimulating investment.

Despite some positive results, the goals of the Strategy and the Program were not fully achieved.

Thus, the choice of priorities for scientific, technical and innovation policies requires a deeply justified strategic approach, any mistake can result in irreparable losses. First, it concerns the directions of the development of science and technology, which form the structure of a scientific and technical revolution, a promising technological order. It is inadmissible to use the limited means of the state to support pseudo-innovations that improve the prevailing generations of technology, thereby preserving technological backwardness and low competitiveness of products. It is equally dangerous to concentrate efforts on the implementation of inventions and technologies, the time for the implementation of which has not yet come, and the resources spent for ten years will not give returns, will be dead. Secondly, the economy of each state, its structure, technological needs, available scientific reserves are original and unviable. Hence, it is necessary to adapt the scientific and technical policy to the specific conditions of the given country. Harmful and destructive can be the mechanical transfer of even the most effective technologies into the environment that rejects them. Careful selection and adaptation of those elements of the revolution in science and technology are required, which are most fruitful on this basis.

In the process of improving the market model of the national economy based on the integration of the scientific and technical sphere into the processes of economic and social development of the society, which means the formation of a system of institutions that create powerful incentives for generating a steady flow of effective innovations, priority should be given to such a promising direction of economic development Kazakhstan, as regional (spatial) modernization, structural and technological transformation, gradual clustertion, the creation of a mechanism to support domestic producers.

**Conclusions.** To create an effective national innovation system, it is necessary:

- to increase the demand for innovation from a large part of the economy;
- to increase the effectiveness of the knowledge generation sector (fundamental and applied science), as there is a gradual loss of established in previous years, aging of personnel, a decline in the level of research, weak integration into world science and the world innovation market and lack of orientation to the needs of the economy;

• to overcome the fragmented nature of the innovation infrastructure, since many of its elements are created, but do not support the innovation process throughout the process of generation, commercialization and introduction of innovations.

Foreign experience shows that in the system of generation of new knowledge, all types of scientific research have the same value and it is inexpedient to give special priority only to applied scientific research. In addition, raising the productivity of labor and capital, and therefore, the competitiveness of the economy, is impossible without the creation and strengthening of its own scientific and technological potential.

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#### **ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ҰЛТТЫҚ ИННОВАЦИЯЛЫҚ ЖҮЙЕСІНДЕГІ ҰЙЫМДАСТЫРУШЫЛЫҚ-ЭКОНОМИКАЛЫҚ МЕХАНИЗМІН ЖЕТІЛДІРУ**

**Аннотация.** Ұлттық экономиканы трансформациялау жағдайында тетікті тиімді дамыту нақты және негізделген инновациялық стратегияны талап етеді. Дамыту үшін құрылыс және инновациялық механизмін тиімді жұмыс істеуі өңірлік деңгейде стратегиялық мақсаттары мен міндеттерін іске асыру үшін қажетті шарттары болып табылады. Аймақтық басқарудың жағдайлық моделін инновациялық стратегиясы жоғары технологиялық жобаларға және адам дамуы үшін де, синтезделген қаржыландыруға бағытталуы тиіс. Мемлекеттік неobhodiumі инвестициялық және инновациялық жобаларды кредиттеу үшін бюджеттік қаржы ресурстарына бай даму институттары, сондай-ақ *ustavnyh* қаражат қатысуға өндіру мен инфрақұрылымды кәсіпорындар құрылды және жаңғыртылды. Олар өз қаржыландыру және жүзеге асыру мүмкін емес, түрлі себептермен, экономикалық өсу мен жеке сектор деп инвестициялық және инновациялық жобаларды қолдау арқылы ұлттық экономиканы дамыту, экспортқа бағытталған моделін қалыптастыру мақсатында «Локомотив» ретінде қызмет етуге арналған.

**Түйін сөздер:** стратегия, әлеует, интеллектуалдық ұлт, инновация, өркендеу, білім.



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**СОВЕРШЕНСТВОВАНИЕ ОРГАНИЗАЦИОННО-ЭКОНОМИЧЕСКИХ МЕХАНИЗМОВ  
НАЦИОНАЛЬНОЙ ИННОВАЦИОННОЙ СИСТЕМЫ  
РЕСПУБЛИКИ КАЗАХСТАН**

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**Ключевые слова:** стратегия, потенциал, интеллектуальная нация, инновации, процветание, образование.

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