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**REGIONAL MECHANISM OF INVESTMENT
AND INNOVATION ACTIVITY**

Annotation. Now in Kazakhstan occurs some economic transformation and the features of these process is the need to reform the mechanism of management of regional investment and innovation activity of territories which acting as autonomous market agents and interested in expanding their market segments and provide additional income and social and economic benefits.

Much attention is given to the significant differences in the level of innovative potential of regions Republic of Kazakhstan. This article discusses the modern problems of development of investment and innovative activity on the example of Kyzylorda region. Despite the fact that Kyzylorda region is a region of oil exploration the investment turnover in the subsoil use industry hasn't so important innovation significance for the region. It shows the appraisal of the integral index of innovative potential of the region: Kyzylorda region has a low innovative potential and it's not the leading region as a regions with a similar «oil component». It should be stressed that measures should be taken for enhancing oil producing companies in their innovation and participation in the industrial upgrade of the region. Conclusions are drawn that the mechanism of the regional venture Fund allows leveraging the additional financial instruments and is able to take the risks of both investors and guarantors.

Keywords: innovation, investment, region, vertical methods, venture fund.

Introduction. The rise in the popularity of the concept of regional innovation systems has been in part driven by the increased intensity of international competition in a globalizing economy, the apparent shortcomings of traditional regional development models and policies, and the emergence of successful clusters of firms and industries in many regions around the world [1].

One result has been the rediscovery by many academics of the importance of the regional scale and the importance of specific and regional resources in stimulating the innovation capability and competitiveness of firms and regions [2].

The innovation process involves many participants and many stakeholders. It can be carried out at national and intergovernmental levels in regional and sectorial areas, local (municipal) formation. All participants have their own goals and set up their organizational structure to achieve them.

An innovation ecosystem requires the simultaneous existence of several actors, each with a different role to play. In academic literature, the concept of a national innovation system emerged in the 1980s and is normally referred to as «The set of public and private actors involved in the exploitation and commercialization of new knowledge originating from the science and technology base and the interactions between them [3]. This concept has been operationalized by several academics that developed indexes of national innovative capacity that rely heavily on the specific role played by each of the main actors that shape innovation patterns and success in a given country. These actors are entrepreneurs, large businesses, SMEs, universities, research institutes, venture capitalists, business and Governments.

Research methods. Attempts to explain social and institutional conditions of regional competitiveness have also resulted in the emergence of such concepts as «learning region», «innovative milieu» [4], «industrial district» [5], «local productive system» [6].

In recent years in works of scientists-economists the new directions of researches are developed: problems of increase of economic efficiency of investments, formation of the mechanism of investment, form and methods of regulation of investment processes, restructuring of economy, problem of innovation development of economy. All these directions are developed in works of the leading scientists of Kazakhstan and the Commonwealth countries: Archangel V.N. [7], Salimov M. [8], Satubaldin C. [9], Todosiychuk A.B.[10], Litvinenko V.[11], Kenzheguzin M.B.[12], Makhnitskaya E.I.[13], Kembali B.A. [14], Kulevskaya J.G. [15] and other scientists.

The purpose of this paper is to theoretically and methodologically substantiate and develop tools to improve investment attractiveness of regional economic system in the transition to an innovative economy.

The results of the study. First of all, we should consider the variety of intra-organizational forms - from the selection of participants of innovative activity within the company to create special innovation units.

In large and small organizations around the innovative activity that corresponds to their missions, goals and strategies. Therefore, the corporation created around a network of small innovative firms preparing their heads with special incubator programs. These organizations are in the form of companies - incubators.

The spread of new complex industrial products and technology sometimes takes place in the organizational form of franchise or lease.

The implementation of regional scientific - technical and social programs related to the organization of relevant scientific organizations (universities), industrial and financial organizations of various kinds of scientific - industrial centers.

Like any other, innovation is costly sometimes very substantial material, financial and organizational resources. For any investor perception of innovation is through the prism of the sending to him the investment project, which is the organizational and financial plan of creating and promoting innovation (Fig.1). The greatest investment required during the construction and the start of production, but the return on these costs in the first place, laid on the stages of R&D and marketing evaluation of the project, secondly, essentially depends on the rate of diffusion of innovation.

In economic practice used two methods of promoting innovation – «vertical» and «horizontal» [16]. For vertical promotion of the whole innovation cycle is concentrated in one organization with the transfer of the results achieved in the individual stages of the innovation division to division. However, the applicability of this method is limited. An organization must be a powerful group that unites the entire production cycle, including after-sales service. An example of such an organization can serve as a concern «Volvo», which does not let out of their hands, even the supply of their garages [17].

Either the company must develop and produce a very narrow range of specific products containing no heterogeneous components (e.g., new chemical materials or pharmacological).

Horizontal promotion of innovation based on partnership and cooperation between the leading enterprise which is the organizer of innovation, the other members of the innovation (technological) transfers that are engaged in the creation and promotion of innovative products.

A necessary component of the promotion of innovation is a horizontal technology transfer.

In Kazakhstan, its capabilities are based on the presence of the different actors of innovation. Currently, we have proliferated as a commercial and non-profit transfer of technologies.

The non-profit technology transfer is most commonly used in research of a fundamental nature. It is usually accompanied by low consumption and can be maintained both on the state line, and on the basis of organizational and personal contacts.

It is theoretically possible to master the technology borrowed money without cost at the initial stage, paying supplier royalty (annual contributions) after the development of production and obtaining necessary equipment, tooling and certain types of materials, components through leasing, compensation or barter. However, in practice, for the financing of technology transfer agreements require seed money, is 20-30% of the total cost of the technology [18].

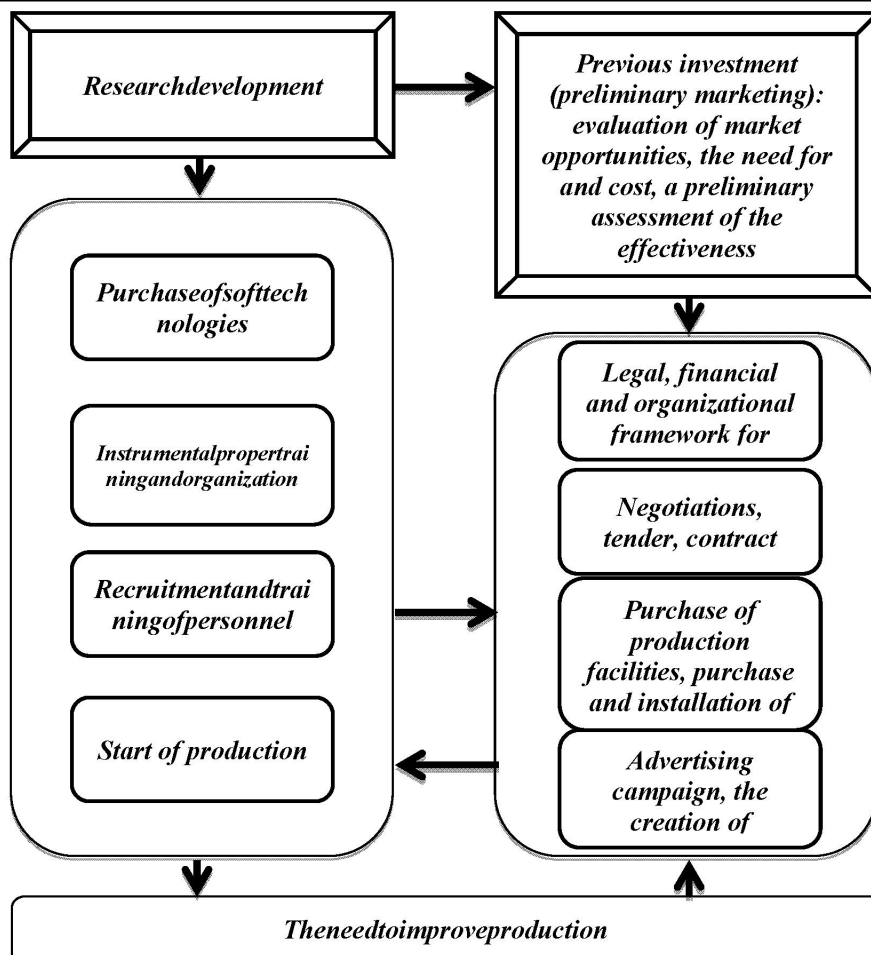


Figure 1 - The relationship of investment and innovation

Source - Developed by the authors according to the results of research

You can use the services of banks and risk (venture) capital. These banks are created for the commercialization of innovations and actively participate in the search and transfer of technologies. Recently their network is actively growing. Thus, in France registered over 200 such banks in the US - more than 3000. As a rule, banks are more willing to venture capital is the overall risk. To bring them the financial resources it's necessary to use their own funds to attract other partners.

Analyze the macroeconomic conditions of investment and innovation activity that allows you to see the overall situation in the country, identify trends and prospects of development of Kyzylorda region. Investments in fixed assets have been steadily growing in the whole country, and across regions. Kyzylorda is an agricultural region and it is not distinguished by high rates and volumes of investments, but also has a positive growth trend. Indexes of physical volume of fixed capital investments indicate mixed trends in all regions of Kazakhstan. The reasons for this are the above-mentioned circumstances.

In terms of regions the situation is as follows. Despite the unstable macroeconomic situation government support in the crisis has kept the production growth dynamics in the period 2011-2015 and in

the structure of gross regional product. The high influx of public investments in different types, state program support sectors (agriculture, road construction, and social infrastructure) contributed to the preservation of the volume of production in all sectors.

It should be noted that in the structure of gross production, according to the report, Agency of statistics on the share of the Kyzylorda region accounts for 4.5% of total GDP.

The data in Table 1 characterize the Kyzylorda region, conducive to develop deposits of hydrocarbons, increasing share of industrial production.

Table 1- Structure of gross regional product by economic activity, %

Region	All	Agriculture	Industry	Building	Trade	Transport and communications	Other services
Republic of Kazakhstan	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Kyzylorda							
2011	3,9	3,4	6,3	3,6	1,1	4,0	2,9
2012	3,8	2,0	5,7	5,4	1,2	4,5	3,0
2013	3,9	2,6	5,9	4,9	1,3	5,7	3,1
2014	3,8	2,2	5,9	5,9	1,3	5,2	2,8
2015	3,6	2,0	5,6	4,8	1,3	4,5	3,0

Source -Agency of Statistics of the Republic of Kazakhstan

The above analysis of macroeconomic indicators that characterize the dynamics and trends of development of economic and investment processes in the Republic, and its component parts - Kyzylorda region, leads to the interim findings in the study of this section:

1. There is a steady growth of the gross domestic product of Kazakhstan and the gross regional product of Kyzylorda region. The growth of GDP and GRP declined significantly due to increase of turnover of the global financial crisis resulted in a drop in the prices of all kinds of commodities and raw materials export of the Republic. A positive aspect in this difficult situation was a formal insight that the economy is built on the export of raw materials, is the most vulnerable to the impact of external forces.

2. Investments in fixed capital grew over the past five years. The sectorial structure of investment indicates the growth of investment in construction, exploration and mining of minerals and hydrocarbons.

3. There is a high degree of depreciation of fixed assets. Liquidation of fixed assets ratio is very low, which makes the presence of worn out and obsolete fixed assets.

4. Labor productivity is low, as in the whole country and by region, largely due to the use in the production of morally and physically obsolete fixed assets.

5. As a result of the above findings, - a high proportion of loss-making enterprises, the growth in mutual debt between business entities.

Table 2 - Dynamics of the structure of capital investments in the Kyzylorda region in 2011-2015, %

Index	2011	2012	2013	2014	2015
Investments - total including:	100,0	100,0	100,0	100,0	100,0
- Technical re-equipment and reconstruction of existing enterprises	16,2	17,5	23,3	19,1	27,8
- Expansion of existing enterprises	18,6	18,2	16,6	17,3	19,7
- Construction of new enterprises	64,7	60,6	59,5	63,7	60,9
- The maintenance of existing facilities	32,6	31,5	29,6	31,8	33,6

Source - Department of Statistics of the Kyzylordaregion.

A more detailed analysis of the investment processes of the Kyzylorda region makes it possible to understand the features and factors intraregional investment activities.

Investments in the Kyzylorda region have its own characteristics (Tab.2). In an attempt to overcome the irrational industrial structure funds are allocated for construction of new ones. The decline in industrial production forced to allocate funds to support the economy-forming enterprises, presented in the main oil industry.

The main shares of the investment funds hold own funds of enterprises and organizations (Tab.3).

Table 3 - Structure of investments in fixed capital by sources of funds of Kyzylorda region, %

Index	2011	2012	2013	2014	2015
Investments in fixed assets, total, including funded by:	100,0	100,0	100,0	100,0	100,0
- budgetary funds	13,0	10,4	13,5	7,6	15,6
- own funds of enterprises and organizations	64,3	63,8	61,5	65,3	56,1
- foreign investment	4,5	-	7,5	21,0	21,4
Source - Department of Statistics of the Kyzylorda region					

Economic-forming industry of Kyzylorda region is the oil industry, which in turn is represented by joint ventures and foreign companies. In this regard, it increased dramatically the proportion of foreign investment, which allocates Kyzylorda region among other southern regions.

The structure of investments by economic activity is a reflection of ongoing regional economic and investment policies.

In Kyzylorda region (Tab.4), the structure of investment is a reflection of irrational sectorial structure of the region. Dominated by the oil industry, was developed in the last 15 years.

Table 4 - Structure of investments by economic activity of the Kyzylorda region,%

Branch	2010	2011	2012	2013	2014
Investments in fixed assets, total, including	100,0	100,0	100,0	100,0	100,0
- agriculture	0,2	0,5	0,4	0,6	1,2
- oil industry	64,6	67,9	62,1	60,0	69,8
- manufacturing	8,5	7,4	9,2	6,8	2,9
- production and distribution of electricity, gas, water	2,4	1,4	1,8	1,6	2,7
- construction	15,3	8,5	11,1	14,8	10,3
- social sphere	12,0	14,3	15,4	16,2	13,1
Source - Department of Statistics of the Kyzylorda region					

In general, it should be said that the Kyzylorda region is an attractive investment in terms of raw materials, precious metals deposits, market accessibility of marketing and processing.

The situation is complicated by the following factors: the regional economy is dominated by manufacturing industries with intermediate stages of the production cycle. Export potential of more than 80% of the raw materials. Almost half of fixed assets used exceeds the standard lifetime of required new equipment to update it involves the transition to a fundamentally new technologies and extremely expensive, the economy is dominated by outdated technology and resource material is not allowed to accumulate sufficient own funds to finance the development of production. In addition, it makes the products companies are extremely expensive and uncompetitive, that pushes the company even has conquered market segments.

Thus, the Kyzylorda region has enough industrial capacity, but it does not, unfortunately, a quick return on invested capital and not enough to the investor without hesitation opted region.

Currently, innovation indicators formed mainly large industrial enterprises, for which it is necessary to maintain export competitiveness.

At the regional level, innovation processes are very weak. In this regard, it should be noted as uneven economic development of the regions of Kazakhstan. Regions in which there are large industrial enterprises, and there are large raw material resources, ahead of the economic and innovative development of the region, originally weak start for: agrarian focus, narrow raw material sources, focus on mono-production. At the same time, the development of innovative activity in the region could be one of their special economic developments regardless of the presence of natural resources.

Public investment in science, as a consequence of increasing its competitiveness and relevance of scientific and technological products, led to changes in the structure of scientific and technical work. Significantly reduce the share of basic research at the same time the share of applied research, scientific and technical works and services. Thus, there are the first attempts to commercialize scientific and technological work.

Taking into account all the macro- and microeconomic factors, there is a low innovation activity of business entities (Tab.5).

Table5 - Number of organizations engaged in research and development, units

Regions	2011	2012	2013	2014	2015
The Republic of Kazakhstan	424	412	345	341	392
Akmola	7	8	9	12	11
Aktobe	16	18	16	13	14
Almaty	10	8	7	10	13
Atyrau	12	9	9	8	9
East Kazakhstan	33	36	34	29	30
Zhambyl	10	7	8	9	11
West Kazakhstan	10	9	15	9	9
Karaganda	28	29	26	23	31
Kostanay	15	13	14	13	13
Kyzylorda	14	23	7	6	6
Mangystau	8	8	7	7	7
Pavlodar	9	11	11	10	11
North Kazakhstan	5	3	3	3	3
South Kazakhstan	9	9	11	15	17
Astana	42	41	49	52	59
Almaty	196	180	119	122	148

Source -Agency of Statistics of the Republic of Kazakhstan

The number of organizations engaged in research and development in Kyzylorda region (Tab.5) has a pronounced upward trend.

Kyzylorda region (Fig.2) has low levels of development and use of new technologies and techniques.

This situation is largely due to the continued low level of availability of sources of financing of investment and innovation programs and business organizations. For the commercial banks' lending projects for the acquisition of new technologies and technical objects is high risk and additional costs for market evaluation of new equipment and products of its production. In this regard, the most attractive projects with stable profitability margins: the construction of residential and commercial real estate (especially against the background of rising prices per square meter), the development and exploitation of mineral deposits, construction materials, trade and services [19].

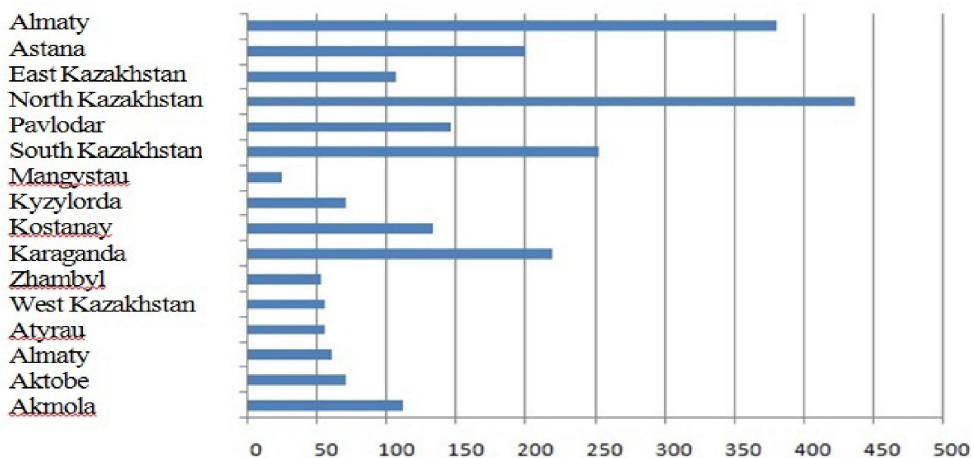


Figure 2 - Distribution of new technologies and techniques for the areas of the Republic of Kazakhstan, units
Source -Agency of Statistics of the Republic of Kazakhstan

In the implementation of its innovative programs is calculated primarily on the company's own funds. Budget funds and development institutions in 2015 amounted to only 12% of the region.

Discussion of results. In the context of regional situation reflects the nation-wide trends of innovative development. Old industrial regions (Karaganda, Pavlodar, Aktobe, East Kazakhstan regions) with an established industrial structure, and to preserve the scientific and technical and design reserve show the best results for development and innovation in the production process. Kyzylorda region, along with other regions of oil development (Mangystau, Atyrau) reflects the peculiarities of the development of export-raw material economy - a low level of innovative activity as a result of the technological process and the lack of competition on the market of raw materials. In general, it should be noted the absence in the Kyzylorda region focused, developed and comprehensive innovation policy and development strategy, which is manifested in the following:

- Scientific and technical sphere in the region is not represented in the regional market for R&D, internal problems and lives very little to do with the real sector of the economy, which imports technological innovation

- In the real economy there are cases of economic entities implementing internal innovation programs, but there is a steady trend: the level of innovation activity of 2%, an innovative passive - 98%.

To finance innovative small and medium enterprises should be the formation mechanism of without collateral funding, which can be implemented in the framework of creation of regional venture funds.

Regional venture fund should be established in form of joint stock company limited liability partnership or a nonprofit organization. In our view, the most appropriate legal form of regional venture fund is a joint stock company, because this form is the most attractive for private investors (founders) of the fund and allows market mechanisms of venture investment priority innovative projects of the region [20]. We have proposed the mechanism of functioning of the regional venture capital fund and it is presented in Fig. 3.

Conclusions. Today it is obvious that the concept of innovation helps to better understand the fundamentals of innovation development. The industrialized countries were able to take the lead on a number of fundamentally important areas by solving the complex problems in the areas of management, science and technology, to create favorable institutional environment for the innovators and entrepreneurs. In Kazakhstan, the formation of the national innovation system is just beginning. Fold modern innovative structures, the ability to develop commercially attractive innovative projects, which are connected to the financing of successful companies. However, this process is slow and is quite limited, since the most important task of the country's transition from the «raw» to the growth of innovation is still not resolved.

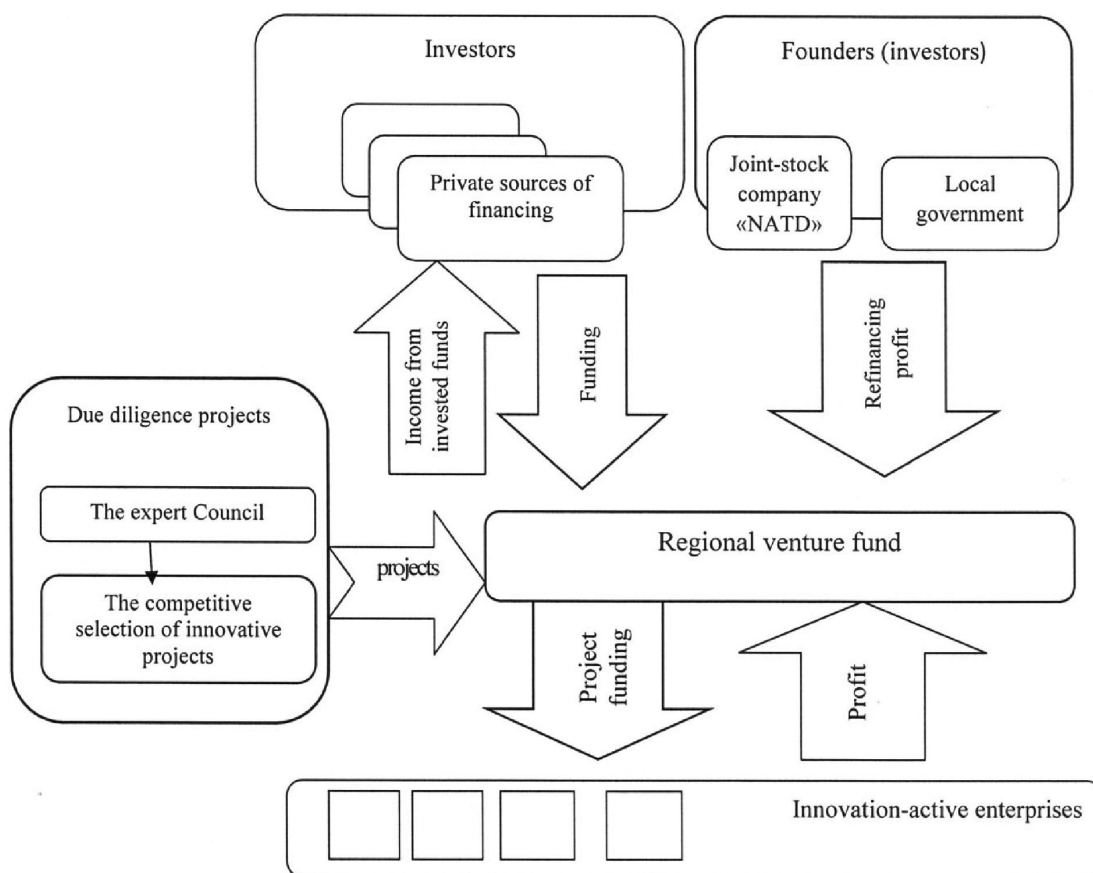


Figure3 - The mechanism of functioning regional venture fund

Source: Developed by the authors according to the results of research

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ИНВЕСТИЦИЯЛЫҚ ЖӘНЕ ИННОВАЦИЯЛЫҚ ҚЫЗМЕТТІҢ ӨНІРЛІК МЕХАНИЗМІ

Аннотация. Қазіргі кезеңде Қазақстанда жүргізіліп жатқан экономикалық өзгерістердің басты ерекшеліктерінің бірі аймақтың инвестициялық-инновациялық қызметін басқарудың өңірлік механизмін қайта құрылымдау болып табылады. Нарықта жеке агент ретінде жұмыс жасай отырып, олар өз рыноктарының бөлшектерін кеңейтіп, қосымша табыс табуға және әлеуметтік-экономикалық артықшылыққа ие болуға мүдделі.

Қазақстан Республикасы өңірлерінің инновациялық әлеуеті деңгейіндегі біршама алшақтыққа маңызды назар аударылады. Аталмыш мақалада Қызылорда облысының мысалы негізінде инвестициялық және инновациялық қызметті дамытудың заманауи мәселелері қарастырылған. Қызылорда облысы мұнай өндіруші аймақ бола тұра, жер қойнауын игеру саласындағы инвестиция айналымы өңір үшін шешуші инновациялық маңызға ие емес. Оған басты дәлел өңірдің инновациялық әлеуетінің интегралды көрсеткішінің бағалануы: Қызылорда облысы инновациялық әлеуеттің төменгі көрсеткішіне ие және жетекші орындарды иеленетін басқа «мұнайлы» өңірлер қатарына енбейді. Бұл мұнай өндіруші компаниялардың өз инновациялық қызметтерін белсендіруіне және өңірді индустриялық жаңаландыруға қатыстыруға қатысты шараларды жүзеге асыру қажеттігін көрсетеді.

Тірек сөздер: инновация, инвестиция, өңір, тікелей әдіс, венчурлық қор.

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Региональный механизм инвестиционной и инновационной деятельности

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Аннотация. Одной из особенностей экономических преобразований, происходящих в настоящее время в Казахстане, является необходимость реформирования механизма регионального управления инвестиционно-инновационной деятельностью территорий, которые, действуя на рынке как самостоятельные агенты, заинтересованы в расширении своих сегментов рынка и получении дополнительного дохода и социально-экономических преимуществ.

Большое внимание уделяется на существенные различия в уровне инновационного потенциала регионов Республики Казахстан. В данной статье рассматриваются современные проблемы развития инвестиционной и инновационной деятельности на примере Кызылординской области. Несмотря на то, что Кызылординская область является регионом нефтяного освоения, оборот инвестиций в сфере недропользования не имеет определяющего инновационного значения для региона. Свидетельством тому является оценка интегрального показателя инновационного потенциала региона: Кызылординская область имеет низкий показатель инновационного потенциала и не входит в число регионов-лидеров с аналогичной «нефтяной составляющей». Это означает, что следует принимать меры по активизации нефтедобывающими компаниями своей инновационной деятельности и участию в индустриальном обновлении региона. Разработанный механизм функционирования регионального венчурного фонда позволяет задействовать дополнительные финансовые инструменты и способен принять на себя риски, как инвесторов, так и гарантов.

Ключевые слова: инновация, инвестиция, регион, вертикальный метод, венчурный фонд.