

## HUMAN POTENTIAL AS A FACTOR OF INNOVATIVE DEVELOPMENT

### Abstract

The article discusses the importance of the formation and development of human potential to achieve the goals of innovative development of the country. For quite a long time in economics, there is an increasing interest in human capabilities, realized in the form of human potential. Innovation processes that occur in all sectors of the economy lead to the formation of an innovative society, the competitiveness of which is determined not so much by tangible assets, as by the level of innovation and intellectual development. The concept of human potential becomes a solid basis for developing programs for the further development of the system of education, science, technology, health care, and the distribution of labor resources. At present, human potential has become the main factor in the development of society, the economy and the state as a whole. It is important not only to know the origins of the emergence and formation of the concept of “human capital”, but also to properly use this valuable resource so that it benefits the national economy. At the state level, it is important to highlight the most priority directions of development and the use of human potential, which will lead to the formation of such an economic development strategy, in the center of which there will be a person with an accumulated stock of knowledge, skills, and innovative ideas. This is especially true for the Kazakh economy, the development of which for the most part is due to the involvement and use of natural resources, while human capital is not always fully used.

Key words: human potential, human development, innovation, innovative potential, innovative development, innovative economy, technology, education, knowledge.

Today it became obvious that the development level of scientific and technical sphere – of science, education, the high technology fields, the world markets of technologies – defines borders between rich and poor countries, creates a basis for a dynamic economic growth. The choice of priorities in scientific and technical sphere has acquired a value, which is beyond prospects of its own development. At the same time, processes of globalisation and growing interdependence of different economies make the task of managing innovative processes more and more difficult and dependent on the ability of each state to correctly designate its own strategic approaches to development of innovative potential.

In the context of the world’s economic globalisation, Kazakhstan faces a number of problems: orientation of the economy on extraction of raw materials, insignificant integration with the world economy, insufficient development of industrial and social infrastructure, general technical and technological backwardness of the enterprises, absence of an effective connection between science and manufacture, low expenses on research and development, etc. To solve these problems Kazakhstan is to build a competitive economy based on knowledge, which would be capable to become the base of public welfare.

The accepted program of the industrially-innovative development of the Republic of Kazakhstan is aimed at achievement of a sustainable development of the country through diversification of economy branches and deviation from the orientation on raw materials; innovations are defined as a major factor for competitiveness of the national economy. High-grade use of innovations for the further dynamical development of the economy and society is possible through realization by the state of a purposeful innovative policy [1].

Innovations became the major factor of economic development, a basis of competitiveness of firms, branches, and national economies. Economy can be considered innovative, if knowledge within it allows generating a continuous stream of inventions which meet dynamically changing requirements, and often even form these requirements.

In 90s, there was a sharp reduction of researches in strategically important directions of scientific and technological development in Kazakhstan, falling in prestige of the scientist and in demand for scientific results, decrease in innovative activity of the enterprises, outflow abroad of experts and intellectual property that has led to decay of the scientific and technological potential, degradation of science intensive manufactures.

In this regard, attention should be paid to the critical problem of modern economics – human development and improvement of human potential. The current global crisis has a negative effect on the reproduction of human development and economic growth of countries in general. Namely, the man and his ability in the modern world is an important factor in economic development and the main force determining the course of social development and its effectiveness.

In developing countries the problem of human development is especially important. It should be pointed out that the global economic crisis has not only material but also social and spiritual foundation that allows us to look for a way out at the qualitative improvement of human society. Socio-spiritual aspect of the crisis tells us that the first crisis is not only in material form, but in the consciousness of man himself. Man must focus its resources on the development of human abilities: an increase in the level of education, health care, improving the spiritual and cultural level of development. All this is necessary to further maintain the viability of the country and its future development.

Application of the systematic approach to formation of an innovative policy in the developed countries has got primary importance, especially in the context of such recent trends in the development of the world economy:

- ♦ the competition for a quality human capital becomes the major characteristic of the world innovative development, growing mobility of the highly skilled personnel also promotes the spread of knowledge;

- ♦ the role of information technologies in the course of knowledge dissemination becomes more and more important for the further growth of innovative activity, processes of knowledge dissemination have gone beyond the borders of separate economies;

- ♦ globalisation forces the companies to compete at more and more high levels of technologies, and at the same time stimulates processes of specialisation and localisation of innovations [2].

The countries which have realised the concept of the systematic approach to implementation of an innovative policy, during a short historical period have managed to create effective national innovative systems, which includes mechanisms for interaction between the state, businesses, science and education, and to achieve an increase in the share of science intensive products in GDP [3].

In information economy there are close interrelations between the parametres of an education system and key parametres of the process of public product reproduction. Logical connection between the work of experts in the field of scientific, engineering and technological maintenance of manufacture and economy development is the most expressed.

The system of higher education has a considerable impact on a national economy. The tendency of transforming educational services into a factor for innovations is increasing. The economic potential of an education system can be named as a measuring instrument for innovations, which reflects the influence of educational institutions on the economic development.

The main task of an education system is a creation of necessary conditions for development and professional formation of people on the basis of national and universal values; realisation of children's rights to upbringing, education, and all-round development, preservation of the native language, culture, national customs and traditions, rights to information awareness and promotion of health. Creating conditions for formation and development of these qualities is more and more often considered as the major task of the education system in the Republic of Kazakhstan.

In the Republic of Kazakhstan, progressive development and education modernisation are possible due to comprehensive support at initiation and implementation of reforms in the educational sphere. The overall aim of educational reforms in Kazakhstan is adaptation of the education system to the new social and economic environment. President of Kazakhstan also has set an aim for the Republic to enter in the number of 30 the most competitive countries of the world. Improvement of the education system plays an important role in achievement of this purpose.

To solve new tasks a number of government programs has been accepted, such as: the Government program of development of education in the Republic of Kazakhstan, the Concept of the 12-year general school education, the Concept of improvement of the preparation and certification system of scientific and pedagogical staff in the Republic of Kazakhstan, the Upbringing concept in the system of continuous education in the Republic of Kazakhstan, the Strategic plan of the Ministry of Education and Science of the Republic of Kazakhstan for 2017–2021, etc. [4].

Development of human potential is a priority problem of the Kazakhstan state policy which is consistently put into practice. Not casually, in December, 2007 the report with which President Nursultan Nazarbayev has addressed to the solemn meeting devoted to Independence Day, has been entitled «Development of human potential – the main value of Independence».

It is obvious, that today it is necessary to use all the available human potential, so that our country could carry out an intellectual breakthrough in the future. For this purpose it is necessary today to make essential investments into public health services, culture and education to form powerful intellectual and creative potential of the Republic of Kazakhstan. It should be noted the words of Pandora Naledi, Minister of Education of South Africa: “Engage of the human capital – is a return on those investments, which directs the state to increase the intellectual potential of the population. After all, investing in human development, you create a key resource for the development of the country”.

Accumulated experience in researches on modern human potential is seen quite necessary and actual, having considerable theoretical and practical value. Therefore, use of this experience in Kazakhstan, of course taking into account historical and national traditions, could prompt faster and less painful advancement of our country in the civilised and developed society.

The task of human development must now be formulated as a key national objective of modernization of a number of contemporary social sectors – education, culture, health, science, which are considered in the first place, as the capitalization of the sector of human potential areas.

Human development is the empowerment of the population, and particularly today, increased spatial mobility, the intensification of professional transitions and the formation of productive mentality. Accordingly, the program of human development should be linked, on one hand, with the creation of objective possibilities and conditions for the population; on the other hand, should appear territorial social and educational programs that make up today’s competence, above all, such as communication, identification, and self-organization.

It is well-known, that each person throughout his or her life accumulates and updates the knowledge through various educational forms and institutions. Necessity of such knowledge replenishment is dictated both by conditions of adaptation to environment, and objective social and economic conditions. The learning path for each person is continuous. As it is noted by the First President «lifelong learning» becomes an essential condition for successful professional development in the fast changing world of high technologies. Use of the knowledge obtained at one certain stage of professional activity will be insufficient. Knowledge and the skills received in the childhood and youth cannot guarantee success for the whole life. Successful professional development will mean constant updating of skills and knowledge to correspond to the fast growing professional requirements, changing habitual models of education, work and life as a whole.

Absence of a complex, systematic approach to management of innovative processes constrains the development of innovative potential of the Republic of Kazakhstan and does not allow to designate the right priorities of its further development.

The following main problems can be named, which negatively influence development of the domestic innovative potential while unsolved:

- ♦ incompleteness of the majority of scientific developments of technologies and products conducted with the purpose of their carrying out to the market. It sharply reduces the value of offered technologies in the opinion of potential partners;

- ♦ absence of modern mechanisms for introduction of technological innovations and their launching to the market. In market conditions, the mechanism of innovation development is inseparably linked with small innovative business, which can be very risky, but also highly profitable in case of success. In developed economies there is a special sector of national economy, which provides necessary conditions for development of small innovative business;

- ♦ absence of developed infrastructural elements of assistance to innovative projects, such as technological parks and specialised business incubators, a network of venture financing funds, special financial mechanisms of support for firms at a stage of their fast growth, certificated appraisers of firms and intellectual property, etc;

- ♦ absence of solvent demand for high technologies and industrial innovations in the home market. The science and scientific and technical activity relate to the sphere of services and these services should be demanded by the market. Unfortunately, the domestic market of scientific services and

high technology production is very small now. The majority of Kazakhstani enterprises cannot afford “buying” science services [5].

Accumulated in the world of free capital did not find a decent application of innovative industries in solving many social problems and returned to the scope of traditional business. Do not identify new civilizational values of type of information technology or social investments, investors began to invest in land, real estate and energy. These three fundamental economic asset values are represented at all times. However, the situation turned first to the mortgage crisis in the U.S., and later in the financial and economic crisis in the world that gave rise to a violation of the financial unit of the world system as a whole.

The exit from the created position can be found only under condition of the conscious coordinated approach to the decision of this problem in which basis the qualitative increment of human potential should lie.

For fulfilling the available considerable potential in forming innovative economy in the country the following factors are necessary: development of institutional bases of modern economy and a forced growth of material base, including mass development of modern communication media.

To implement this plan, government support is needed (grants, engineering, service, business incubation, etc.), as the performers of technological tasks should be the institutes of innovative development, research institutes, universities, domestic enterprises, investors, etc.

The main accent in the innovative policy should be made on the stimulation of economic efficiency of enterprises through a transfer of technologies, technical modernisation, improvement of business processes, introduction of management technologies. It is necessary a shift of support towards stimulation of qualitative improvement of characteristics of the produced goods, development of new competitive products and technological processes for their manufacturing.

The following measures of support of innovative activity should be carried out:

- ◆ allocation of innovation grants, including those on conditions of co-financing;
- ◆ project financings, including financing aimed at creation of joint ventures with anchor (brand) investors in priority branches;
- ◆ realisation of complex propaganda activities including implementation of PR-strategy, competitions among youth, workers of enterprises, and businessmen, seminars, exhibitions, conferences and other actions, which will form among population a favorable opinion about innovations and innovators.

Creation and introduction of high technologies and competitive production in the sectors of “the economy of the future” will allow Kazakhstan to create bases of postindustrial economy. Active fulfillment of the forced industrial and innovation policy will raise the stability of the domestic economy in relation to cyclic crises and will raise the well-being of Kazakhstani people.

During the last years in Kazakhstan there were favorable economic conditions. The Republic is recognised as one of leaders based on macroeconomic parameters of growth not only among the states of CIS, but also among the countries in which consecutive transformation of economic systems is carried out. There were radical restructurings in the economy of the state, which provided formation of market relations and consecutive integration of the country into global economy. Stabilisation and development of the economy allow increasing state expenses on education sphere that makes it possible to constantly upgrade the infrastructure, the material base and to improve the quality of education [6].

The new course of the economy of Kazakhstan is focused on use of natural resources and development of high technology manufactures on the basis of scientific discoveries and use of the human capital. Thus, in the current conditions the requirement for education is urgent and, accordingly, an increase in investments in the development of the intellectual capital is projected.

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### Аңдатпа

Мақалада мемлекеттің инновациялық даму мақсатына жету үшін адами әлеуетті құру әрі дамытудың маңыздылығы туралы мәселелер қарастырылған. Адами әлеует нысанында жүзеге асырылатын, адамзат қабілеттілігіне экономикалық ғылымда ұзақ жылдар бойы қызығушылық артуда. Барлық экономика салаларында болып жатқан инновациялық үрдістер инновациялық қоғамның қалыптасуына әкеледі, ал оның бәсекеге қабілеттілігі тек материалдық активтермен емес, инновациялық интеллектуалды дамуында болып отыр. Адами әлеует тұжырымдамасы бұл білім беру, ғылым, техника, денсаулық сақтау жүйесін одан әрі дамыту, еңбек ресурстарын бөлу бағдарламаларын әзірлеу үшін берік негіз болады. Қазіргі уақытта адами әлеует қоғам, экономика және тұтастай мемлекеттің дамуының басты факторына айналды. Оны зерттеу кезінде «адами капитал» тұжырымдамасының пайда болуы мен қалыптасуының бастауын біліп қана қоймай, сондай-ақ ұлттық экономикаға пайда әкелу үшін осы бағалы ресурстарды дұрыс пайдалану да маңызды болмақ. Мемлекеттік деңгейде адами әлеуетті дамыту мен пайдаланудың неғұрлым басым бағыттарын бөліп көрсету маңызды, сонымен бірге экономикалық стратегиясын қалыптастыруға алып келетін бұл орталықта білімі, дағдылары, инновациялық идеялар жинақталған қоры бар адам тұруы қажет. Бұл әсіресе қазақстандық экономика үшін өзекті болады, ал оның дамуы көбінесе табиғи ресурстарды тарту және пайдалану есебінен болмақ. Осы кезекте айта кететін жайт, адами капитал әрдайым толық көлемде іске асырыла бермейді.

Тірек сөздер: адами әлеует, адами даму, инновациялар, инновациялық әлеует, инновациялық даму, инновациялық экономика, технологиялар, білім беру, білім.

### Аннотация

В статье рассматриваются вопросы важности формирования и развития человеческого потенциала для достижения целей инновационного развития страны. Достаточно продолжительное время в экономической науке возрастает интерес к человеческим способностям, реализуемым в форме человеческого потенциала. Инновационные процессы, которые происходят во всех сферах экономики приводят к формированию инновационного общества, конкурентоспособность которого определяется не столько материальными активами, сколько уровнем инновационно-интеллектуального развития. Концепция человеческого потенциала становится прочной основой для разработки программ дальнейшего развития системы образования, науки, техники, здравоохранения, распределения трудовых ресурсов. В настоящее время человеческий потенциал стал главным фактором развития общества, экономики и государства в целом. При его изучении важно не только знать истоки зарождения и формирования концепции «человеческого капитала», но и правильно использовать этот ценный ресурс, чтобы он приносил пользу национальной экономике. На государственном уровне важно выделить наиболее приоритетные направления развития и использования человеческого потенциала, что приведет к формированию такой экономической стратегии развития, в центре которой будет стоять человек с накопленным запасом знаний, навыков, инновационных идей. Это особенно актуально для казахстанской экономики, развитие которой большей частью происходит за счет вовлечения и использования природных ресурсов, в то время как человеческий капитал не всегда задействован в полной мере.

Ключевые слова: человеческий потенциал, человеческое развитие, инновации, инновационный потенциал, инновационное развитие, инновационная экономика, технологии, образование, знания.