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**ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ**

БАЯНДАМАЛАРЫ

ДОКЛАДЫ

**НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН**

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EXPERIMENTAL RESEARCH OF NEW GENERATION SOLAR CELLS

Abstract. Experimental work was done on a physical model of a solar photovoltaic battery with very high technical and economic efficiency due to the dispersion and focusing of solar radiation by wavelengths and due to the installation of various photocells at each wavelength.

Experimental data and their processing showed that the power of the proposed design of the solar cell in terms of photoconverters is 1.46-1.48 times higher compared to the use of gallium arsenide according to conventional technology, and 4.15-4.2 times higher than single-crystal silicon. Moreover, the proposed solar cells require much less photocells, which significantly increases economic efficiency.

Key words. Solar cell, holographic concentrator, photocells, technical and economic parameters of solar cells.

In world practice, the improvement of solar cells heads toward the increase in the efficiency of solar cells with silicon being the most widely used. For instance, at the world congress of scientists and engineers in the framework of EXPO-2017 held in 2017 in the city of Astana (Nur-Sultan), it was announced that in the coming years the efficiency value of about 25% will be achieved [1].

At the same time, increasing the conversion efficiency of solar radiation is possible not only as a result of increasing the efficiency of photocells, but also due to the increase in the efficiency of solar cells [2, 3] by means of dispersing rays by wavelengths, their separate concentration. A photocell is installed at each separately focused wavelength. In this case, thermal radiation does not hit the photocells, and the required number of photocells is many times reduced.

Figure 1 shows a process chart of one option of the solar cell with increased efficiency (in line with patent RK #31796 (2016) [4].

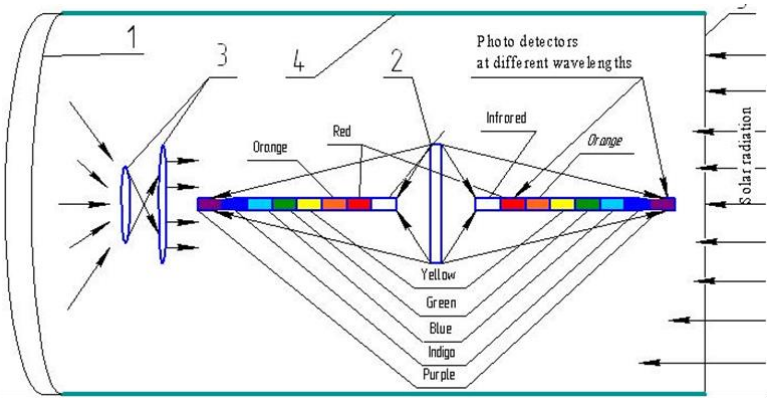

Figure 1 – Process chart of the solar cell

The mirror 1 with a radius of, for example, 30 cm concentrates sun rays, and the parallel rays through collimator lenses 3 hit the holographic concentrator 2 with a radius of 5 cm. The mirror area $S_з$ is 2,826 cm^2. The area of the concentrator $S_к$ = 78.5 cm. The concentration of solar stream $K = S_з/S_к$ = 2,826/78.5 = 36 times. Figure 1 shows that the photoelectric converters are located on both sides of the holographic concentrator, onto which sun rays come from two sides: single radiation of solar energy on the right, and thirty-six-fold one on the left. At ideal performance, the holographic concentrator reflects about 60% and transmits 40% of the sun rays.

Thus, 40% of single solar radiation and 60% of thirty-six-fold solar radiation hit the left photoreceivers, and 60% of single solar radiation and 40% of thirty-six-fold solar radiation fall onto the right photoreceivers:

$$\Phi_{лев} = 0{,}4*\Phi + 0{,}6*36*\Phi = 22\Phi \quad (1)$$

$$\Phi_{прав} = 0{,}6*\Phi + 0{,}4*36*\Phi = 15\Phi \quad (2)$$

where, Φ is single photoemission; $\Phi_{лев}$ is photoemission onto the left photoelectric converter; $\Phi_{прав}$ is photoemission onto the right photoelectric converter.

To examine the efficiency of conversion of solar radiation using a holographic concentrator and to measure the current-voltage characteristics of photoconverters, a physical model of the currently developed solar sell was produced. Figures 2, 3, 4 show photographs of a physical model without a mirror.

The holographic concentrator disperses solar radiation by wavelengths (by rainbow colors), focuses them separately, the area of each focused light (red, orange, etc.) is about 0.25 cm^2. To determine the efficiency of each wavelength, the photoconverters are mounted on a moveable bar (Figure 2). The moveable bar is installed inside the physical model of the solar sell (Figures 3, 4).

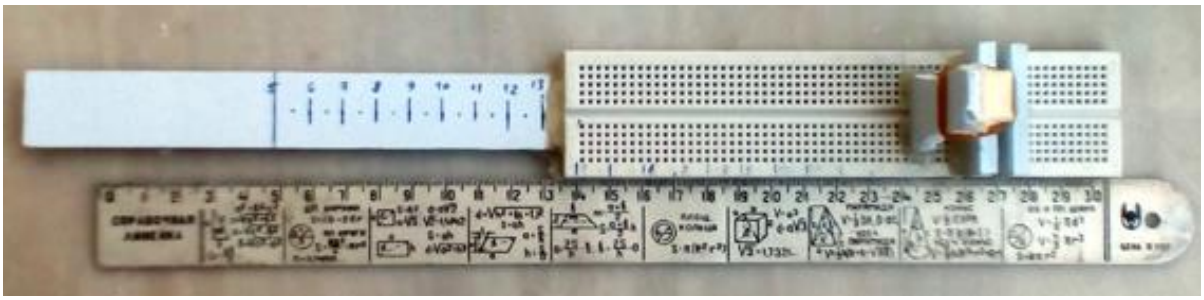

Figure 2 – Fixing a photoconverter onto a moveable bar

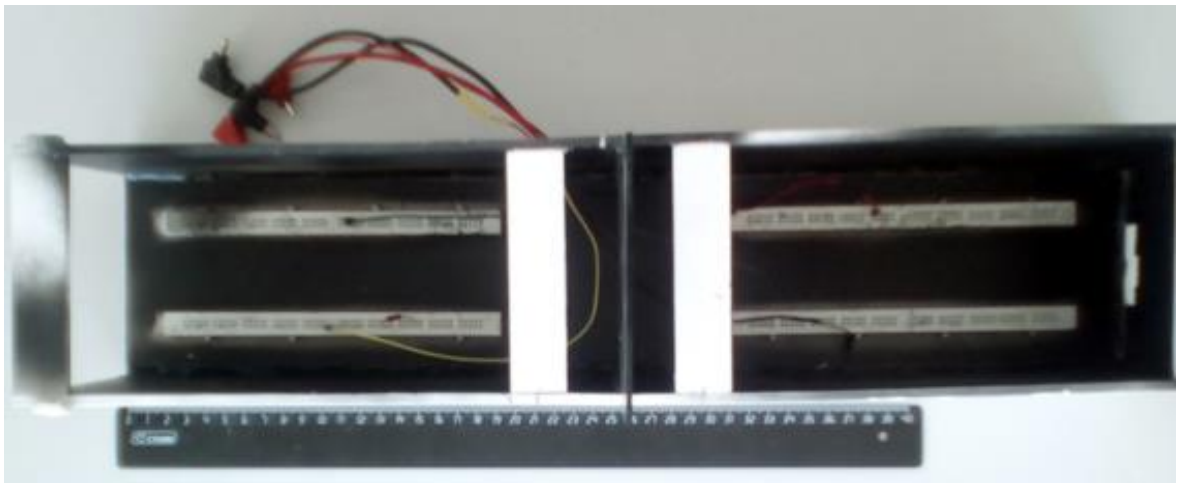

Figure 3 – Physical model of the solar sell (top view)

Figure 4 - Physical model of the assembled solar sell

To establish the photoconversion power of monocrystalline silicon (MonoSi) on an area of 0.25 cm^2, a 1 cm^2 panel was covered with a protective screen with a 0.25 cm^2 opening (Figure 5). The open circuit voltage V (*V*) and short circuit current I *(A*) were measured. Next, the output electric power P (*W*) was calculated. The measurements were made in 1 cm increments and the results are given in Table 1.

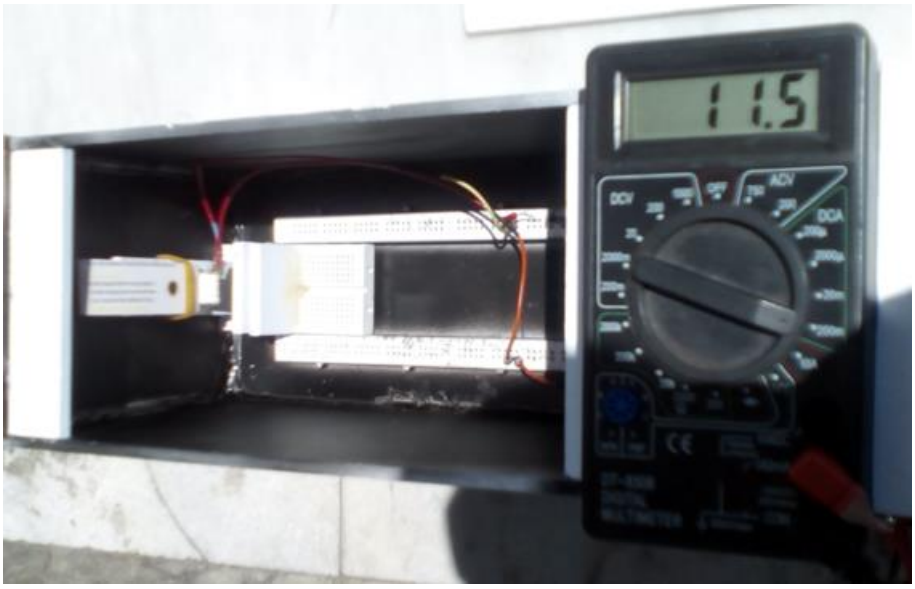

Figure 5 – Measuring current-voltage characteristics of photoconversion of single-crystal silicon (MonoSi) on the area of 0.25 cm^2

Table 1 - Variability of the photoconversion power of single-crystal silicon (MonoSi) over the area of 0.25 cm^2 depending on the wavelength of solar radiation

Colour	Red	Or	Yel	Green	Green	Light blue	Blue	Blue	Viol	Viol
Wavelength, nm	700	600	575	565	535	490	460	440	410	380
Distance from the concentrator, cm	13	14	15	16	17	18	19	20	21	22
V, V	1.87	1.85	1.83	1.81	1.79	1.77	1.75	1.73	1.71	1.69
I, A	0.077	0.076	0.075	0.074	0.074	0.073	0.072	0.071	0.070	0.069
P, W	**0.144**	**0.141**	**0.138**	**0.135**	**0.132**	**0.129**	**0.126**	**0.123**	**0.120**	**0.117**

The decomposition (dispersion) of solar energy begins at a distance of 13 cm from the holographic concentrator.

Figure 6 shows a curve of dependence of the photoconversion power of single-crystal silicon (MonoSi) over the area of 0.25 cm^2 (W) on the wavelength of solar radiation.

To examine the photoconversion power of amorphous silicon **(**AmSi) over the area of 0.25 cm^2, a 32 cm^2 panel was used and covered with a protective screen with a 0.25 cm^2 opening (Figures 7 and 8). The open circuit voltage V (*V*) and short circuit current I *(A*) were measured. Next, the output electric power P (*W*) was calculated. The measurements were made in 1 cm increments and the results are given in Table 2.

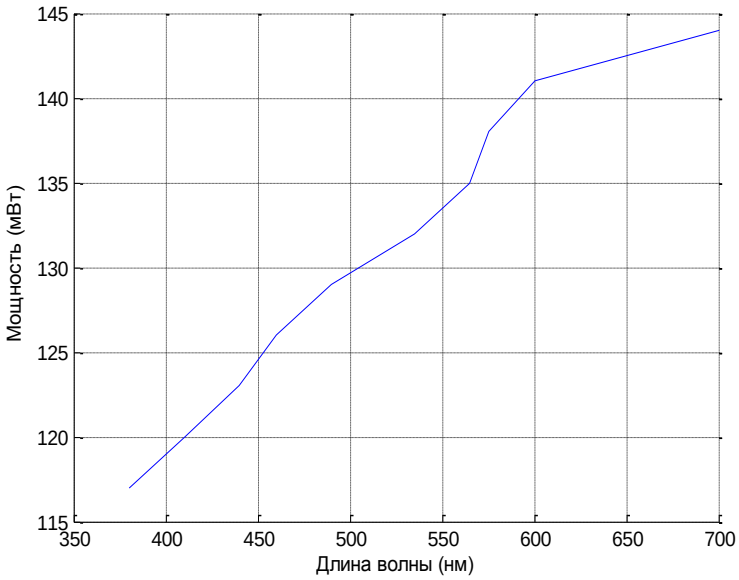

Figure 6 - The curve of dependence of the photoconversion power of single-crystal silicon (MonoSi) over the area of 0.25 cm^2 (W) on the wavelength

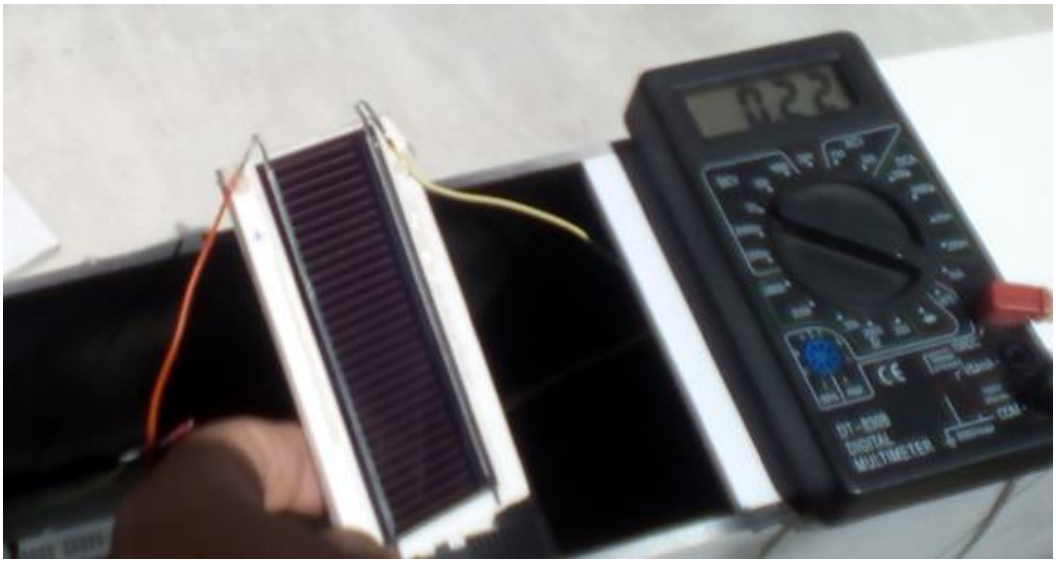

Figure 7 – Measuring the short circuit current of the amorphous silicon panel

Figure 8 – Measuring the photoconversion voltage and current over the area of 0.25 cm^2

Table 2 - Variability of the photoconversion power of amorphous silicon (AmSi) over the area of 0.25 cm^2 depending on the wavelength

Colour	Red	Or	Yel	Green	Green	Light blue	Blue	Blue	Viol	Viol
Wavelength, nm	700	600	575	565	535	490	460	440	410	380
Distance from the concentrator, cm	13	14	15	16	17	18	19	20	21	22
V, V	0.1	0.1	0.13	0.15	0.16	0.13	0.1	0.1	0.1	0.1
I, A	0.07	0.085	0.1	0.15	0.155	0.17	0.11	0.07	0.06	0.06
P, W	**0.007**	**0.0085**	**0.013**	**0.0225**	**0.0248**	**0.0221**	**0.011**	**0.007**	**0.006**	**0.006**

Figure 9 shows a curve of dependence of the photoconversion power of amorphous silicon (AmSi) over the area of 0.25 cm^2 (W) on the wavelength of solar radiation.

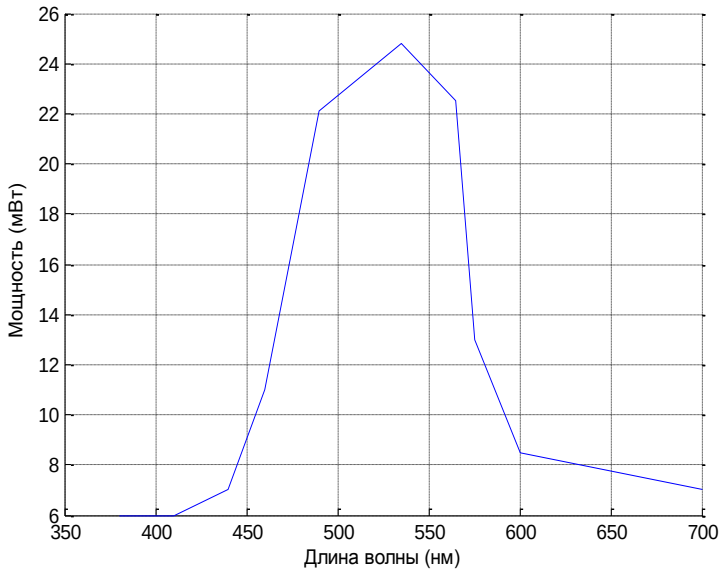

Figure 9 - The curve of dependence of the photoconversion power of amorphous silicon (AmSi) over the area of 0.25 cm^2 (W) on the wavelength

To establish the photoconversion power of gallium arsenide **(**GaAs), a 32 cm^2 panel was used valued at $575. The open circuit voltage V = 2.88 *V* and short circuit current I = 0.48*A* were measured (Figure 10). Next, the output electric power P = 2.88·0.48 = 1.3824 *W* was calculated.

Figure 10 – Establishing the photoconversion power of gallium arsenide **(**GaAs)

To establish the photoconversion power of gallium arsenide **(**GaAs), a 0.25 cm^2 area of the panel was covered with a protective screen with a corresponding opening (Figure 11). The measurements were made in 1 cm increments and the results are given in Table 3.

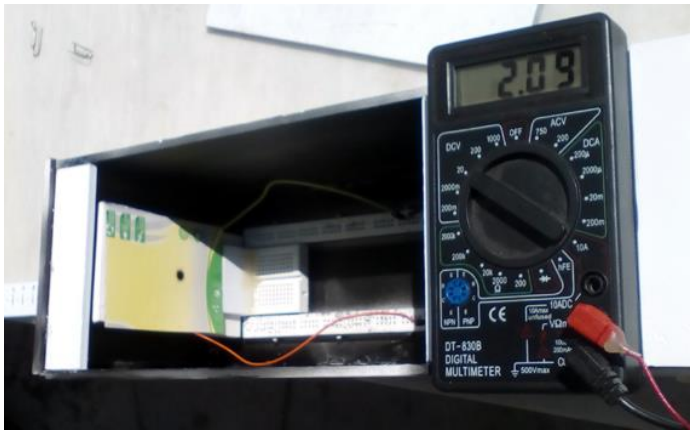

Figure 11 - Measuring current-voltage characteristics of photoconversion of gallium arsenide **(**GaAs) on the area of 0.25 cm^2

Table 3 – Variability of the photoconversion power of gallium arsenide **(**GaAs) over the area of 0.25 cm^2 depending on the wavelength

Colour	Red	Or	Yel	Green	Green	Light blue	Blue	Blue	Viol	Viol
Wavelength, nm	700	600	575	565	535	490	460	440	410	380
Distance from the concentrator, cm	13	14	15	16	17	18	19	20	21	22
V, V	2.04	2.027	2.016	2.006	1.998	1.992	1.988	1.984	1.98	1.977
I, A	0.508	0.499	0.492	0.487	0.484	0.481	0.480	0.478	0.476	0.474
P, W	**1.035**	**1.011**	**0.991**	**0.978**	**0.967**	**0.959**	**0.953**	**0.948**	**0.942**	**0.938**

Figure 12 shows a curve of dependence of the photoconversion power of gallium arsenide (GaAs) over the area of 0.25 cm^2 (W) on the wavelength of solar radiation.

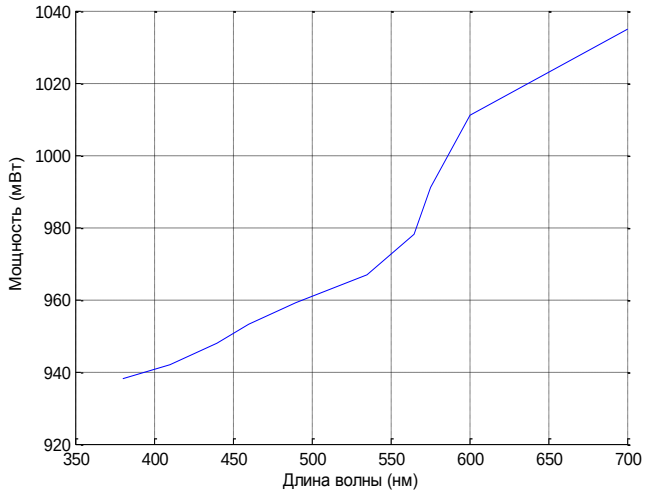

Figure 12 - The curve of dependence of the photoconversion power of gallium arsenide (GaAs) over the area of 0.25 cm^2 (W) on the wavelength

Figure 13 shows the dependence of intensity of photoconversion of solar energy on the wavelength of solar radiation using different photoconverters [5].

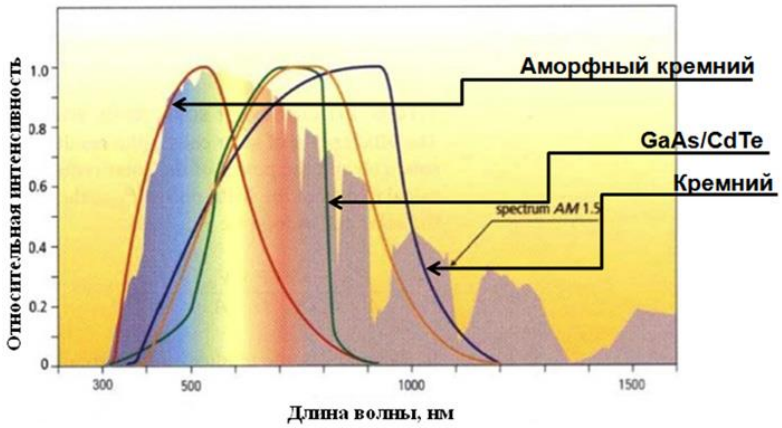

Figure 13 - Dependence of intensity of photoconversion of solar energy on the wavelength of solar radiation using different photoconverters
Относительная интенсивность – Relative intensity
Аморфный кремний – amorphous silicon
Кремний – Silicon
Длина волны – Wavelength, nm

By analyzing the curves in Figure 13 and the obtained experimental curves, it is possible to conclude that they are fully consistent. Moreover, the experimental data show that the photoconversion power of gallium arsenide (GaAs) is 7 times more than that of single-crystal silicon (MonoSi) and 42 times more than that of amorphous silicon (AmSi) on the area of 0.25 cm^2 after the holographic concentrator.

According to the invention protected by the RK patent No. 31796 (2016) [4], to produce electrical power using the physical model of the solar cell, ten 0.25 cm^2 gallium arsenide (GaAs) [6] photoreceivers valued at $8 each are used.

Figure 14 shows an electric circuit diagram of photoconverters.

Using formulas 1 and 2, the power of the photoconverters on the left of the holographic concentrator is multiplied by 22, and on the right, by 15. The obtained values are listed in Table 4. Here, the photocell was installed only at the focused wavelength of solar radiation, and not at regular intervals from the holographic concentrator as in the previous experiments.

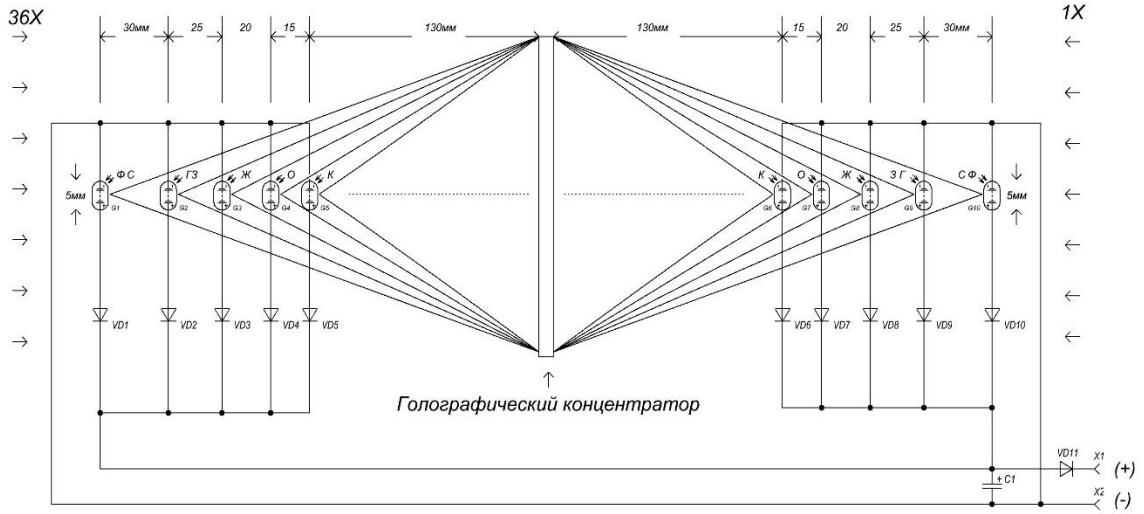

Figure 14 – The electric circuit diagram of photoconverters
Голографический концентратор - Holographic concentrator

Table 4 – Power of photoconverters of the entire solar cell

Color	Vio	Bl+Light bl	Gre	Yel+Or	Red	Red	Yel+Or	Gre	Bl+Light bl	Vio
Wavelength, nm	380	475	535	580	700	700	580	535	475	380
Distance from the concentrator, cm	22	19	16,5	14,5	13	13	14.5	16.5	19	22
P, W	0.938	0.953	0.972	1.000	1.035	1.035	1.000	0.972	0.953	0.938
Power on the right and left of the concentrator	20.636	20.966	21.384	22	22.77	15.525	15	14.58	14.295	14.07

The total power of the solar cell with ten 0.25 cm^2 gallium arsenide (GaAs) [6] photoconverters will be 181 W.

The cost of 10 photoconverters will be $80, therefore the cost of 1W of electric energy converted by the proposed solar cell will be $0.44/W.

The application of gallium arsenide (GaAs) [6] photoconverters in traditional solar cells to convert solar energy over the area of 2,826 cm^2 will require $S_з/S_{фпAmSi}$ = 2,826 cm^2/ 32 cm^2 = 88 photoconverters worth $575 each. Therefore, the total cost will be $50,600 with an output power of $P_з$ = 1.3824 W·88 = 122 W. Consequently, the cost of 1W of electric energy converted by 88 gallium arsenide (GaAs) panels in traditional solar cells will be $414.75/W.

It is evident that the use of gallium arsenide in traditional solar cells is not acceptable, while the proposed design of the solar cell ensures the use of gallium arsenide with high economic efficiency compared to even widely used single-crystal silicon.

So, the use of single-crystal silicon (MonoCrSi) [7] photoconverters to convert solar energy over the area of 2,826 cm^2 will require $S_з/S_{фпAmSi}$ = 26826 cm^2/132 cm^2 = 21 photoconverters worth $55 each at an output power of $P_з$ = 42 W. In this case, the cost of 1W of electrical energy converted by 21 single-crystal silicon panels will be $1.3/W.

It is evident that the economic efficiency of the proposed solar cell using gallium arsenide 2.95 times exceeds the traditional cells with single-crystal photocells over the 2,826 cm^2 solar radiation area.

The cost reduction of the proposed solar cell can be achieved by using single-crystal silicon, for example, in red and orange lights. At the same time, the efficiency of converting solar radiation into electrical radiation will somewhat decrease.

Table 5 shows the parameters of the proposed solar cell and that of a traditional ones. It does not account for the cost of mirrors, collimator lenses and the holographic concentrator. Accounting for these parameters will only insignificantly reduce the value of the proposed design of solar cells. Moreover, the

table does not include other costs, namely: the cost of accumulators, charge controllers, inverters, etc., which are similar for all compared solar cells.

In addition to the above-mentioned technical and economic advantages, the proposed design of solar cells occupies a much smaller area of land allotment.

Table 5 – Performance parameters of the proposed and traditional solar cells

The proposed solar cell				Traditional solar cells based on			
				Gallium arsenide		single-crystal silicon	
Mirror radius, cm	Total P, W	Cost of 1W, $/W	Mirror area, sq. cm	Total P, W	Cost of 1W, $/W	Total P, W	Cost of 1W, $/W
30	181	0.44	2,826	122	416	43	1.3
40	318	0.25	5,024	217	416	76	1.3
50	495	0.16	7,850	339	416	119	1.3

The results of powers of solar cells obtained in experiments and given in Table 5 show that the power efficiency of the proposed design in terms of photoconverters is 1.46-1.48 times higher than that of gallium arsenide using traditional technology, and 4.15-4.2 times higher than single-crystal silicon. This is because infrared radiation does not hit a photocell, and the visible spectrum is dispersed (decomposed) by wavelengths and only one wavelength hits a photocell.

Moreover, the proposed solar cells require much less photocells. For example, the considered physical model of the solar cell requires ten 0.25 cm^2 photocells, regardless of the cross-sectional area of solar radiation, i.e. in this case regardless of the mirror area. Whereas the traditional design requires photocells with an area equal to the cross-sectional area of solar radiation, which in this case equals to the mirror area. In this connection, regardless of the cross-sectional area of the utilized solar radiation, the cost of conversion of light energy of the sun into electrical energy remains constant, while in the proposed design of the solar cell it is sharply reduced (Figure 15).

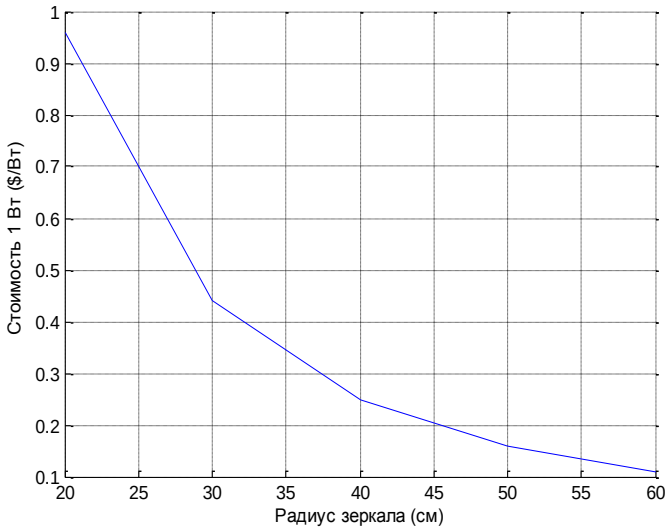

Figure 15 – Dependence of electricity cost on the cross-sectional area of solar radiation (mirror radius) in the proposed design of the solar cell

Стоимость 1 Вт ($/Вт) – Cost of 1W (($/W). Радиус зеркала - Mirror radius

As Figure 15 demonstrates, there is a sharp decrease in the cost of energy as the cross-sectional area of solar radiation increases. As already noted, this ensues from the fact that the number of photocells in the proposed design of the solar cell does not change, it remains constant.

Table 5 shows that the economic efficiency of the proposed design of the solar cell with the use gallium arsenide photoconverters will be 2.95 to 8.12 times compared with the use of single-crystal silicon in traditional cells, and 945.45 – 2,600 times compared with the use of gallium arsenide in traditional cells.

Table 5 does not account for additional costs for the mirror and collimator lenses as well as the cost of the holographic concentrator. When taken into account, their effectiveness will slightly decrease, but not significantly, since the cost of collimator lenses and the holographic concentrator is much less than the cost of photocells, it remains constant, and only the cost of the mirror depends on its size.

Thus, the obtained experimental results and their processing convincingly demonstrate the efficiency of the proposed design of solar cells.

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Д.А. Қонаев атындағы Тау-кен ісі институты

ЖАҢА БУЫН КҮН БАТАРЕЯЛАРЫНЫҢ ТИІМДІЛІГІН ЭКСПЕРИМЕНТТІК ЗЕРТТЕУ

Аннотация. Толқын ұзындығы бойынша күн сәулесін диспергирлеу және фокустау және толқынның әр бір ұзындығына әр түрлі фотоэлементтер орнату есебінен өте жоғары техникалық-экономикалық тиімділігі бар күн фотоэлектрлік батареяның физикалық үлгісімен тәжірибелік жұмыстар жүргізілді.

Тәжірибелік мәліметтер және оларды өңдеу күн батареялары құрылымының фототүрлендіргіш деңгейін-дегі қуаты дәстүрлі технология бойынша галлий арсенийдің пайдалануымен салыстырғанда 1,46–1,48 есе, ал монокристалды кремний 4,15–4,2 есе жоғары екенін көрсетті. Бұл ретте ұсынылған күн батареялары үшін көрсетілген фотоэлементтерден бірнеше есе аз талап етіледі, бұл экономикалық тиімділікті айтарлықтай арттырады.

Түйін сөздер. Күн батареясы, голографиялық концентратор, фотоэлементтер, күн батареяларының техника-лық-экономикалық көрсеткіштері.

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ЭКСПЕРИМЕНТАЛЬНЫЕ ИССЛЕДОВАНИЯ ЭФФЕКТИВНОСТИ СОЛНЕЧНЫХ БАТАРЕЙ НОВОГО ПОКОЛЕНИЯ

Аннотация. Проведены экспериментальные работы с физической моделью солнечной фотоэлектрической батареи с весьма высокой технико-экономической эффективностью за счет диспергирования и фокусировки солнечного излучения по длинам волн и установки на каждую длину волны различные фотоэлементы.

Экспериментальные данные и их обработка показала, что мощность предлагаемой конструкции солнечной батареи на уровне фотопреобразователей выше по сравнению с использованием арсенида галлия по традиционной технологии в 1,46 – 1,48 раза, а монокристаллического кремния – в 4,15-4,2 раза. При этом для предлагаемых солнечных батарей требуется многократно меньше указанных фотоэлементов, что существенно повышает экономическую эффективность.

Ключевые слова: солнечная батарея, голографический концентратор, фотоэлементы, технико-экономичес-кие показатели солнечных батарей.

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THE ORIGIN OF THE DEPRESSION LAKE SYSTEMS TENIZ NORTHERN KAZAKHSTAN

Abstract. The article discusses the origin of the system of peculiar lake basins of Northern Kazakhstan, called tenis - steppe seas, due to the vast areas. With deep incision of the basins of the shadows, so that the water level marks in them are below the edge in the Irtysh channel at the same latitudes, the depths of the highly saline lacustrine water column are insignificant. The article provides a review of the views of many authors on the genesis of tenises: L.S. Berg, Ya.S. Edelstein, A.S. Kes, K.N. Pestovsky, E.N. Posokhova, I.A. Volkov, who linked their origin with various exogenous processes: the remainder of the Oligocene sea or a huge ancient stream, the result of leaching of salts followed by compaction of rocks and deflation, inter-delta depressions, sor-deflation troughs, and others V.V. Goian (1968) for the first time came to the conclusion that tectonic processes are the main factors in the formation of the basins of shadows. The reconstruction of the buried topography according to drilling data confirmed the findings of V.V. Goian. The crystalline basement of the territory for the development of tenises is fragmented into separate blocks that have shifted relative to each other, and the basins of tenises are confined to tectonic depressions.

Keywords. Tenizas - steppe seas, tectonic depressions, lakes, basins, origin.

One of the features of the flat territory of the north-eastern outskirts of the Republic of Kazakhstan is the presence of a system of peculiar basins of salt and bitter-salt lakes, which are called tenis - steppe seas (Seleteniteniz, Ulkenkara, Teke, Kyzylkak, Kishikara, Shaglyteniz, etc.). These lakes have huge water areas, a large incidence of basins relative to the general surface of the plain with relatively insignificant water thicknesses, so that the water level marks in them are below the water edge in the Irtysh channel at the same latitudes.

The plain territory of the north-eastern outskirts of the Republic of Kazakhstan occupies a border position between the Omsk Depression of the West Siberian Plain and the slopes of the Kazakh small hills - the Kazakh folded country of Sary-Arka. The dividing spaces between the lake basins are represented by a wide wave plain, where the relative elevations barely reach 10-15 m. The absolute heights of the plain, generally inclined to the north-east towards the Omsk Depression, are about 120-135 m. Wide flat ridges stand out in the relief of the plain and the same wide, indistinctly shaped hollow depressions, in the bottoms of which there are small lakes, often in the form of chains. The slopes of the shadows of the shadows are cut by numerous valleys of mainly temporary watercourses.

The boundary position of the territory under consideration determined the nature of its structural elements, the history of tectonic development, the geological structure, which are reflected in the features of the modern relief, including those related to the origin of shadows. The boundary position at the junction of large tectonic structures of the Epigercin West Siberian Plate and the Paleozoic Kazakh Shield, experiencing multidirectional movements of the opposite sign along the vertical, for many tens of millions of years contributed to long-term stresses that cause discontinuous discontinuities in the rocks of the crystalline basement. These processes led to the fragmentation of the crystalline rocks of the basement into a system of blocks, the multidirectional movements of which led to the presence of a very dynamically

developing structure that lies at the base of the territory under consideration. Raises of the Kazakh shield, accompanied by concomitant denudation processes, and the immersion of the West Siberian plate, accompanied by accumulation processes, turned this structure into a transit zone of the lithodynamic flow, which has a direction in the direction of the Omsk Depression (Omsk syncline). The structure of the foundation can be traced in all horizons of the platform cover and grows due to the northeast border of the Prikazakhstan monocline. According to F. Zh. Akiyanova, only at the neotectonic stage, as a result of bending, did the Neogene sediment thickness accumulate up to 120 m, and the total amplitude of the latest deformations of the Irtysh depression averages -100, - 140 m, decreasing in the instrument parts to + 20 m. [one].

The question of the origin of shadows is interesting, since these lakes have morphology and morphometry not typical of flat lakes. The tectonic genesis of tenises was first expressed by V.V. Goian [2], who uses drilling data in his research. L.S. Berg [3], the origin of the basins of the shadows associated with various exogenous processes. Ya.S. Edelstein [4], A.S. Kes [5], K. N. Pestovsky [6], E.N. Posokhov [7], I.A. Volkov [8] and others, explained the origin of the basins by the remains of the Oligocene Sea, the result of leaching of salts, followed by compaction of rocks and deflation, inter-delta depressions, sor-deflation troughs, etc.

Conclusions V.V. Goian was supported by research conducted on the basis of the "Groundwater Cadastre of the USSR ..." [9], containing information from prospecting wells for water, as well as deep reference wells, many of which covered the entire thickness of sedimentary bedding of the platform cover up to crystalline basement rocks that made it possible to reconstruct the buried relief of different ages [10,11]. For the purpose of tracking the stages of forming the topography of the territory, the most informative is the buried surface of the deposits of the Chegan Sea, the transgression of which liberated the southern plains of Western Siberia about 40 million years ago. The primary surface of Cheganian deposits, represented mainly by blue-green clays of high thickness, is a marking horizon that can be clearly seen in the sections of the platform cover exposed by the wells. Another marking horizon is the surface of crystalline basement rocks. The deformations of the marking horizons indicate the nature and amplitudes of the displacement of the blocks lying at the base of the border zone of the aforementioned interacting structures of the described territory.

To identify the dependence of the modern surface structure on a similar surface structure of buried surfaces formed by marking horizons, the spatial and vertical positions of the most significant elements of the modern and buried topography are compared.

To analyze the buried topography of the described area, we used a scheme constructed in isohyets along the roof of the Oligocene Chegan and Paleozoic deposits [10].

Stratoisohypses, drawn through 20 m, show the current position of the roof of Chegan deposits and crystalline basement rocks. So, in the southern part of the region there are no Chegan deposits, and rocks of the Mesozoic and Paleozoic, which often go directly to the day surface (Paleozoic), lie close to the surface. The bedrock of the Kazakh shield, represented by granites, granodiorites, porphyries, quartzite's, extends into the described region in the form of a solid massif from the southwest. The surface of crystalline Paleozoic rocks drops very steeply to the north, northeast, and east of the ledge, i.e. towards the lakes. Wells located on the southern and northern shores of Lake. Kishi - Karaoy with a depth of 350 and 420 m did not reach the foundation. The fall of the surface of the Paleozoic rocks is more than 15 m / km.

From the aforementioned protrusion of the Paleozoic rocks to the north-west, north, northeast and east, the roof marks of the marine Oligocene decrease. The Paleozoic ledge is bordered by a wide strip with a relatively small drop lying at heights of 90-120 m. This strip occupies the space between the ledge of crystalline rocks and the hollows of the lakes. The width of the strip is variable: it varies from 12 to 40 km. Its relatively shallow surface turns into a steep slope, shown in the diagram by thickening of stratoisohypses. Above the hollows are the basins of the modern lakes of Kishi - Karoy and Kalibek.

The base of the slope in the northern and eastern side of the region is located at around 30–40 m in absolute height, turning into a more or less horizontal platform, above which there is a vast hollow of lake. Seletenitenis. Stratoisohypses of the overlying slope, enveloping the basin from the west, also form a hollow here.

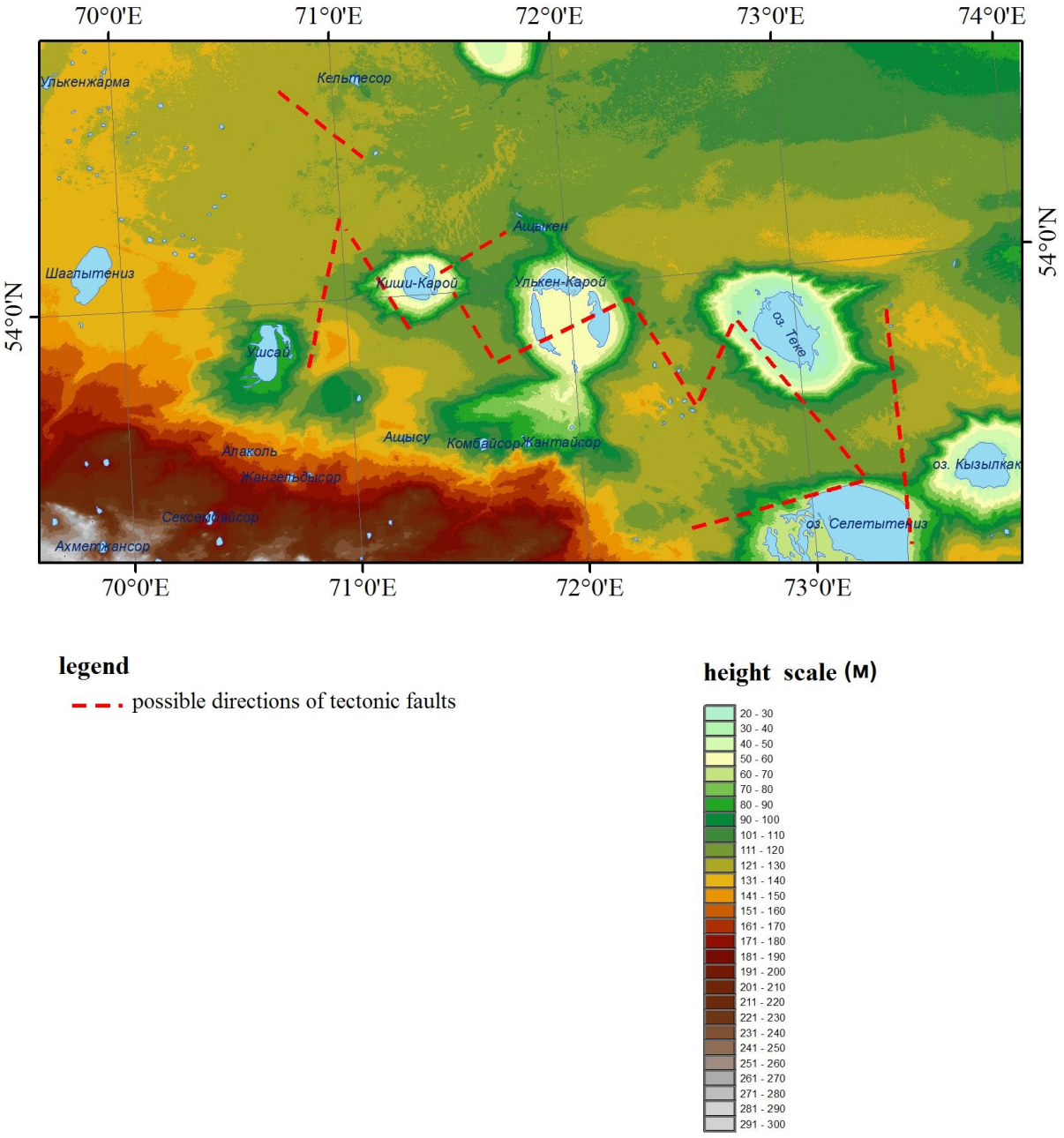

Figure 1 - Schematic relief of the buried surface along the roof of Oligocene marine (Chegan) sediments in the area of the shadows of Northern Kazakhstan

1 - roof marks, 2 - strato-gypsum, 3.- lakes, 4 - Paleozoic rocks,
5 - Mesozoic deposits, 6 - possible directions of tectonic faults

In the western part of the region above the slope in the range of heights of 85-110 m lies the basin of Lake. Shaglyteniz, which is incised shallow and is apparently located in the tectonic trough. Looking ahead, we note that disjunctive processes did not take part in its formation, as in the formation of deep basins of shadows. Probably, in the formation of the basins of the Alabota and Kalibek lakes, the influence of discontinuous processes was not significant, if at all, as can be judged by the distribution of elevations.

The relatively horizontal platform at the base of the slope is complicated by large depressions deepened to zero (possibly lower), to which the basins of modern lakes Ulkenkara and Teke are confined.

The latter are somewhat shifted relative to the deepest parts of the depressions. Between the indicated basins there is a peculiar double overhang on the roof of the Chegan deposits, oriented north-north-east, from which the bottoms of the basins are inclined respectively in opposite directions of the Basin of the lakes, on the contrary, are close to it. Perhaps this ledge is a continuation of the Paleozoic structure depicted in our diagram by an array of crystalline rocks.

Of particular interest in this geological situation is the following circumstance. The map diagram (see Figure 2) shows that north of the basins of Ulkenkaroy and Kishikaroy, the surface of the Chegan clay does not sink to the north and northeast, as one would expect, but somewhat rises. So, the well in the village. Kievsky (the northern shore of Lake Kishikara) opens it at an absolute height of 64 m. The position of the roof of the Chegan deposits right under the lake. Kishikara, according to the profile attached in the work of V.V. Goian [8], corresponds to the level of 40 m abs. heights, as in our diagram. Consequently, Lake. Kishikara is located in a narrow hollow, the bottom of which lies at the level of about 40 m, stretching to a deeply lowered block (Bulaevsky) in the territory of the Peter and Paul Priishimye [10,11]. The minimum elevations within the latter reach -11 m at s. Pisarevka, and the wells located 25-30 km to the east open the roof of the Chegan deposits already at elevations of 53, 54, 74 m, i.e. in this case, as well as north of Lake. Kishikara, there is no normal drop in the roof of the marine Oligocene. The same is seen in the section north of lake. Ulkenkara: three wells located at a distance of 3 km from each other, near the village. Novoselovsky (20 km north of Lake Ulkenkara) If we take the age of the shales as Paleozoic or Mesozoic (clay shales are discovered by some wells among the Cretaceous deposits of this region), then we must assume that there is a graben-like depression below Lake Ulkenkara. The displacement amplitude is at least 100-120 m.

Figure 1 shows the approximately drawn fault lines at the sites of greatest thickening of strato-gypsum.

Thus, the area of development of tenises is characterized by an undeniably complex tectonic structure, as evidenced by the deformation of the roof of marine oligocene sediments, taken as a marking horizon. Deformations occurred as a result of post-Chechen block tectonic movements. Large and deep basins of tenises are confined to negative tectonic structures (depressions, hollows) or are located above their slopes.

Lakes Kishi-karoy, Ulken-karoy and Teke are located in a common graben-shaped depression, which has an irregular shape in plan and profile. Viewing large-scale maps shows that east of Lake. Kishi-karoy towards lake. Ulkenkar stretches a wide depression with absolute elevations of 91 - 107 m, while the height of the interfluve surface varies between 120 - 127 m. In addition, a hollow, but less pronounced than in the previous case, can be traced between the lakes of Ulkenkar and Teke . The presence of these depressions, apparently, reflects the above features of the deep structure.

Findings. 1) The material presented indicates that the system of basins of the shadows of the flat territory of the north-eastern outskirts of the Republic of Kazakhstan has a tectonic nature.

2) The system of basins of the Kazakhstani shadows is located in the border zone between the Omsk Depression of the West Siberian Plain and the slopes of the Kazakh Shallow Ridge, experiencing opposite tectonic movements for a long time: the Omsk Basin has lowered, the Shallow Ridge is characterized by a predominance of uplifts.

3) Due to the multidirectionality of tectonic movements, the boundary zone turned into a crushing zone: since the crystalline rocks of the basement undergoing tensile stresses turned out to be dissected by deep faults into individual blocks moving in the vertical and horizontal directions.

4) Preservation of the features of the deep structure up to the present state speaks of the inherited development of tectonic structures over a long time, including at the neotectonic stage.

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ПРОИСХОЖДЕНИЕ КОТЛОВИН ОЗЕРНЫХ СИСТЕМ ТЕНИЗОВ РАВНИННОЙ ТЕРРИТОРИИ СЕВЕРНО – ВОСТОЧНОГО КАЗАХСТАНА

Аннотация. Рассматриваются вопросы происхождения системы своеобразных озерных котловин Северного Казахстана, получивших название тенизов - степных морей, благодаря огромным площадям. При глубокой врезанности котловин тенизов, так что отметки уровня воды в них находятся ниже уреза в русле Иртыша на тех же широтах, глубины озерной сильно засоленной водной толщи незначительны. Сделан обзор представлений многих авторов о генезисе тенизов: Л.С.Берга, Я.С.Эдельштейна, А.С. Кесь, К.Н. Пестовского, Е.Н. Посохова, И.А. Волкова, связывавших их происхождение с различными экзогенными процессами: остаток олигоценового моря или огромного древнего потока, результат выщелачивания солей с последующим уплотнением пород и дефляции, междельтовыми понижениями, сорово-дефляционными впадинами и др. В.В.Гоян (1968) впервые пришел к выводу о том, что в формировании котловин тенизов главными факторами являются тектонические процессы. Реконструкция погребенного рельефа по данным бурения подтвердила выводы В.В. Гояна. Кристаллический фундамент территории развития тенизов раздроблен на отдельные блоки, сместившиеся относительно друг друга, а котловины тенизов приурочены к тектоническим впадинам.

Ключевые слова: тенизы – степные моря, тектонические впадины, озера, котловины, происхождение

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СОЛТҮСТІК ҚАЗАҚСТАН ТЕҢІЗДЕРІНІҢ КӨЛ ЖҮЙЕЛЕРІ ҚАЗАНШҰҢҚЫРЛАРЫНЫҢ ПАЙДА БОЛУЫ

Аннотация. Мақалада Солтүстік Қазақстанның ерекше көлдер бассейндері, тенис - дала теңіздері деп аталатын, кең аумақтарға байланысты пайда болуы туралы айтылады. Көлеңкелер бассейнін терең кесіп, ондағы су деңгейінің белгілері сол ендіктерде Ертіс каналының жиегінен төмен болуы үшін, өте тұзды лакустралық су бағанының тереңдігі мардымсыз. Мақалада көптеген авторлардың тенистердің генезисі туралы көзқарастары қарастырылған: Л.С. Берг, Я.С.Эделштейн, А.С. Кес, К.Н. Пестовский, Е.Н. Посохова, И.А. Олардың пайда болуын әр түрлі экзогендік процестермен байланыстырған: олигоцен теңізінің қалған бөлігі немесе ежелгі үлкен ағын, тұздардың сілтіленуінің нәтижесінде тау жыныстары мен дефляция, дельта аралық депрессиялар, сор-дефляциялық құдықтар және басқалар алғаш рет В.В. Гоян (1968). тектоникалық процестер көлеңкелер бассейндерінің қалыптасуының негізгі факторлары деген қорытындыға келді. Бұрғылау мәліметтері бойынша жерленген топографияны қайта құру В.В. Гоян. Тенизді игеруге арналған аумақтың кристалды жертөлесі бір-біріне қатысты жылжып кеткен жеке блоктарға бөлінді, ал үстірт бассейндері тектоникалық депрессиямен шектелген.

Түйін сөздер: Тенизалар - дала теңіздері, тектоникалық ойпаттар, көлдер, бассейндер, шығу тегі.

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THE EFFECT OF CANOLA MEAL APPLICATION IN THE DIET OF DAIRY COWS OF HOLSTEIN BREED IN BAYSERKE AGRO LLP

Abstract. The impact of canola meal on dairy productivity and qualitative indicators of milk in Holstein breed cows was studied under the conditions of Bayserke Agro LLP. The prime cost of milk was calculated with the inclusion of soybean cake and canola meal as well as the average dry matter intake in the diet when the nutritional breakdown of the experimental and control groups changed in a comparative aspect.

Keywords: soybean, canola flower, diet, fat, protein, NDF, ADC.

Introduction. Dairy productivity of dairy cows largely depends on provision with protein not decayed in rumen and formed by the microbial protein in the forestomachs and entered the bowel [1].

The provision with this protein at a sufficient level in accordance with the need for the productive capacity of cows is largely ensured by feeds with a high content of transit protein. The main protein feed is widely used in balancing the diet on protein of dairy cows in Kazakhstan is soybean in the form of a cake with the content of crude fat up to 10% and soybean meal up to 1.5%, protein - 35-40% or more. The generally accepted rate of adding soybean to the diet ranges from 100 to 150 grams per liter of products, while the highest fat content in milk without loss of volume is observed when using soybean meal. The only drawback of the use of soybean in balancing the diet of dairy cows according to protein is its relatively high cost, which greatly overestimates the prime cost of the final product since the main cost item in the diet accounts for protein feed.

In this regard, ways to reduce the diet cost without loss of dairy products, including fat and protein contents, are being sought. The main analogues are canola meal or press cake, which at the moment are much lower at market price, while the content of calcium, phosphorus, magnesium, and manganese exceeds soybean, and the optimal ratio of decayed and non-decayed protein ensures good development of rumen microflora.According to some scholars, the availability of calcium in canola is 68%, phosphorus - 75%, magnesium - 62%, manganese - 54%, copper - 74%, zinc - 44%. Canola also contains a significant amount of choline, niacin, riboflavin, folic acid and thiamine, and natural antioxidants like tocopherol, phenolic compounds, and tannins. In addition, it has good eating qualities providing excellent palatability when included in mono feeds[2].

Methods of research. Research work was carried out in a high producing herd of 132 animals, 3 groups of 44 heads each (1 experimental group and 2 control groups), milking was performed on a voluntary basis at the DeLaval robotic milking machine. Through the milking machine, the pelleted feed can be added through a feed unit at a rate of 100 grams per kg of milk up to 100 days of lactation, and 50 grams from 100 days or more of lactation each. The distribution of mono feed was conducted through a trailed horizontal feed mixer (DeLaval, 12 m^3volume) 2 times a day with an interval of 8 hours. Chemical

examination of forage and qualitative indicators of milk was determined in Bayserke Agro LLP laboratory.

Research results. The research work was conducted on the base of the dairy unit of Bayserke Agro LLP, the main experimental breed was Holstein of Canadian breeding. The average milk yield at the time of the experiment averaged from 38 to 41 liters, depending on the cows entering the machine, which varies from 2.9 to 3.2, the fat and protein mass fraction in milk is an average 3.4% and 3.1% respectively.

The aim of the research is to study the effect of canola meal on the dairy productivity of Holstein dairy cows and cost reduction of milk in the nutritional breakdown.

According to the results of a chemical examination of feed, the dry matter content in the diet of the control group averaged 23.5 kg per animal, digestible protein - 3520 g, exchange energy - 282 MJ, NEL - 162 MJ, the total crude fiber content in the diet is 16%. Similar indicators in the diet of the experimental group amounted to 24.7 kg of dry matter per animal, 3548 g of digestible protein, 279 MJ of exchange energy, 158 MJ of NEL and 15.8% of crude fiber. The structure of the experimental diet has been modified for 12 days according to the parameters of mono feed palatability (daily remainder on the feeding table not less than 5%) and the qualitative indicators of milk, such as fat and protein, taking into account the ratio of fat to protein with a coefficient of not less than 1.1. Due to identical indicators of crude protein content in soybeans and canola, which accounted for 38% each, at the beginning of the experiment, soybean cake was replaced by canola meal without changing the proportion of dietary ingredients, but due to a sharp decline in productivity in the experimental group up to 36 kg per animal, a clear recalculation of the diet was carried out with further modifications, which resulted in the approval of the above diet structure.

Table 1 - Diet structure of dairy cows of the control and experimental groups, productivity - 38-41 kg

Name of feed	Control group	Experimental group
Corn	2.2	3.3
Barley	4.6	4
Soybean cake	3.6	-
Canola meal	-	4.54
Pelleted combined feed (through the feed station)	2.2	2.2
IN-R 18 premix for dairy cattle	0.17	0.17
Tricalcium phosphate	0.2	0.2
Alfalfa haylage	8.4	5.8
Corn silage	24.4	27.4
Total	45.8	47.6

As a result of changes in the diet of the experimental group, the consumption of dry matter per animal increased by an average of 1.2 kg, from 23.5 to 24.7 kg, which is caused by a decrease in the content of neutral detergent fiber in the diet of the experimental group by 1.2%, from 25.6% to 24.4%. According to a number of researchers, a decrease in neutral detergent fiber in the diet leads to an enhancement in dry matter intake, but they also noted a reduction in the mass fraction of fat in milk [3]. It was found that the optimal case of the neutral detergent fiber content in the diets of dairy cows during the second phase of lactation is from 32.0 to 37.0% and the acid detergent fiber content is from 25.0 to 25.5% of the dry matter in the diet with productivity up to 25 kg, to ensure a high level of dairy production, the content of fat and protein mass fraction, and the best recovery of fatness after high milk yield[4].In this connection, the high-priority task is to increase the proportion of neutral detergent fiber in the diet to 26% in order to improve the qualitative indicators of milk, including fat content up to 3.6-3.7% and protein of not less than 3.2%. The solution to this problem is possible by adding beetroot pulp or soybean peel to the diet, the input rate of which, according to preliminary calculations, averages 1.2-1.4 kg per animal. The obtained data on the enhancing milk yield are not inferior to those in other farms of the Almaty region with Black-and-motley and Holstein black-and-white dairy cattle breeds [5, 6, 7].

As can be seen from Table 2, the average productivity of animals in the experimental and control groups was 40.8 and 40.3 kg per cow, respectively, but there was a decrease in fat and protein in the experimental group by 0.07% and 0.08%.

Table 2 - Indicators of dairy productivity of cows over the research period (90 days)

Indicators	Group	
	Experimental	Control
Total registered animals	44	88
Gross yield per animal, kg	2774.4±92.8	2741±68.9
Average per animal, kg	40.8±0.95	40.3±1.3
Fat mass fraction, %	3.36±0.9	3.43±0.7
Protein mass fraction, %	3.04±0.08	3.12±0.07
Prime cost in the diet structure, per 1 kg. tg.	58.2	73.1

Taking into consideration that milk sales are based on primary fat content (3.6%), the average productivity of the experimental group animals when transited to the basis was 38.08 kg and in the control group - 38.4 kg, but at the same time the prime cost of 1 kg of milk in the diet structure of the experimental group was lower by 20.4% than in the control one. As the state of the animals of the experimental group in relation to the control group, a difference is not marked.

Conclusions. In such a way, according to the research results, the possibility of preserving dairy productivity and enhancing profitability was shown using in the diet of dairy cows of canola meal as a protein feed. The average consumption of canola meal per 1 kg of products per diet averaged 110 grams, while the difference in the set of feed in the diets caused a change in the intake of dry matters between the groups.

Foundation for the research and source of funding. The program of target financing of the Ministry of Agriculture of the Republic of Kazakhstan for 2018 - 2020. URN: BR06249249-OT-18 Development of a comprehensive system to increase productivity and improve the breeding qualities of farm animals, as an example of Bayserke-Agro LLP.

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"БАЙСЕРКЕ АГРО" ЖШС ГОЛШТИНСКИЙ ТҰҚЫМДЫ САУЫН СИЫРЛАРЫНЫҢ РАЦИОНЫНДА РАПС КҮНЖАРАСЫН ҚОЛДАНУ НӘТИЖЕЛЕРІ»

Аннотация. "Байсерке Агро"ЖШС жағдайында рапсты күнжараның сүт өнімділігіне және голштин тұқымды сауын сиырларының сүтінің сапалық көрсеткіштеріне әсері зерттелді. Соя күнжарасы мен рапс күнжарасын рационға қосқан кездегі сүттің өзіндік құны мен тәжірибелік және бақылау тобының рационының құрылымы өзгергенде құрғақ заттың орташа тұтынуы салыстырмалы аспектіде есептелген. Зерттеу жұмысының қорытындысы бойынша сүт өнімділігін сақтау және рентабельділікті жоғарылату мүмкіндігі рапс дәмін диетада сүт сиырларын ақуыздық жем ретінде пайдалану есебінен көрсетті. Орташа тұтыну рапс жүні 1 кг-ға азық-түлік өнімдері орта есеппен 110 грамм, ал рациондардағы азықтардың жиынтығындағы айырмашылық топтар арасында құрғақ заттардың өзгеруіне әкелді.

Түйін сөздер: соя, рапс, рацион, май, ақуыз, нейтральді-детергенттік клетчатка, қышқыл-детергенттік клетчатка.

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РЕЗУЛЬТАТЫ ПРИМЕНЕНИЯ РАПСОВОГО ШРОТА В РАЦИОНЕ ДОЙНЫХ КОРОВ ГОЛШТИНСКОЙ ПОРОДЫ ТОО «БАЙСЕРКЕ АГРО»

Аннотация. Изучено влияние рапсового шрота на молочную продуктивность и качественные показатели молока дойных коров голштинской породы в условиях ТОО «Байсерке Агро». Рассчитана себестоимость молока при включении в рацион соевого жмыха и рапсового шрота и среднее потребление сухого вещества при изменении структуры рациона опытной и контрольной группы в сравнительном аспекте.

Ключевые слова: соя, рапс, рацион, жир, белок, НДК, КДК.

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ENZOOTOGENESIS OF RODENT PLAGUE

Abstract. The article discusses the micro-focal structure of the plague infection enzootia. A hypothesis of enzootogenesis based on the "bottleneck" effect in population genetics is proposed. The phenomenon of preservation of the causative agent of the plague in soil amoeba during the inter enzootic period is discussed. The role of fleas in the transmission of a microbe is recognized as local. However, their significance is monopolistic in the epidemiology of the plague in bubonic form.

Key words: plague, micro-foci, landscape-epizootological region, enzootogenesis, population genetics, "bottleneck" effect, soil amoeba, flea.

Introduction. In the XIX century, it became clear that the plague infection or the causative agent of the plague is a bipolar microbe that is localized in certain territories. Later, in the 30s of the last century, Y.N. Pavlovsky formulated for the first time the concept of the natural focality of human and animal diseases as a separate section of the geographical landscape, together with a set of donor-hosts and vectors of the pathogen [7]. By hosts, he meant warm-blooded animals, and invertebrates were vectors. Wu-Lien-Teh polemicized this doctrine, expressing a certain skepticism regarding the phenomenon of the natural focus of the plague. His priority was the physiological state of rodents. In particular, the author believed that if rodents had absolute immunity, then there would have been no foci of plague infection [19].

In the post-Soviet space, the plague is the most studied. Over time, the natural foci of plague turned into an official administrative structure, a kind of natural and technogenic conglomerate formed as a product of normative decisions to streamline ongoing anti-epidemiological and preventive measures, taking into account the regional natural and geographical factor.

Hypotheses and theories of the phenomenon of natural foci of plague. Over the past decades, the spatial and biocenotic structures of enzootic territories have been studied. However, the deeper the epizootic and epidemic process was studied, the more questions arose. And the main one is where the plague microbe comes from, where it disappears and how it reappears. As a result, there are many hypotheses and theories trying to explain the phenomenon of focal plague. The main ones are:

- "nomadic" plague, characterized by continuous "waves" of epizootics and the remnants of the small foci of infections as sources of new epizootics[13];
- micro-focal plague, in the form of minimal areas, where the microbe is autonomously stored. For the first time substantiated by the types of marmot settlements [14];
- "telluric" plague in which there is a long-term preservation of the pathogen in virulent form in the substrate of rodent burrows[16,12];
- plague of blood-sucking ticks stored in the body of ixodic and other groups of arthropods [2];
- non-transmissible plague, excluding the role of fleas in the transmission of the microbe with intense, diffuse epizootics [10];
- latent plague associated with prolonged inter-epizootic periods, excluding the occurrence of epizootics[1];
- plague in the L-form, when periodically the R-form of the microbe is transformed into an inactive L-form [6];
- "bird" plague - transfer of the plague microbe from the active natural foci of infection by different types of birds [5].

It should be noted that currently there are about 30 different hypotheses and theories regarding the mechanism of enzootia of the studied infection.

Micro-focal structure of the plague. The enzootia of the rodent plague of Eurasia actually exists in the form of micro foci. In the landscape-ecological and epizootological aspect, it is located on the most optimal sites, where, due to the diversity of natural complexes, favorable conditions are created for the survival of rodent populations. Their settlements are the oldest, with a high density of holes, and the number of animals is stable [4]. In the populations, the classical course of the long-term dynamics of the number of small ground squirrel, midday, tamarix and great gerbils is expressed with differentiated cycles from depression to rise, peak and decline. And this is especially important for plague enzootogenesis.

Regarding the poorly studied micro-foci of plague in Karakum and Kopetdag (Turkmenistan), it should be noted that in general epizootic activity is low here and is similar to Southern Kyzylkum [8].

Of the 18 landscape ecological areas (LEAs) of the Karakum desert plague focus, the most active are the Zaunguz and Central Karakum with an epizootic index of 0.5. Slightly lower, 0.2 - in the Western Karakum and Sarykamysh cavity. In other LEAs, epizootics are extremely rare, with an epizootic index of about 0.1. And three of them - the Tedzhen-Murgaba interfluve, the Badkhyz highlands and the Karabil upland, with a total area of about 31.0 million hectares with different species of gerbils, are marked by the lack of registration of the plague microbe. A very low epizootic activity characterizes the Kopetdag desert focus, in two LEAs of which the corresponding index is below 0.1. In general, in the southern subzone of deserts, the micro-focality of plague is poorly studied. Presumably in Karakum there can be no more than two of them.

Table-Micro foci of plague in Kazakhstan and Central Asia

Name of the foci	Epizootic Index	Micro foci	Square, thousand ha	Long-term average abundance of the main source of infection
Ground squirrels foci of plague (small ground squirrel) Ural-Wilsky steppe foci	0,28	South Chelkar	80,0	High, 20 spc/ha
Gerbils foci of plague (small gerbils) Volga-Ural foci (great gerbil)	0,28	Becketai-Kamysh-Samarian	150,0	Average, 4-8 spc/ha
Ural-Emba desert foci	0,86-0,34	North-East Caspian	740,0	Average,5-10 spc/ha
		Lower Wilsky	370,0	Average,5-10 spc/ha
		Lower Embinsky	580,0	Average,5-10 spc/ha
Predustjurt desert foci	0,68	Ushkan	90,0	Low, 2-3 spc/ha
Ustjurt desert foci	0,40	Akzhigit	320,0	Low, 3-5 spc/ha
Mangyshlak desert foci	0,57	Mountain Mangyshlak	55,0	Low, 2-3 spc/ha
Aral-Karakum desert foci	0,38	Northeast Karakum	620,0	Low, 2-3 spc/ha
		Central Karakum	180,0	Low, 3 spc/ha
Aryskum-Daryalyktakyr desert foci	0,43	West Daryalykta	40,0	Low, 3-4 spc/ha
Karakum desert foci	0,1-0,5	Zaunguz-Karakum	?	Unstable, 6-18 spc/ha
		Central Karakum	?	Unstable, 6-18 spc/ha
Kyzylkum desert foci	0,24	Central Kyzylkum	250,0	Unstable
Moyynkum desert foci	0,40-0,70	Moyynkum-Saksauldalia	300,0	Low and average, from 3-5 to 10 spc/ha
Taukum desert foci	0,50	West Taukum	200,0	High 10-12 spc/ha

Notes. 1 - Epizootic index - the ratio of the number of years during which plague epizootics were recorded to the number of years of studies.

2 - In the Karakum desert foci, the mean annual abundance of large midday gerbils is given; unstable number, i.e. population is exposed to a deep depression.

It should be emphasized that the microcenters of great and are two-component: in the first of them there are areas with the most intense epizootic processes that surround areas with less intense epizootics. This can explain the stability of the functioning of the micro foci as a self-regulating ecosystem.

It must be noted that over time, under the influence of environmental and anthropogenic factors, the micro foci of the plague can change their sizes, move in space, or even completely disappear. So, in the last, more than 10 years, the Salt-marsh LEA of the Ural-Emba desert center has lost activity. Since 2004, it gradually disintegrated the role of continuous settlements of the large gerbil into separate fragments, often not related to each other [9]. According to the oral report of F.A.Sarayev, plague epizootics are still not recorded. The reason most likely lies in global warming. The average long-term air temperature in the long-term aspect of the Northern Hemisphere began to increase noticeably, starting from the 80s of the twentieth century. At the beginning of the XXI century, it reached an absolute maximum for 120 years of observation. And over the past 30 years, average air anomalies have gradually increased from 0.17 to more than 0.64 ° C [20]. Or almost 3.7 times.

Recent space images of the Ural-Emba interfluve and the Aral Sea Karakum from Google Earth show the most noticeable ecological destruction of the first region (light spots) and the development of similar processes in the second (Fig. 1). At the same time, plague epizootics in the Aral Karakum also started to decline, although in the active Central Karakum LEA in 2018, 5 strains from the great gerbil and 9 from fleas were isolated according to the Aralsea antiplague service.

A B

Figure 1 - Space images of the territories of the Ural-Emba (A) and Aral-Karakum desert foci of plague. The Salt-marsh and Central-Karakum LEAs are outlined

Hypothesis of endootogenesis of rodent plague. The hypothesis is based on animal population genetics [15]. The source of the causative agent of infection becomes an edificator species, the most numerous in natural complexes according to the law of Baitanayev's maximum in ecology [16, 3]. This law, in contrast to the Liebig minimum law, reflects the biology features of the mammalian fauna of different landscapes. The high abundance of the background species in the phase of the peak of abundance negatively affects the biology and ecology of the population. The stressful situation from overconsolidation causes disturbances in the genome. Then, when there is a decrease and depression in numbers, conditions for imbreeding arise, which leads to depletion of the gene pool. Since absolute genetic diversity is possible in the most numerous populations of free random crossing. As a result, there is an increase in homozygosity, changes in the frequency of genes appear, and the tendency is fixed at the loci of only one allele. A number of alleles drop out, for example, those responsible for the body's immunity against various infections.

Another significant concept, in addition to the above source of infection, is the host of the pathogenic microbe, which is inherent in the soil amoeba. The plague microbe is stored in soil amoeba cysts, which become protective reservoirs for the plague pathogen. This happens in rodent settlements, where the microbe is stored in cysts during the interepizootic period. A model of the mechanism of enzootogenesis is presented in Figure 2.

The hypothetical scheme of the members of the epizootic triad, taking into account the new one, therefore should look like this: rodent-microbe-amoeba. A flea falls out of it, which, obviously, is not the

cause of spontaneous, "explosive" plague epizootics in large areas. The flea factor is local, acting within a limited number of holes. Therefore, the place of a flea on a global scale belongs to the soil amoeba.

The significance of fleas is monopolistic in bubonic plague in the epidemiology of the studied infection. A flea is ineffective as a carrier in epizootics of a wide scale, but is most significant in the epidemiology of human bubonic plague.

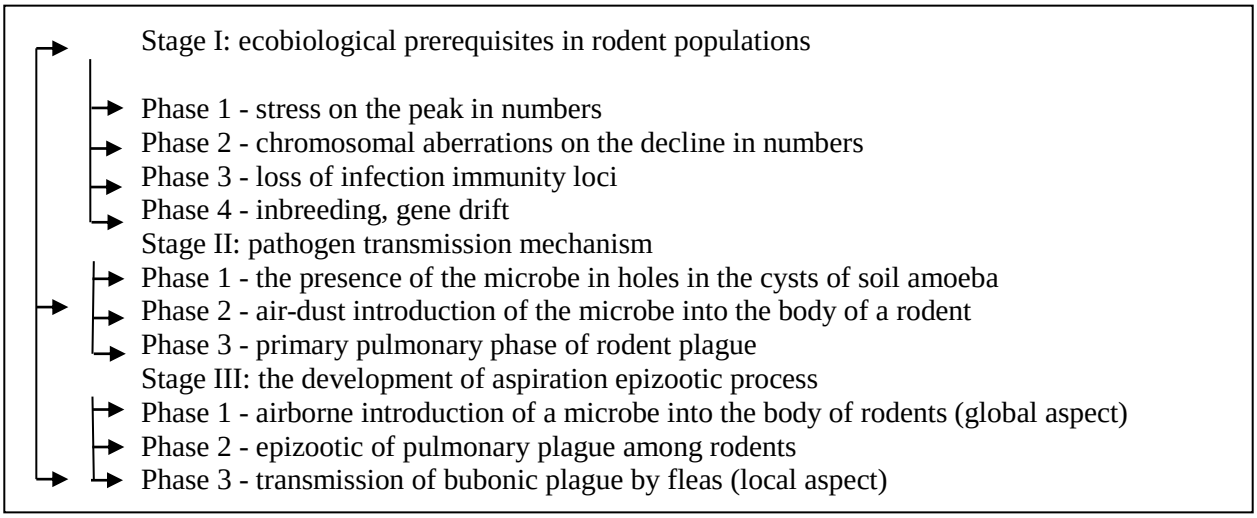

Figure 2 - Generalized scheme of the mechanism of plague enzootogenesis

Enizootogenesis is realized in three stages: from ecobiological prerequisites in rodent populations to the microbial transmission mechanism and the aspiration development of the epizootic process. Moreover, the primary infection of rodents with the pulmonary form of the disease. This can explain the explosive nature of the spilled, intense epizootics of the plague. And the transmission of it by fleas is less important.

After the publication of the hypothesis of enzootogenesis, the first articles related to this problem appeared. For example, in one of them the method of variation statistics considers the genetic component of the sensitivity of great gerbils to the plague pathogen [11]. And in the other - the authors sequenced the gene of the great gerbil from Western China, with its more than 96% coverage. The genetic variation of the MHCLL locus, which manifests itself at the population level to determine the importance of gene duplication in the resistance of the great gerbil to the plague microbe, was studied [18].

Conclusion. Studies of the genetic diversity of rodent sources of plague infection are at early stage. The full implementation of the main provisions of the hypothesis of enzootogenesis will make it possible to uncover the real causes of the disappearance and occurrence of the plague and to carry out reorganization on the basis of innovative technologies.

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КЕМІРГІШТЕР ОБА АУРУЫНЫҢ ЭНЗООТОГЕНЕЗІ

Аннотация.Мақалада оба жұқпалы ауруының шағын ошақтық құрылымы қарастырылған."Бөтелке құсығының" асері негізіндегі энзоотогенез гипотезасы ұсынылған. Эпизоотия аралығы кезенде микроб топырақты амебада сақталу ерекшелігі талқыланған. Трансмиссивтік табыс ету саласындағы бүргенің рөлі жергілікті болып табылады. Бірақ бубондық оба эпидемиологиясында олардын маңыздылығы монополиялық.

Түйін сөздер: оба, шағын ошағы, ланшафттық-эпизоотологиялық ауданы,энзоотогенез, популяциялық генетика,"бөтелке құсығының" әсері, топырақ амебасы,бүрге.

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ЭНЗООТОГЕНЕЗ ЧУМЫ ГРЫЗУНОВ

Аннотация. Рассматривается микроочаговая структура энзоотии чумной инфекции. Предлагается гипотеза энзоотогенеза на основе эффекта «бутылочного горлышка» в популяционной генетике. Обсуждается феномен сохранения возбудителя чумы в почвенной амебе в межэнзоотический период. Роль блох в трансмиссивной передаче микроба признается локальной. Однако их значимость монопольна в эпидемиологии чумы при возникновении ее бубонной формы.

Ключевые слова: чума, микроочаг, ландшафто-эпизоотологический район, энзоотогенез, популяционная генетика, эффект «бутылочного горлышка», почвенная амеба, блоха.

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UNEMPLOYMENT. HUMAN CAPITAL. GENDER POLICY

Abstract. In practice, there is a difference in life expectancy, literacy, education and earnings of men and women in the global trend in human development. At the same time, the possibilities of women are more limited than those of men. The unequal position of men and women entails negative socio-economic consequences: gender asymmetry in the labor market, the feminization of poverty, the problem of "double employment" of women. Gender-based discrimination also manifests itself in family decisions, unequal access to household incomes, unequal participation in raising children and family benefits, domestic violence, trafficking of women for the purpose of sexual exploitation, maternal mortality, short life expectancy men, low general health indices.

Keywords: unemployment, human capital, gender policy, equality, female labor.

INTRODUCTION

The labor market is the most complex element of a market economy. Here, not only the interests of the employee and the employer are intertwined when determining the price of labor and the conditions of its functioning, but, as in a mirror, practically all the socio-economic phenomena occurring in the Republic of Kazakhstan are reflected [3]. On how well the economy functions, in what phase of the economic cycle it is, what is the behavior of the main market actors: the employer's employee depends on the demand for labor and its supply, and accordingly the unemployment rate.

A long period of unemployment reduces the competitiveness of the individual, reduces his chances of getting a job again. As a result, chronic, "stagnant" unemployed people have less motivation to work, to professional development and retraining, which can lead to the development of psychological apathy, a change of lifestyle to dependent, oriented to casual earnings against the background of a drop in living standards.

Human capital - a combination of knowledge, skills used to meet the diverse needs of man and society as a whole.

Initially, human capital was understood only as a combination of investments in a person, increasing his ability to work - education and professional skills. In the future, the concept of human capital has expanded significantly. Recent calculations made by World Bank experts include consumer spending — household spending on food, clothing, housing, education, healthcare, culture, and government spending on these goals.

Human capital in the broad sense is an intensive productive factor in economic development, the development of society and the family, including the educated part of the workforce, knowledge, tools for intellectual and managerial work, the environment and work activities that ensure the efficient and rational functioning of human capital as a productive development factor.

In a meaningful way, human capital includes a stock of health, knowledge, and abilities that are capitalized under the following conditions:

- streaming, accumulative stock of human abilities in phases of life;
- the feasibility of using the stock of abilities, which leads to an increase in labor productivity;
- an increase in labor productivity naturally leads to an increase in employee earnings;

• an increase in income motivates the employee to make additional investments in his human capital, accumulate it cumulatively.

Gender relations are socially organized relations between the sexes. As a rule, this is an inequality relationship in which men dominate. Gender relations are understood as a product of the interaction of women and men, which are social communities with the macro- (society) and micro- (family) environment. Gender studies help to study and understand how a particular society determines, shapes and consolidates the social roles of women and men in the public consciousness and in the consciousness of the individual, as well as what consequences this distribution has for them.

In accordance with the Strategy "Kazakhstan-2050 ″: a new political course of a successful state" (hereinafter referred to as the "Strategy-2050"), the country has taken a course towards accelerated modernization and industrialization, which are reflected in the Concept for Kazakhstan becoming one of the 30 most developed countries in the world. Kazakhstan intends to use the 15-20-year-old "window of opportunity" to implement five strategic directions: the development of human capital, the improvement of the institutional environment, the establishment of a knowledge-based economy, the formation of a modern infrastructure and deepening international integration.

For Kazakhstan, such a strategic document for the first time opens a new stage in the social policy of the state. So, in particular, the Strategy notes the lack of public awareness of the need for gender equality, the presence of stable traditional stereotypes about the role and place of women in society.

MAIN PART

The Gender Equality Strategy provides indicators by which its implementation will be monitored, including:

-the contribution of women and men to the formation of GDP;

- the number of people living below the poverty line;

- HIV prevalence among pregnant women; - maternal mortality structure;

-number of permanent preschool institutions, etc.

So, it can be argued that in the Republic of Kazakhstan a sufficiently strong legal base has appeared for observing the equality of women and increasing their status in various spheres of public life. In the population, women make up more than half (more than 52.1%), therefore, the main directions of the state social policy are reduced to issues of family, women and children.

The results of studies on the problem of gender equality of foreign and domestic authors allow us to conclude that it has not been completely resolved in any of the countries of the world. Gender equality remains the subject of heated public debate and the goal of the social policies of states developing along the path of democracy and the development of human rights.

The situation is aggravated by the growing complex of unresolved issues related to the use of female potential.

As international practice shows, models of gender relations have a significant impact on the level of functional stability of the family. The higher the level of gender equality, the greater the responsibility, parity and effectiveness in the fulfillment by family members of their household, economic, moral-educational, protective and other important functions.

Thus, it becomes obvious that the formation of conditions for the formation of a modern sustainable family and the achievement of gender equality is an inextricable process of social modernization of society.

The development of a comprehensive Concept of family and gender policy in the Republic of Kazakhstan (hereinafter referred to as the Concept) as a link between existing concepts in the field of competitiveness and social development seems an obvious and justified necessity and one of the fundamental conditions for the successful integration of the Republic of Kazakhstan into the world community.

The consequences of the transition period have intensified gender inequality in the political, economic and social spheres of the post-Soviet countries. In a transforming society, there is a real threat of reduced investment in female human capital, as at the level of individual households comes the realization of the inefficiency of such investments. In Kazakhstan, issues of gender equality are pointed out quite acutely. The socio-economic transformation of Kazakhstani society has required the state to formulate a new

policy that more closely takes into account the vector of changes in the international gender equality policy. The country's leadership is actively contributing to the achievement of such equality, creates the conditions for studying the experience of different countries in solving specific problems, and establishes contacts with national, regional and international organizations dealing with gender issues.

Currently, the gender problem has been identified as a priority by many international organizations, recognizing that gender indicators should be introduced in all social and economic programs that contribute to the democratization of society, improving the quality of life, poverty eradication, and sustainable development of the country. The main problem of gender studies is finding out the possibilities of overcoming gender inequality, discrimination on the basis of sex at all levels and in all spheres of social life - labor, economics, politics, family. Gender is seen as a set of social and cultural norms and roles of men and women that determine their behavior, as well as social relationships between them.

Gender relations are socially organized relations between the sexes. As a rule, this is an inequality relationship in which men dominate. Gender relations are understood as a product of the interaction of women and men, which are social communities with the macro- (society) and micro- (family) environment. Gender studies help to study and understand how a particular society determines, shapes and consolidates the social roles of women and men in the public consciousness and in the consciousness of the individual, as well as what consequences this distribution has for them. A country distinction to the concept of "gender" is given by some Western researchers (I. Hoffman, C. West, D. Zimmerman, N. Smelser). In their opinion, “gender” is the difference between the sexes, having a social coloring in accordance with the peculiarities of social development in a particular country. Russian researchers interpret this term as "social gender or status" [1]. It is defined as the changing socio-economic status of the individual, which is associated with the reproductive behavior of a person, his family role, individual opportunities in education, professional activity, etc. Moreover, gender characteristics are specifically manifested in various fields. Economic reforms in Kazakhstan contribute to the beginning of the evolutionary women's movement, which, being one of the important institutions of civil society, became the first conductor of gender policy in the republic.

State support is becoming the main factor in the development of such a new direction in scientific research as gender development, and in the Republic of Kazakhstan. Certain institutional structures are being created, and the regulatory framework is being improved. Among the factors contributing to the development of gender studies in Kazakhstan, it should be noted the factor of globalization. He has international contacts with centers for women's and gender studies. The interaction of Kazakhstani and foreign researchers contributes to the development of gender studies in domestic social and humanitarian knowledge.

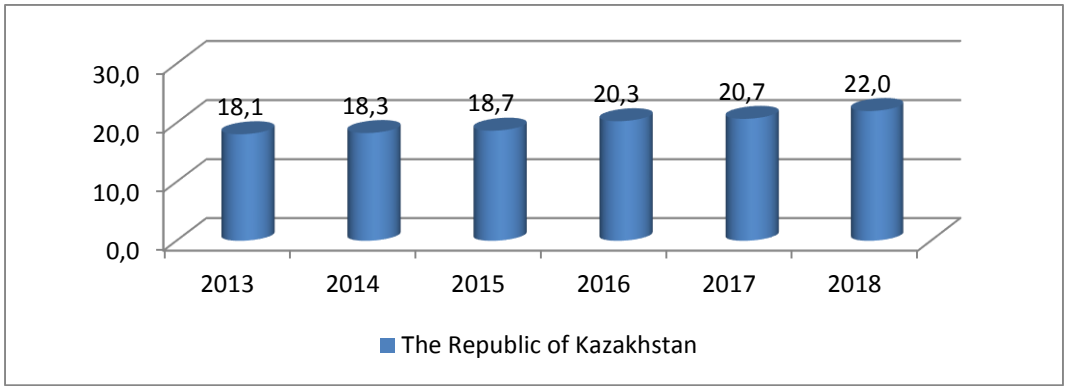

Figure 1 - The proportion of women heads of farms or farms

The proportion of women heads of farms or farms increased from 18.1% in 2013 to 22% in 2018.

Over the years of independence, Kazakhstan has developed a whole system of institutional mechanisms for protecting women's rights and increasing their status. These mechanisms are constantly being developed and improved, and their activity in all spheres of life is becoming more and more effective and efficient. In order to implement the recommendations of the UN Implementation Committee

on the Elimination of All Forms of Discrimination against Women on the creation of a comprehensive policy and institutional approach to achieving gender equality in all spheres of life, the "Gender Policy Concept in the Republic of Kazakhstan" was approved (2003), which should become the basis for the development of national programs and strategies to combat poverty, reduce inequality, eradicate diseases, improve access and quality of education.

The Millennium Goals, identified by the UN for Kazakhstan in a gender perspective, were to promote gender equality, empower women, improve maternal health, reduce child mortality, eliminate extreme poverty and hunger. In 1998, Kazakhstan joined the UN Convention on the Elimination of All Forms of Discrimination against Women. The UN Conventions on Political Rights of Women and On Citizenship of a Married Woman, a number of acts of the International Labor Organization concerning the rights of women and children have also been ratified. For Kazakhstan, such a strategic document for the first time opens a new stage in the social policy of the state. So, in particular, the Strategy notes the lack of public awareness of the need for gender equality, the presence of stable traditional stereotypes about the role and place of women in society.

The Gender Equality Strategy provides indicators by which its implementation will be monitored, including:

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So, it can be argued that in the Republic of Kazakhstan a sufficiently strong legal base has appeared for observing the equality of women and increasing their status in various spheres of public life. In the population, women make up more than half (more than 52.1%), therefore, the main directions of the state social policy are reduced to issues of family, women and children. The deterioration of the socio-economic situation, its instability significantly affect the quality of life of all citizens and especially women with young children and children with disabilities, single parents, single mothers. Programs of industrial and innovative development of the country introduce a whole range of tasks that need to be addressed in relation to gender issues. It was women who were not prepared for adaptation in these economic conditions, less competitive than men. Women more often fall into the number of unemployed, work in forced part-time employment, are pushed to low-paid positions, low-skilled and non-prestigious types of work. Economic inequality entails unequal access to resources, which, in turn, creates different opportunities for the development of human potential in different population groups.Gender roles and differences also determine differences in how the crisis period has affected women and men. During this period, new specific forms of gender inequality appeared, due to the limited mobility of the workforce, lack of awareness of the labor market and the influence of the internal division of labor. The social and economic situation of most women is worse than that of men, which indicates the incomplete and ineffective use of human, namely female potential.

However, these measures are still insufficient to ensure both women and men, since they concern men, a decent level of both their own lives and the maintenance of children.

In this regard, the following directions are identified for further support for women.

1. Particular attention should be paid to social support for families with children.

2. Support for women's economic activity. It is necessary to create conditions for their employment in a crisis, to increase the competitiveness of women in the labor market, and to retrain and train women in promising new specialties. The question of considering distance employment, i.e. on the combination of work with domestic responsibilities and parenting.

3. Empowering women to actively participate in political and public life. In Kazakhstan, the number of women deputies in maslikhats and in the Parliament does not increase; at present, their share is only about 17%.

4. Strengthening the institution of marriage and family. Increasing the prestige of the family, supporting young families.

Thus, from the foregoing, we can conclude that the concept of human development is constantly being improved. Human development - this is the development of man, by this is meant the development

not of any particular person, but of the totality of people who carry out life activities within the framework of a particular society. And from this it follows that human development is determined by the development of the population.

The gender strategy expresses the interests of the progressive sections of society, relies on the objective laws of the historical process, provides for the consistent democratization of power by involving women and men in management, and suggests finding mutually acceptable solutions that take into account the gender interests of society. Prevention of infringement of both women and men on opportunities and rights, legal principles, actions, development of public and state structures taking into account gender interests and needs should become the norm of civilized states. In the modern economic and political spheres of Kazakhstani society, the following gender-asymmetric trends can be distinguished:

- women spend much more time on unpaid activities associated with the household, men on paid activities in social production;
- professional horizontal segregation in the labor market, when traditionally female professions are paid less and have no prestige in society;
- professional vertical segregation, when men occupy higher positions than women;
- the unemployment rate among women is higher than among men, and its duration is longer; the average wage for women is 1.5 times lower than for men;
- Women are represented in politics and power structures much less than men.

The social realization of the citizens of the country is one of the indispensable conditions for eliminating imbalances in various spheres of life. Research and development in this area is important for Kazakhstan, especially now, in the context of its entry into the strategic period of innovative development and the formation of a competitive environment within the global economic space. The country is undergoing structural transformations of the economy, the mechanism of effective management is deepening, the scope of the use of scientific and technical information and new technologies is expanding. The state is aware of the need to strengthen the information base and build analytical capacity by setting the goals of achieving Western standards of gender equality and adopting legislation in line with international standards aimed at combating discrimination.

Assessing the situation by indicators unified for all countries, it can be noted that Kazakhstan has already eliminated gender inequality at all levels of education so far: there is no quantitative gender inequality in primary and secondary education, there is no problem of girls accessing any of the educational levels. The level of education for women in Kazakhstan is much higher than for men.

Nevertheless, the high level of education among women in our country does not guarantee them prestigious, promising, decent income, career advancement and does not protect them from being released on the labor market, and the level of education is one of the most important qualitative characteristics of the population, which are the basis for the formation of the personnel potential of the country.

CONCLUSION

Asymmetric gender-based release of staff is one of the manifestations of gender inequality in employment. The dynamics of the unemployment rate shows that in the early stages of radical reforms, the greatest blow fell on women. The reduction in the total number of employed people in the early 90s was due to the active exclusion of women from paid employment to the household or to the rapidly expanding area of irregular employment, the most common forms of which are small retail trade and shuttle business.

Thus, the level of involvement of female labor in innovative, infrastructure and high-tech projects and programs is very low. The presence of restrictions on women in working with difficult and dangerous working conditions negatively affects women's access to highly paid professions. The approved list of works that prohibit the use of women's labor in Kazakhstan, in comparison with the CIS countries, is one of the most extensive.

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ЖҰМЫССЫЗДЫҚ. АДАМ КАПИТАЛЫ. ГЕНДЕР САЯСАТЫ

Аннотация. Іс жүзінде, адамзат дамуының жаһандық тенденциясында ерлер мен әйелдердің өмір сүру ұзақтығы, сауаттылығы, білімі мен табысы бойынша айырмашылық бар. Сонымен қатар, ерлердің мүмкіндіктерімен салыстырғанда әйелдердің мүмкіндіктері анағұрлым шектеулі. Ерлер мен әйелдердің тең емес позициясы теріс әлеуметтік-экономикалық салдарға әкеледі: еңбек нарығындағы гендерлік асимметрия, кедейліктің феминизациясы, әйелдердің «қос жұмыспен қамту» проблемасы. Гендерлік негіздегі кемсітушілік сонымен қатар отбасылық шешімдерде, үй кірістеріне тең қол жетімділікте, балалар мен отбасының пайдасына теңсіз қатысу, тұрмыстық зорлық-зомбылық, әйелдерді сексуалдық қанаушылық үшін сату, ана өлімі, өмір сүрудің қысқа ұзақтығында көрінеді. ер адамдар, денсаулықтың төмен көрсеткіштері.

Түйін сөздер: жұмыссыздық, адами капитал, гендерлік саясат, теңдік, әйелдер еңбегі.

УДК 33.331

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БЕЗРАБОТИЦА. ЧЕЛОВЕЧЕСКИЙ КАПИТАЛ. ГЕНДЕРНАЯ ПОЛИТИКА

Аннотация. На практике в мировой тенденции человеческого развития существует разница в продолжительности жизни, грамотности, образовании и заработках мужчин и женщин. При этом возможности женщин более ограничены по сравнению с возможностями мужчин. Неравноправное положение мужчин и женщин влечет за собой негативные социально-экономические последствия: гендерную асимметрию на рынке труда, феминизацию бедности, проблему «двойной занятости» женщин. Дискриминация по признаку пола проявляется и в принятии семейных решений, неравном доступе к доходам домохозяйства, неравноценном участии в воспитании детей и в получении семейных льгот, бытовом насилии, трафике женщин с целью сексуальной эксплуатации, материнской смертности, короткой продолжительности жизни мужчин, низких индексах здоровья населения в целом.

Ключевые слова: безработица, человеческий капитал, гендерная политика, равенство, женский труд.

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THE ANALYSIS OF FINANCIAL STABILITY OF ECONOMIC ENTITIES OF THE LIGHT INDUSTRY OF KAZAKHSTAN TAKING INTO ACCOUNT MODERN TRENDS

Abstract: For the modern Kazakhstan economy, the most topical are the problems of ensuring the economic financial sustainability and competitiveness of industrial enterprises. Given the significant role of light industry in ensuring economic and strategic security, employment of the working population and raising its standard of living in new geopolitical conditions, it is necessary to pay special attention to the development of the industry and provide it with substantial investment support, as is done by leading world countries.

The article considers the analysis of the current state of the light industry of the Republic of Kazakhstan, which occupies one of the most important places in the production of socially significant products. In recent years, the industry has experienced a decline, which is accompanied by a decrease in the production index and is associated with a technological lag in production, which adversely affects the competitiveness of products.

The study used the techniques and methods of balances, reports, grouping, ranking, coefficients, comparisons, time series.

Keywords: light industry, clothing market, import, export, financial sustainability, financial security, financial management.

Introduction - Considerable attention is paid to the development of light industry in many countries of the world, since this industry has considerable socio-economic significance, ensuring high employment of the working-age population. Considering that light industry is technologically most connected with the agrarian sector, its development contributes significantly to the restoration and development of the most important areas of agricultural production, thereby increasing effective domestic demand and the capacity of the domestic market.

With a significant raw material and energy base and proximity to large sales markets, Kazakhstan can become one of the regional centers of light industry, and clothing production in the world ranking is among the leading industries.

Kazakhstan's light industry is currently experiencing rather difficult times. Such problems of the industry as underutilization of capacities, dependence on the state defense order, lack of working capital, non-use of market tools to promote products are relevant to this day. Only the apparel industry is developing more stably, the real growth of which over the past 7 years has shown a positive trend.

The breadth of economic areas, management spheres, strategic priorities and solved tasks testifies to the multidimensionality of the concept of financial sustainability, where relationships are considered as a logical transformation of concepts.

Literature review – Currently, in various literary sources devoted to the problems of studying the financial sustainability of economic entities, there is no unambiguous interpretation of this concept. A number of authors identify financial stability with financial independence, solvency and liquidity. Moreover, certain confusion is caused by differences in the names and techniques of calculating the indicators characterizing the above-mentioned concepts [1].

Kovalev V.V. and Volkova O.N. associate financial stability with the overall financial structure of the enterprise and the degree of its dependence on lenders and investors [2]. Moreover, for the sake of completeness, it is necessary to analyze not only the structure of funding sources, i.e. the ratio of own and borrowed funds, but also the structure of investment in terms of long-term perspective.

Boronenkova S.A. and Melnik M.V. in determining financial stability also refer to the capital structure and degree of financial autonomy. However, according to the authors, the priority characteristic of financial stability is the level of funding in terms of formation of stocks and costs [3].

Actually, the term "stability" is used as a characteristic of complex dynamic systems and describes the property of the system to maintain its current state under the influence of various influences or the ability to return to its original position or close to it after leaving it [4].

So, for example, N. N. Kaurova devoted her study of financial and economic security [5].

In his monograph E. V. Karanin describes the security of financial interests at all levels of financial relations, a certain level of independence, stability and stability of the country's financial system under the influence of external and internal destabilizing factors on it that pose a threat to financial security, as well as the ability of the financial system of the state to provide effective functioning of the national economic system and a constant economic growth [6].

In his publications, O. A. Mironova argues that financial stability and security lies in the national interests, which are secured by a set of measures carried out by the state through fiscal, tax, monetary and investment policies [7].

E.I. Kendyukh describes the financial sustainability of economic entities in industry due to food security [8].

Since financial security as a category is directly integrated with the category of financial stability, it can be concluded that these categories are rather widely characterized in modern literature, a certain theoretical basis and methodological tools have been created. It should be noted that this position is justified quite widely by I. A. Blank from the point of view of the existing characteristics of financial sustainability, where the author emphasizes its leading role and fundamental importance for the formation of the structure and assessment of the level of the financial potential of an enterprise ensuring its economic development. From this position, the characteristics of the elements embedded in the concept, such as: financial activities; operations related to financial activities; risks associated with financial activities [9].

Professor L. V. Davydova, in her articles, proceeds from the fact that "financial sustainability" is a general economic category. She appeals to the fact that there are no significant differences between the overall and financial stability of an enterprise. In this regard, she proposed the concept of "market sustainability", which is interrelated with the competitiveness of products, with the potential capabilities of the enterprise and its position in the market. The ability of an organization to successfully develop in a constantly changing situation in its external and internal sphere of activity is an indicator of market sustainability. The increase in profits, the introduction of innovations, the optimization of financial processes provide a financial basis for the self-financing of an enterprise in a market environment, for the implementation of the process of expanded reproduction [10].

B. Kolass assumes that "financial sustainability" is a purely financial category. He appeals to the fact that financial stability should be considered not in the context of the economic activity of the enterprise as a whole, but in the relationship and interdependence with its financial activities [11].

According to the position of A.D. Sheremet, the financial condition of an economic entity is manifested in its solvency, namely: the ability to currently meet the payment requirements of suppliers of goods, works and services in accordance with the concluded economic agreements; in the ability to repay current credit obligations, finance the payment of wages to workers and employees, fulfill tax and other financial obligations of a public nature [12].

According to the position of G.V. Savitskaya, the organization's financial condition is characterized by a system of indicators that are designed to reflect the state of capital in the process of its circulation, as well as the ability of a business entity to finance its activities for a fixed time [13].

Thus, financial stability is a system that includes a set of interacting elements based on differentiation and dynamics of indicators (indicators) allocated to assess its condition, protection from threats and risks, providing the conditions for sustainable and safe development.

Methodology – Indicators of economic, including financial sustainability at the level of the state and its regions are real statistical indicators of economic development, characterizing the most fully studied phenomena in the field of sustainable and safe development.

In order to manage the sustainable and safe development of individual organizations of light industry, it is important to determine the determinants of such development - management mechanisms and methods. The mechanism of managing sustainable development for each organization should be adaptable to innovation, anti-crisis policy, should be focused on the sectoral development strategy. Tools and methods should be aimed at retaining and expanding the organization's position in the market and maintaining the level of financial condition in order to achieve key indicators of strategic development.

Therefore, among the common and even mandatory tools for managing sustainable and safe development for light industry organizations, the following may be in demand:

- financial management (to ensure liquidity, profitability, financial sustainability);
- information resource management;
- management of innovation and competitiveness;
- quality management and effective marketing;
- Management of risks;
- active interaction with public authorities and management in the region of their financial institutions.

Relying on the determinants of development of the organization of light industry identified above, it is possible to create conditions for sustainability, financial stability, improve interaction and strengthen long-term economic ties with other organizations (suppliers of raw materials and consumers of the light industry and its products) on the terms of an effective contractual policy, timely and full implementation of on commitments. The spectrum of such conditions should, first of all, include:

- reduction of investment risks and investment attractiveness of projects implemented;
- optimization of logistics chains "supply of raw materials - production of products - sales of products to the consumer", taking into account regional features of the development of enterprises - contractors (partners, investors, suppliers, customers, etc.);
- reduction of inflation risks due to diversification of production and optimization of pricing policy for strategically important types of light products;
- technological development of the material base of production and activation of innovative activities;
- improving the effectiveness of the contractual policy and responsibility of the organization's management for the fulfillment of contractual obligations by all parties to the contractual relationship

The creation of all the conditions described above, aimed at adequately reflecting the influence of negative external and internal factors on the development of working producers and consumers of light industry products in the regions of the Republic of Kazakhstan, and requires constant analysis and monitoring.

Results of a research - In an economy based on market principles, financial relations have become the tool that allows you to adapt and adapt an organization to the new conditions for the reproduction of capital in general, to innovations occurring in its internal and external life. Here you need to understand that the financial activities of a private entity (organization) cannot conflict with the financial activities of a public entity (state), since they are directed towards a single resultant action - the growth of national welfare.

The Message of the President of the Republic of Kazakhstan, the Leader of the Nation N.A. Nazarbayev to the people of Kazakhstan dated January 10, 2018 "New development opportunities in the Fourth Industrial Revolution" states that "the focus on the manufacturing sector with high productivity is unchanged, it is necessary to develop and test new tools aimed at modernizing our enterprises with a focus on the export of products "[14].

Light industry is a complex industry that includes more than 20 sub-sectors, which can be combined into three main groups.

1. Textile, including cotton, wool, silk, knitwear, as well as the primary processing of wool, the production of nonwovens, the network knitting industry, felting and felt, etc.
2. Sewing.
3. Leather, fur, shoe.

In order to identify threats to the sustainable and safe development of light industry enterprises in the Republic of Kazakhstan, we will analyze the external environment, that is, the socio-economic conditions that currently exist in the regions of Kazakhstan, in which light industry organizations have to work.

In Kazakhstan's light industry, more than 90% of enterprises are represented by small and medium-sized businesses, while about 20% of the enterprises in the industry are equipped with outdated equipment, the workload of which is 30–40% [15].

Today in Kazakhstan, the number of operating enterprises in the industry as of January 1, 2019 was 992, of which 13 are large, 27 are medium and 952 are small enterprises. The share of light industry in the structure of the manufacturing industry is 0.9% (Figure 1) [16].

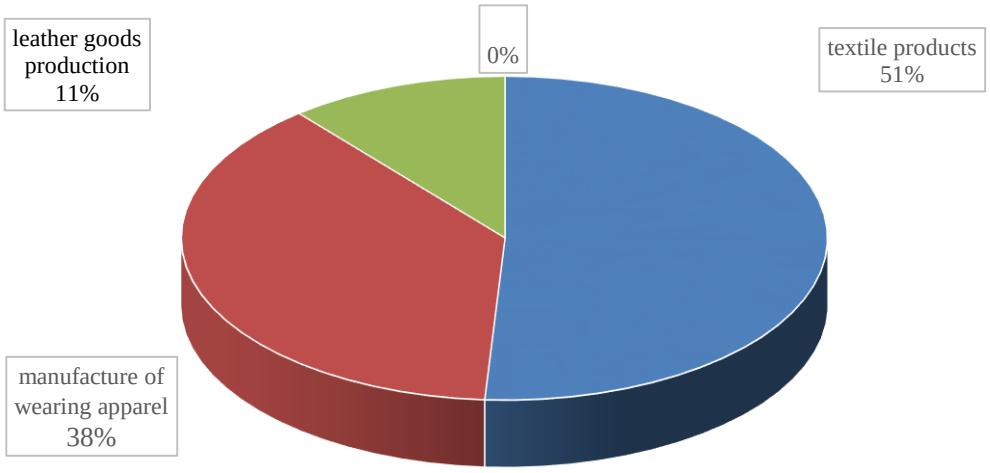

Figure 1 - The structure of products of light industry

Note: Compiled on the basis of the source: www.zakon.kz

In the structure of products of light industry in Kazakhstan, 51% is accounted for by the production of textiles, 38% by clothing and 11% by leather and related products (Figure 2) [17].

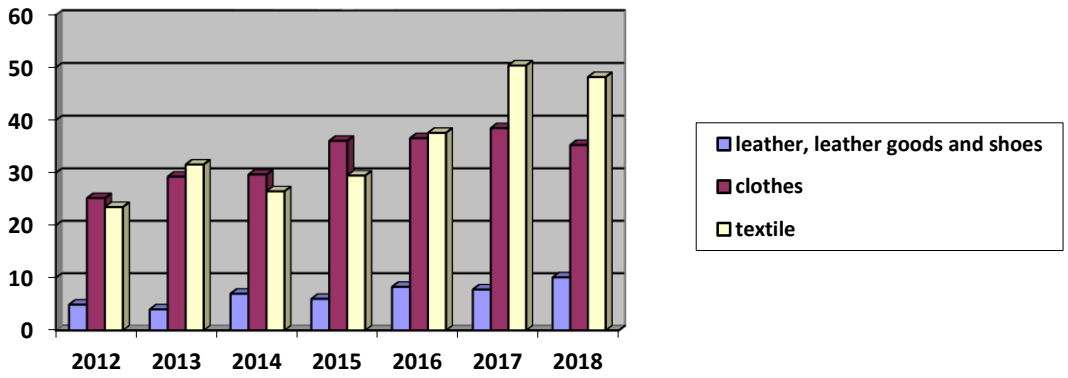

Figure 2 - Dynamics of production volumes of light industry
of the Republic of Kazakhstan for the period from 2012-2018, in billion tenge

Note - Based on the source: www.kidi.gov.kz

Investments in fixed assets in the sphere of light industry at the beginning of 2019 amounted to 913.7 million tenge, almost 13 times more than a year earlier. It should be noted that the growth was secured by the inflow of investments into the production of textiles (from 7.5 million tons in January 2018 to 902.9 million tons in January of the current 2019). In 2018, the volume of investments amounted to 72 million tenge. Immediately by 95.2% less than in the same period of 2017.

In 2018, Kazakhstan exported textiles and textiles in the amount of $ 180.3 million, and cotton fiber in the amount of $ 78.7 million. Exports of light industry products in January-November 2018 compared to the same period in 2017 decreased by 15.7% to $ 179 million.

One of the reasons for the predominance of imports over exports is that exports are mainly represented by low-value commodities, while imports mainly constitute finished goods with high added value. Significant imports of light industry products create competition for domestic goods.

Imports of light industry products in January-November 2018 amounted to $ 1,281 million, which is 15.6% higher than the same figure in 2017 (Figure 3) [17].

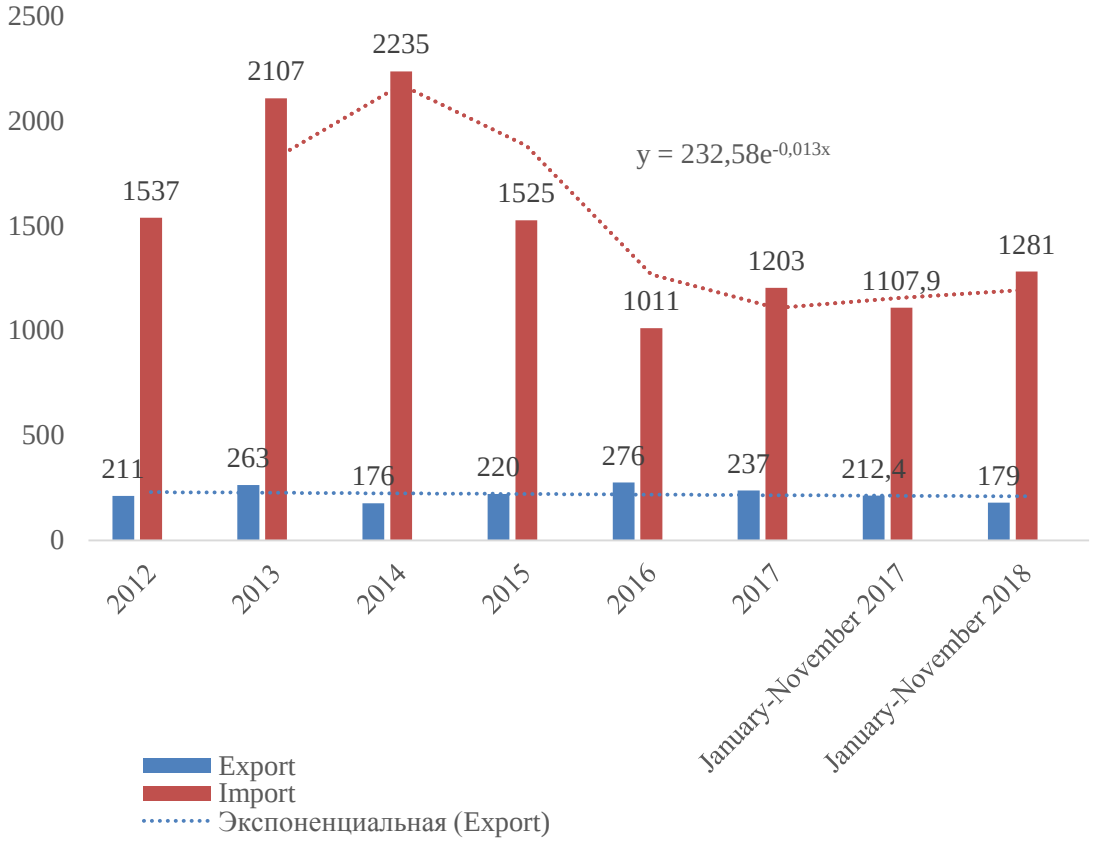

Figure 3 - Dynamics of export and import indices of light industry of the Republic of Kazakhstan for the period from 2012-2018, in million US dollars

Note - Based on the source www.kidi.gov.kz

Application functionality - If we consider the development of light industry in a regional aspect, then the main concentration of the industry is observed in three regions of the Republic of Kazakhstan - this is the city of Shymkent, the Almaty region and the city of Almaty (Table 1).

Table 1 – The main concentration of light industry in the regions of the Republic of Kazakhstan for 2017-2018 (in billion tenge)

Region	2017	2018
Atyrau region	1,9	3,3
Aktobe region	1,0	2,6
West Kazakhstan region	1,0	1,3
Kostanay region	3,2	2,6
North Kazakhstan region	2,6	1,6
Akmola region	5,7	6,7
Pavlodar region	6,0	5,4
Karaganda region	5,3	5,4

Astana city	3,1	3,1
East Kazakhstan region	4,3	4,3
Mangystau region	2,4	2,6
Kyzylorda region	0,9	1,5
South Kazakhstan region	34,9	28,2
Zhambyl region	2,8	3,5
Almaty region	12,0	11
Almaty city	9,6	10,8
Note – compiled by authors according to the source www.kidi.gov.kz		

Based on this, we presented data for 2018 on the sectoral specialization of these regions (Table 2) [18].

Table 2 - Sectoral specialization of the development of light industry in the southern regions of the Republic of Kazakhstan for 2018

Indicator	2018		
	Almaty region	Almaty city	Shymkent city
Share in production, in %	12,0	9,9	36,1
Number of enterprises, units:			
Textile	13	73	62
Clothes	29	197	39
Leather, shoes	11	31	13
Note - Compiled on the basis of the source: National Chamber of Entrepreneurs of Kazakhstan "Atameken" for 2018			

The considered indicators of the development of light industry, both in general and in the regional aspect in the Republic of Kazakhstan, determine the relevance of identifying and researching the factors affecting the financial condition of light industry enterprises, and hence their financial sustainability.

Conclusions - The development of light industry in Kazakhstan today is one of the priorities and has great potential, since Kazakhstan:

1) is located in a single market with Russia and Kyrgyzstan in the EAEU, where there are no customs borders and restrictions

2) where there are all opportunities for expanding markets and exporting products;

3) there is a competitive advantage, as it borders on China.

There are many areas of development of domestic production of the textile and clothing industry of the country, whose products, above all, should be focused on improving the competitiveness of domestic products and import substitution in the domestic market of Kazakhstan. Among the main areas of work for the development of light industry in Kazakhstan are the following:

- modernization of production;
- implementation of systematic measures of economic policy, including in the field of public procurement and increasing the share of local content;
- providing industry with qualified human resources;
- the development of science and innovation;
- measures for crisis management and financial rehabilitation and financial sustainability of enterprises in the industry [19].

These issues are to be resolved with the direct participation of the state through the implementation of measures to protect the Kazakhstani manufacturer, combat counterfeit and contraband products, use subsidies, leasing schemes, investment funds, and develop public-private partnerships.

Government support for light industry, both organizational and financial, is quite extensive. Despite this, there are problems in the sphere that impede the development of industry, for example, a high level of concentration and closeness. For this, it is necessary to organize sales within the country. In order to develop the industry and its use in the Kazakhstan economy, the following support measures are provided:

- direct financial assistance, including the provision of concessional loans, loans, earmarked grants;
- state encouragement of innovation (introduction of new technologies, pilot and serial production of new products);
- export orientation and promotion of development of foreign economic activity, which includes assistance in insurance, organizing and participating in international exhibitions, providing market information;

- information support of SMEs, including the provision of comprehensive information, the promotion of science in the field of creating new technologies and materials, methods of their use and specific recipients of receipt;

- zero rates on loans for the purchase of equipment;

- organization of work with well-known foreign firms under tolling schemes;

- subsidizing the purchase of raw materials and auxiliary materials for light industry enterprises;

- For exporters, VAT refund on export of products in accordance with the Tax Code of the Republic of Kazakhstan.

In order to support this industry, the Roadmap projects for the development of the light and furniture industry and the construction industry for 2019-2021 were approved. The implementation of the proposed measures will allow annually increasing the production of building materials, products of light and furniture industry by 73 billion tenge [20].

The prospects for Kazakhstan largely depend on the degree of its successful integration into the world economy. At the same time, the country faces the task of not integrating into the world economy at any cost, but of taking a place in it that is adequate to its economic potential [21]. To solve this task, first of all, you need to know what resources our country has today for full integration, and what needs to be done to use these resources and, if possible, to increase the existing economic potential. The aim of this work is to prepare proposals for the development of Kazakhstan's light industry, which will contribute to the development of domestic production and the opening of new competitive enterprises capable of entering foreign markets.

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ҚАЗІРГІ ЗАМАНҒЫ ҮРДІСТЕРДІ ЕСКЕРЕ ОТЫРЫП, ҚАЗАҚСТАННЫҢ ЖЕҢІЛ ӨНЕРКӘСІП ШАРУАШЫЛЫҚ СУБЪЕКТІЛЕРІНІҢ ҚАРЖЫЛЫҚ ТҰРАҚТЫЛЫҒЫ

Аннотация. Қазіргі заманғы қазақстандық экономика үшін өнеркәсіптік кәсіпорындардың экономи-калық қаржылық тұрақтылығы мен бәсекеге қабілеттілігін қамтамасыз ету проблемалары неғұрлым өзекті болып табылады. Жеңіл өнеркәсіптің экономикалық және стратегиялық қауіпсіздікті, еңбекке қабілетті халықты жұмыспен қамтуды қамтамасыз етудегі және жаңа геосаяси жағдайларда оның өмір сүру деңгейін арттырудағы елеулі рөлін ескере отырып, саланы дамытуға ерекше көңіл бөлу және оған жетекші әлемдік елдер сияқты елеулі инвестициялық қолдау көрсету қажет.

Мақалада әлеуметтік маңызы бар өнімдер өндірісіндегі маңызды орындардың бірі болып табылатын Қазақстан Республикасының жеңіл өнеркәсібінің қазіргі жай-күйін талдау қарастырылған. Соңғы жылдары салада құлдырау байқалады, ол өндіріс индексінің төмендеуімен сүйемелденеді және шығарылатын өнімнің бәсекеге қабілеттілігіне теріс әсер ететін өндірістің технологиялық артта қалуымен байланысты.

Зерттеу барысында баланстар, мәліметтер, топтастыру, ранжирлеу, коэффициенттер, салыстыру, динамика қатарлары әдістері мен тәсілдері қолданылды.

Түйін сөздер: жеңіл өнеркәсіп, киім нарығы, импорт, экспорт, қаржылық тұрақтылық, қаржы қауіп-сіздігі, қаржыны басқару.

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АНАЛИЗ ФИНАНСОВОЙ УСТОЙЧИВОСТИ ХОЗЯЙСТВУЮЩИХ СУБЪЕКТОВ ЛЕГКОЙ ПРОМЫШЛЕННОСТИ КАЗАХСТАНА С УЧЕТОМ СОВРЕМЕННЫХ ТЕНДЕНЦИЙ

Аннотация. Для современной казахстанской экономики наиболее актуальными являются проблемы обеспечения экономической финансовой устойчивости и конкурентоспособности промышленных предприятий. Учитывая значительную роль легкой промышленности в обеспечении экономической и стратегической безопасности,

занятости трудоспособного населения и повышении его жизненного уровня в новых геополитических условиях, необходимо уделять особое внимание развитию отрасли и оказывать ей существенную инвестиционную поддержку, как это делают ведущие мировые страны.

В статье рассмотрен анализ современного состояния легкой промышленности Республики Казахстан, которая занимает одно из важнейших мест в производстве социально значимой продукции. В последние годы в отрасли отмечается спад, который сопровождается снижением индекса производства и связан с технологическим отставанием производства, который отрицательно сказывается на конкурентоспособности выпускаемой продукции.

В ходе исследования использовались приемы и методы балансов, сводки, группировки, ранжирования, коэффициентов, сравнения, рядов динамики.

Ключевые слова: легкая промышленность, рынок одежды, импорт, экспорт, финансовая устойчивость, финансовая безопасность, управление финансами.

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MANAGEMENT SYSTEM OF INNOVATIVE ACTIVITY DEVELOPMENT IN THE REPUBLIC OF KAZAKHSTAN

Abstract. The purpose of the work is to determine the most effective existing system of innovation management in the country. To conduct the work, comparison methods, analysis and synthesis were used, with the help of which the world experience of creating an innovation process management system is presented. In the modern economy, the development, implementation and use of innovations allows the country to be competitive, create jobs and increase the welfare of the population. The results of the work are a characteristic of an effective system of innovation management at the state level. The area of application of the results is in the practical activities of the state and is reflected in the results of the implementation of state programs and regulatory legal acts in the field of innovation. As a result of the analysis of the world and Kazakhstani experience in creating a management system for innovation, conclusions were drawn about the need for systematic and focused work at all levels. Consistency implies a concentration of activities and an emphasis on priorities in the development and application of innovations. Innovations should be developed in such areas as public services, information technology, medicine, tourism, finance and other important areas.

Keywords: state, innovation, innovative development, system, management.

Introduction - The relevance of the research topic is caused by the need to ensure continuous innovative development of the economy in order to improve the welfare of the country. The innovation development management system should contribute to increasing competitiveness, growth of employment, creating benefits for society and the state.

The purpose of the research is to consider the issues of innovative development of the country and determine the optimal system for managing this process. To achieve the goal the task was to determine the most optimal system for managing the development of the innovation process. This task is intended to show world experience in the use of control systems and the possibility of their application in the Republic of Kazakhstan.

During the study, comparison methods (benchmarking), analysis and synthesis were used, as the world experience gives an example for comparison.

To activate innovative activity in Kazakhstan, the Laws «On Informatization» and «Innovation Activities», the «State Program of Industrial and Innovative Development of the Republic of Kazakhstan for 2015-2019», the State Program «Digital Kazakhstan» for 2017-2020 and other documents were passed [1-4].

At present, innovation is the most important factor in enhancing national competitiveness, which is achieved with the right definition of goals and priorities.

In this regard, the state is called upon to form and maintain an environment conducive to the development and improvement of the competitive advantages of domestic companies.

Innovative development is the basis for the development and modernization of all sectors of the economy and fields of activity, as it involves the introduction of new technologies, techniques and organizational management methods.

The definition of innovations shows them as the development and implementation of new ideas, organizational methods and techniques, the use of which increases competitiveness and creates new values.

Consistency in the management of innovation activity involves the systematization of goal setting and coverage of the largest number of activity areas and development directions.

Thus, the concept of innovative development of the country's economy and the inclusion of innovative directions in the strategy of companies should become the main national ideas [5, p. 3].

Methods

When working on the article, statistical data were used, as well as economic literature and official publications in indexed journals.

Research methods include logical, systemic and statistical analysis of innovative processes, as well as an assessment of the industrial and innovative development of the country's regions.

The study was based on an analysis of information from official sources, including scientific publications, reviews and data from state statistics authorities, analytical data on innovative technologies of specialized research institutes.

In the analysis of statistical indicators, comparative and factor analyzes were used, the results of which were reflected in the conclusions and recommendations.

Results of a research

Kazakhstan, in its practice of innovative development, uses the existing experience and current trends in innovation activity used in foreign practice. Many countries use integrated innovation management systems, including at the state level.

The main essence of the integrated management system (IMS) is that the units involved in the implementation of innovation policy and innovation management are distributed at different levels of the managerial structure, but they interact with each other and coordinate their joint activities [6].

This contributes to the creation of a flexible structure for managing innovative activities, with horizontal connections between departments, through the development of a program based on a long-term development strategy.

Countries using innovative development can be divided into three main groups [7]:

- leading in science through the implementation of large-scale innovative projects, including in all areas of science and production (USA, UK, France);

- using innovations and creating a favorable innovative climate in the country (Germany, Sweden, Switzerland);

- supporting the innovation process by creating the appropriate infrastructure and developing various branches of science (Japan, South Korea, China).

That is, the state policy in the field of innovation is formed on the basis of priority activities to increase competitiveness, ensure economic development and improve the standard of living of the population. The country determines the strategy of innovative development by identifying opportunities and priorities. Moreover, the system for managing the development of innovative activity in the Republic of Kazakhstan is based on principles, the main of which are [2]:

– orientation of the state strategy towards the innovative development path;
– support for programs and projects aimed at implementing innovative policies;
– personnel training for the implementation of innovative activities;
– freedom in receiving and spread of information on innovative needs and the results of scientific, technical and innovative activities.

Thus, the system for managing the development of innovative activity includes the following areas:

1) regulation of priority areas of innovative development and innovative programs;

2) establishment of organizational and economic conditions for attracting investments in the promotion of innovation policy;

3) creation of innovative infrastructure;

4) financing of innovative programs from the state budget;

5) state participation in the creation of innovative industries;

6) promotion of Kazakhstani innovations in foreign markets.

The subjects of innovation activity can be individuals and legal entities, technology parks, technology incubators and innovation centers, the main activity of which is aimed at creating innovation.

At the same time, attention should be paid to small and medium-sized businesses that, as startups, are engaged in the development of innovations and the promotion of new ideas [8].

Statistical performance indicators of the state program of industrial and innovative development of Kazakhstan are compiled by the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan.

Table 1 - General indicators of industrial and innovative development of Kazakhstan.
GVA of the manufacturing industry*, in nominal terms, in million tenge

Regions \ years	2014	2015	2016	2017	2018	January-June 2019
Total in the Republic of Kazakhstan	4093 849,1	4 201 012,1	5 321 896,9	5 944 890,9	7 057 977,6	1 631 421,7
Akmola	147 488,1	166 194,6	258 480,1	287 083,7	334 371,8	86 480,4
Aktobe	155 711,0	161 897,8	223 689,7	261 995,4	335 687,8	94 267,1
Almaty	363 266,3	360 889,3	400 809,7	506 916,7	599 284,5	135 213,4
Atyrau	189 426,3	184 664,2	256 473,5	257 640,4	597 037,0	67 472,0
West Kazakhstan	83 283,3	63 024,7	74 199,2	90 900,9	117 045,7	23 685,3
Zhambyl	133 910,9	122 981,3	146 887,1	148 807,5	175 511,1	50 702,4
Karaganda	789 859,7	922 700,3	1176 434,4	1 310 359,6	1 414 850,4	319 220,5
Kostanay	159 302,6	158 465,5	181 630,9	237 972,1	269 170,5	61 814,5
Kyzylorda	46 841,6	60 417,0	87 738,0	67 460,3	72 933,3	17 430,2
Mangystau	67 930,1	77 097,2	96 648,4	92 780,7	148 369,0	21 630,9
South Kazakhstan	474 296,9	484 481,2	499 050,5	587 213,9		
Turkistan	-	-	-	-	173 528,0	44 701,2
Pavlodar	391 470,7	389 903,4	536 615,6	661 929,1	750 813,4	177 857,4
Northern Kazakhstan	74 383,4	73 262,7	94 805,0	112 469,5	122 103,5	25 485,6
Eastern Kazakhstan	503 389,5	453 709,7	686 056,2	633 887,3	716 910,5	178 571,8
Nursultan City	119 721,4	177 736,9	185 946,3	238 590,7	292 918,2	64 572,0
Almaty city	393 567,3	343 586,3	416 432,3	448 883,1	437 700,3	123 468,8
Shymkent city **	-	-	-	-	499 742,6	138 848,2
* In connection with the transfer of the regional center from Shymkent to Turkestan in 2018, the data are presented for 2018-2019 for the Turkestan region; ** In connection with the attribution of the city of Shymkent to the largest cities of the Republic of Kazakhstan, data for 2018-2019 are presented for the city of Shymkent separately from the Turkestan region						
Note: compiled by source [9]						

Table 2 - Results of the implementation of the state program «Information Kazakhstan – 2020» by 10.10.2018 (state bodies)

Indicator	Measurement	2013	2014	2015	2016	2017	2018
Innovation Activity Level	%	8,0	8,1	8,1	9,3	9,6	9,8
Number of own data centers, server rooms, server equipment of government bodies	units		The number of own data centers - 33; server rooms - 2302; server equipment (server, video server, uninterruptible power supply, data storage system and server cabinet and rack) - 23868	The number of own data centers - 34; server rooms - 2618; server equipment (server, video server, uninterruptible power supply, data storage system and server cabinet and rack) - 20261	The number of own data centers - 12; server rooms - 2327; server equipment (server, data storage system) - 6227	The number of own data centers - 18; server rooms - 2442; server equipment (server - 5806, data storage system - 1210) - 7016	The number of own data centers - 21; server rooms - 2537; server equipment (server - 5933, data storage system - 1330) - 7612
Note: compiled by source [9]							

An analysis of the general indicators of industrial and innovative development is presented for the manufacturing industry, the development of which is aimed at the country's efforts (table 1). According to statistics it follows that in the republic as a whole there is an increase in gross income, in all regions and large cities. In some regions, there was a decrease in indicators in 2015-2016.

In the same way, work on informatization and digitalization is carried out systematically at the state level.

The state program «Digital Kazakhstan» is aimed at the development, implementation and use of digital technologies in the work of government bodies, companies and the public [4]. To implement this program, digitalization of all sectors of the economy, science, education, healthcare, the creation of smart cities and others is supposed. The target indicators of the program are labor productivity indicators, the share of electronic commerce, the level of digital literacy, and the improvement in the WEF GCI rating by the «Ability to Innovation» indicator.

In recent years, there have been significant changes in the field of digitalization, which is reflected in the daily life of the country.

Government agencies use the e-government program to provide services to the public, disseminate the necessary information and issue reference materials and documents on the basis of the «Single Window» principle [10]. Although it should be noted that there are the cases of information leakage occurred as a result of the «human factor» or cyberattacks. To prevent such cases, cybersecurity should be strengthened and the risk of negligence or criminal schemes in working with personal and state information should be reduced.

In healthcare and medicine, DamuMed program has been introduced, with the help of which city residents can make an appointment with doctors and receive the necessary information on medical services.

There has been developed a program for using Kazakh language on the iPhone and iPad, which makes it possible to further develop Kazakh language.

In the field of education, almost from the moment of gaining independence, the process of computer equipping for schools, colleges and universities began in order to teach computer literacy students.

Various innovations are encouraged in science, for which scientists are given grants for research activities.

In science and education, grants are provided for studying at leading foreign universities under the undergraduate, graduate and doctoral programs.

In the business sector, startup innovations are encouraged if they are real business projects aimed at developing and implementing inventions or developments.

It must not be forgotten that the territory of Kazakhstan houses the Baikonur cosmodrome, as a result of which there is a significant opportunity for the development of space technologies.

Thus, it should be recognized that the implementation of work on the creation of a management system for innovative activities in the republic is mainly being successfully implemented. Shortcomings in the Internetization, informatization and digitalization of remote and small settlements remain a significant problem. It would also be necessary to raise the living standards of certain categories of the population who cannot afford to use the benefits of civilization, especially in rural areas.

Conclusion

In accordance with the results of the work carried out, it can be concluded that in Kazakhstan, the work on managing innovative activities is carried out systematically and stably. The plans are being implemented, although a decrease in some indicators due to the crisis and devaluations has affected the successful development of the country.

Innovations are introduced not only in the field of technology or new technologies. Various novelties in organizational, social and other areas also relate to innovations and require careful consideration, since their influence may appear in the future and affect the further development of society and the state.

The innovation management system can be successfully implemented only by joint efforts, starting with government bodies and ending with each member of the society.

For this, an appropriate infrastructure must be created, whereas thinking and mentality should be directed towards creating a future for the whole society.

The state in the development of economic policy should take into account the interests of the entire community, which creates tangible and intangible values. The functions of the state are to increase the competitiveness and real well-being of society. To this end, efforts should be directed to the development of national companies and start-ups, support of innovative strategies of companies, at the same time, avoiding undue interference in the activities of companies and violation of the competitive environment.

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ ИННОВАЦИЯЛЫҚ ҚЫЗМЕТ ДАМУЫН БАСҚАРУ ЖҮЙЕСІ

Аннотация. Жұмыстың мақсаты - елдегі инновациялық менеджменттің ең тиімді жүйесін анықтау. Жұмысты жүргізу үшін салыстыру, талдау және синтез әдістері қолданылды, олардың көмегімен инновациялық процестерді басқару жүйесін құрудың әлемдік тәжірибесі ұсынылды. Қазіргі экономикада инновацияны дамыту, енгізу және қолдану елдің бәсекеге қабілетті болуына, жұмыс орындарын құруға және халықтың әл-ауқатын арттыруға мүмкіндік береді. Жұмыс нәтижелері мемлекеттік деңгейде инновациялық менеджменттің тиімді жүйесінің сипаттамасы болып табылады. Нәтижелерді қолдану аймағы мемлекеттің практикалық қызметінде болады және инновация саласындағы мемлекеттік бағдарламалар мен нормативтік құқықтық актілерді іске асыру нәтижелерінен көрінеді. Инновацияны басқару жүйесін құрудағы әлемдік және қазақстандық тәжірибені талдау нәтижесінде барлық деңгейде жүйелі және мақсатты жұмыстың қажеттілігі туралы тұжырымдар жасалды. Жүйелілік дегеніміз іс-әрекеттің шоғырлануын және инновацияларды дамыту мен қолданудағы басымдықтарға баса назар аударуды білдіреді. Инновациялар мемлекеттік қызметтер, ақпараттық технологиялар, медицина, туризм, қаржы және басқа да маңызды салаларда дамуы керек.

Түйін сөздер: мемлекет, инновация, инновациялық даму, жүйе, басқару.

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СИСТЕМА УПРАВЛЕНИЯ РАЗВИТИЕМ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ В РЕСПУБЛИКЕ КАЗАХСТАН

Аннотация. Цель работы состоит в определении наиболее эффективной действующей системы управления инновационной деятельностью в стране. Для проведения работы использовались методы сравнения, анализ и синтез, при помощи которых представлен мировой опыт создания системы управления инновационным процессом. В современной экономике разработка, внедрение и использование инноваций позволяет стране быть конкурентоспособной, создавать рабочие места и повышать благосостояние населения. Результаты работы представляют собой характеристику эффективной системы управления инновационной деятельностью на уровне государства. Область применения результатов находится в практической деятельности государства и отражается в результатах выполнения государственных программ и нормативно-законодательных актов в области инновационной деятельности. В результате анализа мирового и казахстанского опыта создания системы управления инновационной деятельности были сделаны выводы о необходимости системности и целенаправленной работе на всех уровнях. Системность предполагает концентрацию деятельности и акцент на приоритеты в разработке и применении инноваций. Следует развивать инновации в таких сферах, как государственные услуги, информационные технологии, медицина, туризм, финансы и другие важные направления.

Ключевые слова: государство, инновация, инновационное развитие, система, управление.

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TO THE QUESTION OF NOVELTIES OF THE INTERNATIONAL AIR LAW

Abstract. The International Air Law is oneof the branches of international law, representing set of the international legal principles and norms, governing the relations between the states for implementation of the international air traffics. A subject of the international air law is the relations between the states, which concern the legal regime of airspace and the international air traffics. Air traffics between the states are regulated on the basis of the conventional principles of the International Law, the principles and norms, which are contained in the multilateral and bilateral agreements, concluded between various states. The International Civil Aviation Organization (ICAO) is the main international organization, which is carrying out the activity in the sphere of regulation of air traffics. The basic principle of the International air law is the principle of sovereignty of the state over the airspace, located over all its overland and water territory. This principle is enshrined in the Convention on the international civil aviation of 1944 and determines the content of other principles of the International Air Law, also the character and the features of the legal relationship, using airspace in the international air traffics. There are the basic principles of the International Air Law: 1) principle of safety of the international civil aviation; 2) the principle of free flights in the international airspace.

Key words: international air law, branch of law, international legal principles, norms of international law, international air traffic, legal regime of airspace, principles of international law, multilateral agreements, bilateral agreements, International Civil Aviation Organization.

Air Law, one of the branches of law, directly or indirectly concerned with the civil aviation. Aviation in this context extends to both heavier-than-air and lighter-than-air aircraft. Air-cushion vehicles are not regarded as aircraft by the International Civil Aviation Organization (ICAO), but the practice of individual states in this regard is not yet settled. The earliest legislation in air law was 1784 decree of the Paris police, forbidding balloon flights without a special permit.

Large part of air law is either International Law or International Uniform Law (rules of national law, international uniform). International Air Law is need an international agreement or an amendment for the states-sides if the treaty.

A basic principle of International Air Law is complete and exclusive sovereignty over the airspace above its territory, including sea territory. At the turn of the 20-th century the view that airspace, like the high seas, should be free, was changed. But the principle of airspace sovereignty was unequivocally affirmed in the Paris Convention on the Regulation of Aerial Navigation (1919) and subsequently by various other multilateral treaties. The principle is restated in the Chicago Convention on International Civil Aviation (1944). Airspace is now generally accepted as an appurtenance of the subjacent territory and shares the latter's legal status. Thus, under the Geneva Convention on the High Seas (1958) as well as under international customary law, the freedom of the high seas applies to aerial navigation as well as to maritime navigation. Vertically, airspace ends where outer space begins [1, P.17].

It follows from the principle of airspace sovereignty that every state is entitled to regulate the entry of foreign aircraft into its territory and that persons within its territory are the subjectsof the laws. States normally permit foreign private (i.e., nongovernmental and noncommercial) aircraft to visit or fly through their territory without too much difficulty. Such aircraft registered in states that are sides to the 1944 Chicago Convention.

Commercial air transport is divided into scheduled air services and nonscheduled flights. Charter flights fall mostly, but not invariably, into the latter category. Under the Chicago Convention, contracting

states agree to permit aircraft registered in the other contracting states and engaged in commercial nonscheduled flights to fly into their territory without prior diplomatic permission and, moreover, to pick up and discharge passengers, cargo and mail [2, P.29].

The privilege of operating commercial services through or into the foreign country was enteredin 1944, during Chicago conference, split into five so-called freedoms of the air. The first is the privilege is flying across the country nonstop; the secondis flying across with the stop for technical purposes only. These two freedoms are also known as transit rights. A large number of ICAO members are the sidesof the 1944 International Air Services Transit Agreement, placing these rights on a multilateral basis. The thirdfreedom of the air is known as traffic rights, referring to passengers, mail, or cargo carried on a commercial service. The forth of the five freedoms is the privilege of bringing in and discharging traffic from the home state of the aircraft or airline; the fourth is picking up traffic for the home state of the aircraft or airline; the fifth is that of picking up traffic for or discharging traffic from third states in the territory of the state granting the privilege. The fifth freedom is the main bargaining point in the exchange of traffic rights among the states. Attempts have been made since 1944 to create other freedoms, but each new freedom usually represents in practice a new restriction [3, P.64].

Efforts to conclude a widely acceptable multilateral agreement on traffic rights were unsuccessful, and such rights have continued to be handled through bilateral international agreements. These agreements fix the routes to be served, the principles governing the capacity of the agreed services (frequency of the service multiplied by the carrying capacity of the aircraft used), and the procedures for the approval of fares and tariffs by the respective governments. Most agreements require that airlines operating the same routes consult among themselves before submitting their fares to the two governments and many agreements specify the International Air Transport Association (IATA), an association of airlines, as the organ for such consultations. The right to carry domestic traffic between the points within a state is normally reserved to that state's own airlines. A bilateral agreement signed at Bermuda in 1946 between the United Kingdom and the United States set a pattern that has generally been followed, although the formal Bermuda-type agreement is likely to be accompanied by confidential memorandum attaching various restrictions.

In private law the acceptance of this maxim for a long time posed little difficulty, and the Code Napoléon of 1804 adopted it almost verbatim; in more recent times, however, it is more than questionable whether such a principle can be accepted without qualification. Both the German Civil Code (1896) and the Swiss Civil Code (1907), adopted the functional approach, limiting the right of the owner to such a height and depth as the necessity for enjoyment of the land. In common-law countries the courts have arrived at a broadly similar position. In France, too, both the doctrine and the courts have refused to take the regulation literally. In one celebrated case, Clément Bayard v. Coquerel (1913), the Court of Compiègne, lending judicial authority for the first time to the theory of abuse of rights, awarded damages to a plaintiff, whose balloon had been destroyed by "spite structures", erected by the defendant on his own land and ordered the offending spikes to be taken down.

In the course of the 1920s it became clear in most countries, either through judicial decisions or express legislation that aircraft would be allowed to fly over the private properties of others in normal flight, in accordance with aeronautical regulations. This immunity applies only to the mere passage of the aircraft and does not extend to damage caused by it encroachments on the use or enjoyment of the land, such as excessively low flights [4, P.58].

In most countries airports may be privately, municipally, or nationally owned and operated, and the siting of an airport may be the subject to town and country planning or zoning regulations. Whether or not the establishment of an airport requires special permission, aircraft leaving or entering a country will normally be required to do so at an airport having customs and immigration facilities. Airports that are open to public use are generally subject to some form of licensing or control in order to ensure compliance with minimum safety standards. Members of ICAO, in order to comply with their obligations under the Chicago Convention, have to make the same conditions as they are open to national aircraft. Restrictions may also be imposed on the noise level of aircraft taking off or landing, as well as the general level of noise, vibration, smoke, and so forth that may result from the operation of airports. In order to secure safety of flight, restrictions may be imposed on the use of lands adjoining an airport, such as the height of buildings or the planting of trees. Practice varies as to whether such restrictions are regarded as true

measures of planning or zoning the private property for public use, which require the payment of compensation [5, P.222].

Some legal systems exempt the airport owner, operator, and users from liability for low flights over neighboring properties, noise, vibration, or other forms of disturbance, provided all necessary regulations and conditions. In the absence of such immunity, granted by law or obtained privately from adjacent landowners, the owners, operators and users of airports are basically liable, in much the same way as other occupiers of land, for any substantial impairment of the use or enjoyment of neighboring lands.

Among the most important points resolved in the 1919 Paris Convention were that aircraft should have a nationality, that they should have the nationality of the state, in which they were registered, and that no aircraft could be validly registered in more than one state. The 1944 Chicago Convention retained these principles. While both conventions preclude dual or multiple registration, the ICAO Council in 1967 recognized the possibility of joint registration of aircraft by the number of states, and even "international registration" [6, P.16].

Under the 1944 Chicago Convention an aircraft, in order to benefit from the privileges conferred by the convention, must comply with its terms. Many of these terms are further elaborated in annexes to the convention. According to the norm of Article 20 of the convention, "every aircraft engaged in international air navigation shall bear its appropriate nationality and registration marks".In accordance with the norm of Article 31, "every aircraft engaged in international navigation shall be provided with a certificate of airworthiness issued or rendered valid by the State in which it is registered".In 1960 a number of European countries signed, in Paris, a multilateral agreement, relating to Certificates of Airworthiness for Imported Aircraft, which is open to accession by other states, designed to facilitate mutual recognition of certificates of airworthiness for import and export purposes. Under Article 30(a) of the Chicago Convention,aircraft of each contracting state may carry out radio transmitting apparatus only in case of registeredlicense [7, P.49].

As regards the operating personnel of the aircraft, the Chicago Convention provides that the pilot of every aircraft and the other members of the operating crew of every aircraft engaged in international navigation shall be provided with certificates of competency and licenses issued or rendered valid by the State of aircraft registration.

When an aircraft is almost registered in one contracting state or on the territory of other contracting states,radio transmitting apparatus may be used only by the members of the flight crew, who are provided with a special license for the purpose, issued by the appropriate authorities of the State, in which the aircraft was registered.

In addition, the convention prescribes that there shall be maintained in respect of every aircraft engaged in international navigation a journey log book in which shall be entered particulars of the aircraft, its crew and of each journey.

All of the above documents must be carried by "every aircraft of a contracting State, engaged in international navigation," as well as the appropriate manifests if passengers and cargo are carried.

The fact that all of these rules concerning the aircraft and its crew are channeled through the state of registry can give rise to the problems, when an aircraft is leased or chartered for any length of time to operators of different nationalities ("interchange of aircraft"). These problems can sometimes be resolved by a temporary transfer either of de facto control or of registration of the aircraft to the state of the operator.

The provision and operation of ground and other air navigation facilities, as well as the establishment and enforcement of air navigation rules and air traffic control, are the responsibility of the territorial state. So is investigation of accidents, though among ICAO members, under the Chicago Convention the state of registry shall be given the opportunity to appoint observers to be present at the inquiry [5, P.227].

Among ICAO members, over the high seas the Rules of the Air established by ICAO. Enforcement rests primarily with the state of registry, which is also responsible for investigating accidents occurring over the high seas. A body known as Euro control, established in 1960 by the Brussels Convention Relating to Co-operation for the Safety of Air Navigation, represents an attempt at international cooperation in air-traffic control by the number of western European states.

Registration of aircraft for nationality and publiclaw purposes is distinguished from registration for purposes of private law. Some legal systems treat aircraft simply as ordinary movable property. Others

require all sales and other transactions, relating to aircraft, such as mortgages, to be affected in writing and recorded in a public registry before they may be invoked against third sides. If aircraft is used as security for credit or loans, the system of recording of rights with international recognition of the rights recorded with obvious advantages. Convention on the International Recognition of Rights in Aircraft was concluded in Geneva in 1948. Few states accepted it at the beginning, but later, with the rising cost of modern aircraft, the interest in the convention was increased. Its wide acceptance will have the side effect of bringing about much greater uniformity in the rules of private law, governing the rights on aircraft.

Air Law, the branch of law, has directly or indirectly concerned with the civil aviation. Aviation in this context extends to both heavier-than-air and lighter-than-air aircraft. Air-cushion vehicles are not regarded as aircraft by the International Civil Aviation Organization (ICAO), but the practice of individual states in this field is not yet settled. The earliest legislation in Air Law was 1784 Decree of the Paris police, forbidding balloon flights without a special permit. In the beginning we wrote about this Decree.

Large part of Air Law is either International Law or International Uniform Law (rules of national law that have by agreement been made internationally uniform) [6, P.48].

Basic principle of International Air Law is: every state has complete and exclusivesovereignty over the airspace above its territory, including its territorial sea. At the turn of the 20th century the view that airspace, like the high seas, should be free was sometimes advanced. But the principle of airspace sovereignty was unequivocally affirmed in the Paris Convention on the Regulation of Aerial Navigation (1919) and subsequently by various other multilateral treaties. The principle is restated in the Chicago Convention on International Civil Aviation (1944). Airspace is now generally accepted as an appurtenance of the subjacent territory and shares the latter's legal status. Thus, under the Geneva Convention on the High Seas (1958) as well as under international customary law, the freedom of the high seas applies to aerial navigation as well as to maritime navigation. Vertically, airspace ends, where outer space begins.

It follows from the principle of airspace sovereignty that every state is entitled to regulate the entry of foreign aircraft into its territory and that persons within its territory are the subject ofnational legislation. States are normally permit foreign private (i.e., nongovernmental and noncommercial) aircraft to visit or fly through their territory without too much difficulty. Such aircraft is registered in the states- the sides of the 1944 Chicago Convention, which allows into the territories of all other contracting states without prior diplomatic permission.

Commercial air transport is divided into scheduled air services and nonscheduled flights. Charter flights fall mostly, but not invariably, into the latter category. Under the Chicago Convention, contracting states agree to permit aircraft registered in the other contracting states and engaged in commercial nonscheduled flights into their territory without prior diplomatic permission [7, P.55].

For scheduled air services, the privilege of operating commercial services through or into the foreign country is 1944 Chicago conference, split into five so-called freedoms of the air. The first is the privilege of flying across a country nonstop; the second, of flying across with a stop for technical purposes only. These two freedoms are also known as transit rights. A large number of ICAO members are the sides of 1944 International Air Services Transit Agreement, placing these rights on a multilateral basis.

Efforts to conclude a widely acceptable multilateral agreement on traffic rights were unsuccessful, and such rights have continued to be handled through bilateral international agreements. These agreements fix the routes to be served, the principles governing the capacity of the agreed services (frequency of the service multiplied by the carrying capacity of the aircraft used), and the procedures for the approval of fares and tariffs by the respective governments. Most agreements require that airlines operating the same routes consult among themselves before submitting their fares to the two governments, concerned for approval, and many agreements specify the International Air Transport Association (IATA), an association of airlines, as the organ for such consultations. The right to carry domestic traffic between the points within a state is normally reserved to that state's own airlines. A bilateral agreement signed at Bermuda in 1946 between the United Kingdom and the United States set a pattern that has generally been followed, although the formal Bermuda-type agreement is likely to be accompanied by confidential memorandum[7, P.57].

In most countries airports may be privately, municipally, or nationally owned and operated, and the siting of an airport may be subject to town and country planning or zoning regulations. Whether or not the establishment of an airport requires special permission, aircraft leaving or entering a country will normally be required to do so at an airport having customs and immigration facilities. Airports are open to public use, some form of licensing or control in order to ensure compliance with minimum safety standards. Members of ICAO, in order to comply with their obligations under the Chicago Convention, have to make certain such airports open to aircraft of all other ICAO members under the same conditions. Restrictions may also be imposed on the noise level of aircraft taking off or landing, as well as the general level of noise, vibration, smoke, and so forth that may result from the operation of airports. In order to secure safety of flight, restrictions may be imposed on the use of lands adjoining an airport, such as the height of buildings or the planting of trees. Practice varies as to whether such restrictions are regarded as true measures of planning or zoning or as takings of private property for public use, which require the payment of compensation.

Some legal systems exempt the airport owner, operator, and users from liability for low flights over neighboring properties, noise, vibration, or other forms of disturbance, provided that all the regulations and conditions laid down for the operation and use of the airport. In the absence of such immunity, granted by law or obtained privately from adjacentlandowners, the owners, operators, and users of airports are basically liable, in much the same way as other occupiers of land, for any substantial impairment of the use or enjoyment of neighboring lands [7, P.59].

Registration of aircraft for nationality and public-law purposes is distinguished from the registration for purposes of private law. Some legal systems treat aircraft simply as ordinary movable property. Others require all sales and other transactions relating to aircraft, and recorded in a public registry before they may be invoked against third sides. If aircraft is used as security for credit or loans, the system of recording of rights with international recognition and advantages. Convention on the International Recognition of Rights in Aircraft was concluded in Geneva in 1948.

Although some systems of national law still adhere to the view that ships and aircraft are part of the territory of the state the nationality of which they possess, this is merely a crude metaphor. In International Law, a distinction has to be made between three types of state jurisdiction: territorial jurisdiction over national territory and all persons and things; quasi-territorial jurisdiction over national ships and aircraft and all persons and things; and personal jurisdiction over all other nationals and all persons under a state's protection, as well as their property. In case of conflict, territorial jurisdiction overrides quasi-territorial jurisdiction and personal jurisdiction, while quasi-territorial jurisdiction overrides personal jurisdiction.

In the conclusion we would like to note, that the State, conducting the investigation, should recognize the need for coordination between the investigator-in-charge (IIC) and judicial authorities. Most of the evidence should remain confidential unless the judicial authorities determine "that their disclosure outweighs any adverse domestic and international impact or any future investigations".Evidence, gathered during the accident or incident investigation, could be utilized inappropriately for subsequent disciplinary, civil, administrative and criminal proceedings. If such information is distributed in the future, no longer be open disclosed to the investigators. Lack of access to such information would impede the investigation process and seriously affect flight safety. Hence, extreme caution is urged in using evidence, gathered for safety investigation purposes in liability or punitive judicial or administrative proceedings, lest the willingness involved in aviation accident be chilled from volunteering useful information.

З.К. Аюпова, Д.Ө. Құсайынов

ХАЛЫҚАРАЛЫҚ ӘУЕ ҚҰҚЫҒЫ НОВЕЛЛАЛАРЫ ТУРАЛЫ

Аннотация. Халықаралық әуе құқығы халықаралық-құқықтық жиынтығын білдіретін, мемлекеттер арасындағы қатынастарды реттейтін халықаралық әуе қатынастарын жүзеге асыру мақсатында халықаралық құқықтың принциптері мен нормаларының саласының көшбасшы. Халықаралық әуе нысанасы әуе кеңістігін және халықаралық әуе қатынастарын құқықтық режиміне қатысты құқықтарының мемлекеттер арасындағы қарым-қатынастары болып табылады. Мемлекеттер арасындағы әуе қатынасы, көп жақты және екі жақты келісімдерде құрамындағы әр түрлі мемлекеттер арасында жасалған халықаралық құқықтың жалпыға бірдей танылған принциптерін қағидаттары мен нормалары негізінде реттеледі. Халықаралық азаматтық авиация ұйымы (ИКАО) негізгі халықаралық әуе қатынастарын реттеу саласындағы қызметті жүзеге асыратын ұйым болып табылады. Оның бүкіл құрлық және су аумағы үстіндегі әуе кеңістігіне халықаралық әуе құқықтар - мемлекеттің негізгі

принципі тәуелсіздік принципі үстінде орналасқан. Бұл принцип Халықаралық азаматтық авиация туралы Конвенцияның принциптерінің мәртебесі құқықтық қатынастардың сипаты мен мазмұнын айқындайды және 1944 жылы құрылып халықаралық әуе құқығын, сондай-ақ әуе кеңістігін пайдалану кезінде туындайтын басқа да ерекшеліктері халықаралық әуе қатынастарымен қамтамасыз етті. Негізгі қағидаттарына қойылатын халықаралық әуе құқықтарына мыналар жатады: 1) Халықаралық азаматтық авиация қауіпсіздігін қамтамасыз ету қағидаты; 2) халықаралық әуе кеңістігінде еркін ұшу қағидасы.

Түйін сөздері: халықаралық әуе құқығы, құқық саласы, халықаралық-құқықтық принциптер, халықаралық құқық нормалары, халықаралықәуекатынастары, әуекеңістігінің құқықтық режимі, халықаралық құқық принциптері, көп жақты келісімдер, екі жақты келісім, Халықаралық азаматтық авиация ұйымы.

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К ВОПРОСУ О НОВЕЛЛАХ МЕЖДУНАРОДНОГО ВОЗДУШНОГО ПРАВА

Аннотация. Международное воздушное право – это отрасль международного права, представляющая собой совокупность международно-правовых принципов и норм, регулирующих отношения между государствами в целях осуществления международных воздушных сообщений. Предметом международного воздушного права являются отношения между государствами, которые касаются правового режима воздушного пространства и международных воздушных сообщений. Воздушные сообщения между государствами регулируются на основе общепризнанных принципов международного права, принципов и норм, содержащихся в многосторонних и двусторонних соглашениях, заключенных между различными государствами. Международная организация гражданской авиации(ИКАО) является основной международной организацией, осуществляющей деятельность в сфере регулирования воздушных сообщений. Основной принцип Международного воздушного права - принцип суверенитета государства над воздушным пространством, расположенным над всей его сухопутной и водной территорией. Этот принцип закреплен в Конвенции о международной гражданской авиации 1944 г. и определяет содержание других принципов международного воздушного права, а также характер и особенности правоотношений, возникающих при использовании воздушного пространства в международных воздушных сообщениях.К основным принципам международного воздушного праваотносятся:1) принцип обеспечения безопасности международной гражданской авиации;2) принцип свободы полетов в международном воздушном пространстве.

Ключевые слова: международное воздушное право, отрасль права, международно-правовые принципы, нормы международного права, международное воздушное сообщение,правовой режим воздушного пространства, принципов международного права, многосторонние соглашения, двусторонние соглашения, Международная организация гражданской авиации.

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LEGAL PROTECTION OF INTELLECTUAL PROPERTY

Abstract. Intellectual property is the result of only the mental activity of man. The subjects of the rights of this property can be both citizens (authors), including individual entrepreneurs, and legal entities - organizations. This often leads to conflict situations between creators and legal entities claiming to be the owners of the results of intellectual activity of the creator. Intellectual property is inherently new information and is valued, can be used simultaneously by an unlimited number of people, it is difficult to limit the territory of their use. However, crimes in the field of intellectual property often constitute an infringement of the author's rights without his consent, as described in detail by the authors of this article.

Keywords: property rights, intellectual property, civil law, innovation.

INTRODUCTION

Intellectual property - alternative means of legal entities, goods, works, services and enterprises that have the result of intellectual activity and legitimate protection. Intellectual property objects are copyright and industrial property.

The principal nature of intellectual property is the owner of intellectual property, primarily the author has the exclusive right to use it, and intellectual property may not be used without his or her permission.

Intellectual property is divided into the following types: literary, artistic and scientific works; performers, phonograms and radio programs; inventions in all areas of human activity; scientific novelties; industrial designs; trademarks, service marks and trade names and marks; Preventing unfair competition.

Intellectual property includes:

• copyright,

Patent Law,

Personalization tools,

• topology of integrated circuits, breeding achievements, trade secrets, production secrets (know-how) and others. the "non-traditional" intellectual property objects.

MAIN PART

These days, thanks to the right-to-know values, we can easily deal with legal entities, individual entrepreneurs, and physical persons. The legal personality of the individual and individual proprietary person may be arranged by the termination of a firm brand, trade mark, know-how, patent, or any kind of intellectual property. A physical or intellectual intellectual property can be represented in the documentary production, project documentation, music production, and so on. Use of fireworks and commercialization of protected intellectual property rights on the object of intellectual property, following: acquisition of the right to use intellectual property objects in the framework of licensed contracts; protection of production and utilization of the market for non-competitive competition, right of monopoly property right on object of intellectual property; authorship rewards of the author; (or composer) and many more..

To obtain the right to receive patents, trademarks, and intellectual property rights, the right to use the intellectual property rights (objects of authorship and patent right) shall be respected in the interests of protection of rights. For example, the exclusive right to purchase a patent is either a patent or a patent patent.

- The 5th Civil Code of the Republic of Kazakhstan (hereinafter - the Civil Code of the Republic of Kazakhstan), which is a legal document in the Republic of Kazakhstan, which is based on the right principles of the law and the right to protection of intellectual property. It is true that the Civil Code of the Republic of Kazakhstan defines special rights, such as the right to use material objects, the exclusion of the exclusive right and material objects created in the result of such an outbreak; Obvious Attestation, Included in the List of Controversial Rights, Included in the List of Legal Acts [1].
- • In the case of administrative offenses, the rights of the administrators are settled in the event of a criminal offense, unless otherwise stipulated by the laws and regulations of the Criminal Procedure Code of the Republic of Kazakhstan, as well as Articles 128, 129, 145 of the Code of Administrative Offenses of the Republic of Kazakhstan.
- • Actually, Article 128 of the Law of the Republic of Kazakhstan "On the right of access to inventions, industrial models, industrial designs, selective integration, integrated circuits of integrated circuits" establishes the use of non-simultaneous use of the invention, the optional model, the industrial product, the selection achievement, the integral microcircuits topologies, or an applicant of the invention, a sophisticated model, a productive image, selection achievement, integrated circuits from topology to official publications, and a list of the authorship or acquisition of such affiliation, if the action is incomplete or implied, shall be punished by a fine of one hundred and fifty to one hundred and fifty per cent, in the amount of one hundred and fifty per cent, for legal entities, or non-profit organizations - in a size from one-to-five to two, for legal entities, with a large number of entities, - in the amount of up to three-quarters of the month's calculated booklets.
- The penalty imposed on physical persons after deducting administrative penalties for a period of up to one year following the expiration of a period of one year prior to the expiration of a statutory period of up to five years from one year to five years from the date of entry into force of a statute of limitations; small or medium-size enterprises or non-commercial organizations, - in the amount of two-thirds of the total number of legal entities involved in small undertakings, - in size from sixth to seventy for the countable dehydrators [3]. Similarly, the administrative responsibility is to exploit the object of authorship and confidentiality of the objects, and to the extent necessary for the purchase, transfer, alteration or the production of counterfeit copies of objects of authorship and (or) the right to use of the right to use, in accordance with authorship or co-authorship.

•Additionally, the Code of Civil Procedure provides, that the confiscated exemptions of objects of authorship and (or) confiscation of property rights in the manner prescribed by Article 628 of this Code shall be excluded by the author's or his / her right of access to the file [3]. It also wants to clarify whether the confiscated items are either confiscated entirely by the "pirate" product, but not the products exposed by the rule of law enforcement [3].

Criminal liability is provided for by the Criminal Code of the Republic of Kazakhstan (hereinafter referred to as the Criminal Code of the Republic of Kazakhstan) for attribution of authorship or coercion to co-authorship, if this act caused significant damage to the author or other copyright holder or substantial harm to their rights or legitimate interests, illegal use of copyright or related rights , as well as the acquisition, storage, movement or manufacture of counterfeit copies of copyright and (or) related rights for marketing purposes, committed actual size. For violation of the rights to inventions, utility models, industrial designs, selection achievements or topologies of integrated circuits, liability is provided for under Article 184-1 of the Criminal Code of the Republic of Kazakhstan [4].

Disclosure without the consent of the author or applicant of the essence of the invention, utility model, industrial design, selection achievement or topology of an integrated circuit before the official publication of information about them, as well as attribution of authorship or coercion to co-authorship, if these acts caused significant damage to the author or other copyright holder or significant harm their rights or legitimate interests, the illegal use of an invention, utility model, industrial design, selection achievement or topology integrally the chip, perfect in a significant size.

Independent article 184-1 of the Criminal Code of the Republic of Kazakhstan includes industrial property objects. This was done due to the fact that the objects of copyright and related rights differ significantly in nature from the objects of industrial property rights. Copyright, for example, arises from the moment of creation of a work without its mandatory registration, while rights to objects of industrial property - from the moment of registration and issuance of a title of protection. Hence the different ways of committing crimes.

Crimes in the field of intellectual property constitute an infringement of the rights of authors and other copyright holders in the form of various types of use of works (duplication, sale and other distribution, etc.) without the consent of the author and other copyright holders, as a result of which they cause substantial harm.

This harm represents, in addition to the costs of restoring the violated right, the non-received amounts of remuneration due to the author. Moreover, the proposed construction of the article allows not establishing the amount of damage; it will be enough to establish the size of the act itself. So, in order to hold accountable, according to the wording of Articles 184 and 184-1 of the Criminal Code of the Republic of Kazakhstan, it is necessary that a crime is committed in a significant amount, i.e. when, for example, the cost of the "pirated" products sold is such a size or 100 MCI. Thus, in order to bring the violator to criminal responsibility, it is enough to identify the fact of the sale of "pirated" products worth 100 MCI.

In addition, liability is provided not only for the fact of sale or other distribution of "pirated" products, but even for the purchase, manufacture, storage or movement of "pirated" products for marketing purposes, committed on a large scale. So, according to the Order of the Ministry of Internal Affairs of the Republic of Kazakhstan dated February 29, 2000 No. 119, the Ministry of Justice of the Republic of Kazakhstan dated February 29, 2000 No. 23, the Ministry of State Revenues of the Republic of Kazakhstan dated March 1, 2000 No. 168 "On measures to ensure the property interests of authors of works and owners of related ", the illegal use of works and objects of related rights prevents the development of intellectual and cultural potential of the Republic of Kazakhstan, harms its international authority, strengthens criminalization society [5].

In accordance with Article 199 of the Criminal Code of the Republic of Kazakhstan, means of individualization also relate to intellectual property, and criminal liability is provided for their illegal use. Thus, today in Kazakhstani legislation there are a sufficient number of tools for the full protection of the results of intellectual activity. But after all, it is relevant in any way, since it is, as we see, the result of innovative activity can be any information that has a progressive impact on various areas of society.

If you use the concept of intellectual property in the field of protection of the results of innovation, then there is an ambiguous situation with the definition of the object of intellectual property, and hence the concept of intellectual property.

However, we will see what happens if we approach the concepts of "intellectual property" and "innovation" from the standpoint of the creativity criterion established by law.

The content of innovation, as previously mentioned, can be any information useful for the progress of various areas of production and the sphere of society management, including entrepreneurial information, that is, one that is useful for doing business, in the sense that it can affect production , the financial situation of the entrepreneur.

Such information (entrepreneurial) is information about various aspects of the production, trade, management, scientific, technical, financial activities of the enterprise, which should be protected in the interests of competition and economic security.

For example, information about clients, the content of the transaction, information about the fact of the conclusion of the transaction, the contents of the memorandum of association, the contents of the internal financial statements, information about discoveries, inventions, recipes, and technological methods and so on can be useful. This information can be divided into two groups: scientific and technical information and business information.

The concepts "results of innovation" or "innovation" and "intellectual property" are comparable, but do not always coincide: the concept of "innovation" is covered by the concept of "intellectual property" only in terms of information that is a product of intellectual creativity. Not every innovation is the result of creative intellectual work.

However, from the standpoint of recognizing the conditional nature of the concept of “intellectual property”, it can be recognized as fair that the innovation is classified as an intellectual property. But it is necessary to bring the legislative definition of the concept of intellectual property into line with a specific list of its objects.

So, based on the results of a review of relevant literature and current legislation, the following general conclusions can be drawn.

Genetically, the concept of “intellectual property” comes from the word “intelligence”. In other words, this type of property is associated with the human intellect - "the ability to think, rational knowledge of the world, creativity." The intellects itself, the ability to create are not influenced by legal and other social norms and external control. Law regulates public relations only regarding a product created as a result of intellectual activity.

In accordance with applicable law, the owner of the results of intellectual activity has the exclusive right, which has the following qualities. No one can commit actions that infringe on the rights of the owner. Intellectual property results may be used by third parties only with the consent of the copyright holder. The object of this right is individual, since it was created by the intellectual efforts of a particular person (or persons).

CONCLUSION

However, all objects of intellectual property are inherently new information (not necessarily created in the process of intellectual creative work) which is embodied in certain material media; they have a valuation, they can be goods, they don’t wear out, over time they can become obsolete (but only morally), they can be used simultaneously by an unlimited circle of people, it is difficult to limit the territory of their use.

Thus, the owner of intellectual property cannot physically hold the object created by him. After the dissemination of information (ideas), it can no longer be in the exclusive possession of the author. Therefore, the issue of protecting copyright holders is acute. If we turn to the legislation in force in this area, then, as we have shown, we can draw ambiguous conclusions regarding the concept of intellectual property and intellectual property.

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ПРАВОВАЯ ЗАЩИТА ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ

Аннотация. Объекты интеллектуальной собственности являются следствием только мыслительной деятельности человека. Субъектами же права этой собственности могут быть как граждане (авторы), в том числе индивидуальные предприниматели, так и юридические лица – организации. Это и приводит часто к конфликтным ситуациям между творцами и юридическими лицами, претендующими быть собственниками результатов интеллектуальной деятельности творца. Объекты интеллектуальной собственности являются по своей природе новой информацией и имеют стоимостную оценку, могут одновременно использоваться неограниченным кругом лиц, трудно ограничить территорию их использования. Однако преступления в сфере интеллектуальной собственности зачастую представляют собой посягательства на права автора без его согласия, о чем подробно представлено авторами данной статьи.

Ключевые слова: права собственности, интеллектуальная собственность, гражданское право, инновации.

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ЗИЯТКЕРЛІК МЕНШІК ҚҰҚЫҒЫН ҚҰҚЫҚТЫҚ ҚОРҒАУ

Аннотация. Зияткерлік меншік - бұл адамның ақыл-ой әрекетінің нәтижесі ғана. Бұл меншік құқығының субъектілері азаматтар (авторлар), оның ішінде жеке кәсіпкерлер, заңды тұлғалар - ұйымдар бола алады. Бұл көбінесе жасаушының зияткерлік қызметі нәтижелерінің иесі болуға үміткер авторлар мен заңды тұлғалар арасындағы жанжалды жағдайларға әкеледі. Зияткерлік меншік - бұл мүлдем жаңа ақпарат және бағаланады, оны бір уақытта шектеусіз адамдар қолдана алады, оларды қолдану аумағын шектеу қиын. Алайда, зияткерлік меншік саласындағы қылмыстар көбінесе осы мақаланың авторлары егжей-тегжейлі сипаттаған оның келісімінсіз авторлық құқықты бұзу болып табылады.

Түйін сөздер: меншік құқығы, зияткерлік меншік, азаматтық құқық, инновация.

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SUPPORT OF ENTREPRENEURSHIP AS THE BASIS OF INNOVATIVE DEVELOPMENT OF THE ECONOMY OF KAZAKHSTAN

Abstract. The support of entrepreneurship, according to the authors, is the basis of innovative development of the economy of Kazakhstan. An innovative vector of development is an objective necessity for Kazakhstan. Since, in the opposite case, Kazakhstan is influenced by such circumstances as a lag in the technological plan, the presence of national advantages of the resource type (territory and minerals), the lack of competitiveness of a domestic product can reduce its economic security. Thus, the prospect of innovative development is considered as a long-term direction of the structural policy in the field of science and business, and to ensure the overflow of investments in innovation.

Keywords: entrepreneurship, state support, small business, innovation, development.

INTRODUCTION

One of the main factors in the effective functioning of the economy in modern conditions is the forced modernization and development of innovations. For Kazakhstan, diversification and increasing the competitiveness of the economy is a difficult task, leading domestic economists note, given the degraded state of the manufacturing industry and agriculture, scientific and technical potential, the extremely low level of the entire infrastructure system and quality of service. The country will not only have to organize the production of new types of products, take measures to improve their quality and lower prices, but radically modernize its economy **[1, c. 155].**

In the process of developing state policy in this area, it is necessary to take into account the differences between the innovative development of foreign countries and Kazakhstani practice. While in developed countries, innovations are an immanent part of the entrepreneurial sector, in Kazakhstan, the method of production of the national system does not imply interest in innovation in private capital. This is due to the fact that entrepreneurship is concentrated mainly in the sphere of circulation (trade, banking) and the extractive sector, which have the potential to limit innovation due to their specifics. The real sector, which is the basis for the widespread introduction of innovations, is underdeveloped in Kazakhstan.

MAIN PART

But in the context of globalization, the development of innovation is an objective necessity, and only the state can engage in this process. In turn, an active innovation policy is an important condition for economic diversification, which leads to the formation of a competitive innovation-type economy. However, the activation of innovation by the state leads to a twofold effect: on the one hand, this position of the state is an objective necessity, on the other hand, active government actions to introduce innovations in the private sector contribute to the loss of innovative business skills.

Innovations activated in this way will be a foreign element in the system of functioning of a private business, imposed on it from above. In accordance with the natural tendency to increase competitiveness, innovations are a natural consequence of the development of a holistic business system. Since these processes are not observed in the national economy, there is a progressive isolation, which means a decrease in competitiveness. And this fact is the basis for activating the state policy of stimulating innovation in any case. The positive effect of the introduction of innovations under the influence of the state, in our opinion, will surpass the negative consequences of government intervention in these processes. **Thus, there is an active role of the state in the formation of a competitive innovation-type economy in Kazakhstan.**

Innovation policy will be effective if there is a systemic relationship between two main areas: the activation of human potential and the development of the entrepreneurial sector of the innovation type. In other words, between these elements it is necessary to ensure a progressive systematization, without which the innovative policy of the state will be ineffective.

Moreover, the main factor in the formation of a competitive economy of an innovative type is the activation of human potential, i.e. the creation of an intellectual nation. This implies the development of education, science, fundamental and applied research, which is the basis for the innovative development of the business sector.

Table 1 presents the quantitative indicators of existing enterprises of SMEs in the regions of the Republic of Kazakhstan.

Table 1 - The operating subjects of small and medium business in the Republic of Kazakhstan

	Total		Including				Including				Total, in% to the corresponding period of the previous year	
			legal entities of small enterprises	legal entitiesсреднего	Individual entrepreneurs	Peasant or farm	legal entities of small enterprises	legal entities medium-sized businesses	Individual entrepreneurs	Peasant or farm		
	2018	2017	2018				2017				2018	2017
The Republic of Kazakhstan	1207374	1185163	223828	2555	783389	197602	189637	2711	813482	179333	104	93
Akmola	44087	44763	6887	114	32427	4659	5726	117	35465	3455	103	97
Aktobe	53124	50783	9447	103	37946	5628	8279	101	37817	4586	105	102
Almaty	115061	118690	9826	159	59765	45311	6862	139	68694	42995	102	101
Atyrau	45906	44217	6844	110	36546	2406	5335	99	36726	2057	107	95
West Kazakhstan	39797	40435	5760	97	27658	6282	4762	91	30878	4704	106	102
Zhambylskaya	62651	56842	5745	53	39906	16947	4268	57	36700	15821	105	90
Karaganda	82084	84878	16634	188	56701	8561	14872	192	63102	6712	102	99
Kostanay	51028	53178	7037	157	38320	5514	5928	147	42258	4845	104	88
Kyzylorda	40988	38145	5051	61	29825	6051	4503	63	30197	3319	111	92
Mangystau	49860	46610	8140	80	39677	1963	6454	95	9538695	1366	108	100
South Kazakhstan	42903	173770	9044	101	39484	3274	13922	159	91778	67911	104	95
Pavlodar	28557	43997	4772	131	20062	3562	7566	94	32856	3481	101	99
North Kazakhstan	128322	28683	6819	46	53323	68314	4218	135	21590	2740	104	84
East azakhstan	87011	99021	10602	176	60651	15582	8542	158	75227	15094	105	100
Astana	105815	100266	39152	249	66252	162	30900	295	69043	28	109	101
Almaty city	171477	160885	60501	621	109756	539	57440	770	102456	219	99	87

The role of the state is related to promoting the development of the economy. But this role is filled with different content depending on the chosen model of modernization. Innovation from above involves identifying national priorities at the highest levels of government and large government investments in priority sectors, providing them with benefits and subsidies, providing them with accelerated development. Government intervention is necessary if there is a certain distrust of business and market forces. But such a policy may turn out to be futile with catching up industrialization.

For innovative modernization from below, increasing the role of the state in this direction is also necessary, but it should be aimed at improving and developing market mechanisms. This includes antitrust policy, regulation of lobbying activities, the maintenance of an information system, and the transparency of business and other organizations.

The most important area related to the economic functions of the state is support for innovations and venture capital businesses focused on creating new markets, new products, and new technologies. An undoubted priority is investments in science and education. All of these areas are focused on the development and promotion of private initiative.

The implementation of the innovative model of economic development due to the prevailing objective prerequisites needs an increasing state influence, since Kazakhstan has to solve a whole range of socio-economic problems. The main means of implementing this type of development are: structural changes, improving the institutional structure, the formation of human capital, the further development of the social sphere and public sector.One of the factors of the innovation development strategy is, first of all, institutional changes. It is about adapting skills, norms of behavior, relevant institutions and organizations to new conditions for the development of technology, economics, social life, their ability to promote or impede positive changes in the economy. The differences in the well-being of countries and their competitiveness are largely due to the flexibility and variability of institutions. The peculiarity of institutions is a slow change. However, the pace of their creation and change can be accelerated. One of the reasons for the ineffectiveness of the reforms in Kazakhstan is the imperfection of the institutional base.

When introducing new institutional forms, it is necessary to take into account their influence on existing institutions and the risk of institutional gaps with their inherent rejection of new rules [2, p. 34]. In Kazakhstan, the formation and change of institutions is actively initiated by the state, based on a study of the economic environment. Creating the institutional base for economic reform in the modern period is a solution to the problem of increasing the innovative activity of the economy. Thus, most institutions in developed countries created by the state are innovative. Their activities are aimed at improving the competitiveness of business entities, their adaptability to external factors.

CONCLUSION

To raise the level of research and development, it is necessary to conduct a state policy of incentives in the following areas:

• targeted formation of a market for products of innovative enterprises by placing state orders on them;

• providing innovative enterprises, including small ones, with production facilities, preferential investment support, assistance in developing business innovation centers, technology parks, technology support centers, and providing legal, financial, marketing, business, and other services; assistance in legal and commercial protection of intellectual property;

• assistance in the formation and expansion of the network of leasing companies;

• Conducting a focused policy on the development and production by small enterprises of new types of products based on high technology;

• in order to reduce the likelihood of loss of funds invested by investors as a result of unsuccessful implementation of innovative projects, it is advisable to insure them, including through budget investments;

• concessional lending to scientific and technological developments in the share financing of large projects. Improving the work in these areas will enable the creation and active introduction of innovations in Kazakhstan, which in the future will allow Kazakhstan to participate in global competition.

The transition to an innovative economy is an absolute imperative for the development of Kazakhstan for the period until 2020 and beyond. The stimulation of innovative activity and the formation of an innovative sector is necessary both to maintain the competitiveness of goods and services in a global market, and to move to the next - innovative stage of development, which allows to harmonize the quality of human capital and the structure of the economy, as well as mitigate the negative factors that limit potential economic growth today.

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ҚАЗАҚСТАН ЭКОНОМИКАСЫНЫҢ ИННОВАЦИЯЛЫҚ ДАМУ НЕГІЗІНДЕГІ КӘСІПКЕРЛІК ҚОЛДАУ

Аннотация. Авторлардың пікірінше, кәсіпкерлікті қолдау - Қазақстан экономикасының инновациялық дамуының негізі. Дамудың инновациялық бағыты - бұл Қазақстан үшін объективті қажеттілік. Керісінше жағдайда, Қазақстанға технологиялық жоспардағы артта қалушылық, ресурстар түрінің ұлттық артықшылықтарының болуы (аумақ пен пайдалы қазбалар), отандық өнімнің бәсекеге қабілеттілігінің болмауы оның экономикалық қауіпсіздігін төмендетуі мүмкін. Осылайша, инновациялық дамудың перспективасы ғылым мен бизнес саласындағы құрылымдық саясаттың ұзақ мерзімді бағыты ретінде қарастырылады және инновацияға инвестициялардың толып кетуін қамтамасыз етеді.

Түйін сөздер: кәсіпкерлік, мемлекеттік қолдау, шағын бизнес, инновация, даму.

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ПОДДЕРЖКА ПРЕДПРИНИМАТЕЛЬСТВА КАК ОСНОВА ИННОВАЦИОННОГО РАЗВИТИЯ ЭКОНОМИКИ КАЗАХСТАНА

Аннотация. Поддержка предпринимательства, по мнению авторов, является основой инновационного развития экономики Казахстана. Инновационный вектор развития является объективной необходимостью для Казахстана. В обратном случае Казахстан под влиянием таких обстоятельств, как отставание в технологическом плане, наличие национальных преимуществ ресурсного типа (территории и полезных ископаемых), неконкурентоспособность отечественного продукта может понизить свою экономическую безопасность. Таким образом, перспективность инновационного развития рассматривается, как долговременное направление структурной политики в области науки и бизнеса, и обеспечения перелива инвестиций в сферы инноваций.

Ключевые слова: предпринимательство, государственная поддержка, малый бизнес, инновации, развитие.

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OPTIMIZATION STRATEGY OF FUNDING IN SECOND-TIER BANKS

Abstract. As known, funding is a priority for banking. In pursuit of resources, banks form a funding strategy that provides the highest return on their investments in the relevant assets. This raises the question of what sources of funding to use and what assets to best direct.

In the article, the author suggests applying dynamic modeling methods, namely game theory, to optimize the funding strategy of banks. The application of the Brown-Robinson method, the Bayes, Savage, Wald and Hurwitz criteria is used for the task of bank funding optimization.

Keywords: funding strategy, bank funding, Brown-Robinson method, dynamic modeling.

Introduction. Funding in banks is of great importance in their activities, since without financing it becomes impossible for the bank to function at all. As a rule, sources of funding are deposit and non-deposit resources. The first of them are the cheapest and preferred for the bank, which creates appropriate competition in the struggle for this source of funding. Non-deposit sources are more expensive. These include interbank loans, repo transactions, issuance of securities, loans on international markets, etc.

In any case, when choosing funding sources, banks are guided by their value. The possibility of obtaining higher transfer interest becomes the goal of forming a banking funding strategy.

As O.Zh. Zhadigerova, G.M. Kadyrova developed banking system is the basis of a modernized economy, and therefore, the accumulation of large amounts of financial resources is important for large universal banks [1].

The policy of bank funding rates has been reviewed by many authors. In particular, the application of the funding rate to determine the cost of a banking product is presented in the work of A.V. Kashtanov [2]. Practical experience of applying the funding rate to assess the activities of the bank's business units is presented in the work of A.P. Shlyapin [3]. As known, the choice of funding source depends on the size of the bank, but for many Russian banks the national money market is a significant source of liquidity for the banking sector [4].

Features of funding banks in the international loan markets are considered in the work of K.A.Surovneva [5].

In turn, M.Sh.Davydov emphasizes that the funding strategy of banks directly depends on the specifics and specialization of the bank’s activities [6].

The proposal on funding banks through securities is considered by E.A. Ruzieva, A.M. Nurgaliyeva and others. [7].

As I.V. Pashkovskaya rightly emphasizes, financial risks can lead to a systemic crisis in banks; therefore, the mechanism for managing the funding strategy should be constantly monitored and improved. [8].

Regarding the application of methods for assessing funding rates, their impact on the development of banks and the economy of the country as a whole, various works also exist. For example, in the practice of EU banks, the historically official exchange rate was a good indicator of the cost of funding for banks. However, the global financial crisis of 2007-2009. and regulatory changes have had a significant impact on funding costs. The search for more stable sources of financing has changed the funding structure of banks. As a result, the price of these more stable sources of financing has risen. The author attempts to calculate a conditional marginal indicator of the cost of funding in banks, reflecting the ratio of the cost of funding and the official exchange rate [9]. A study by the Reserve Bank of Australia examines how changes in the structure and pricing of bank funding affect their total cost of funds and lending rates [10].

There is also a study in the literature that assesses the impact of financial stress of banks on the real economy based on various funding sources. [11].

Thus, the importance of the funding structure of banks is emphasized by many authors. At the same time, it should be noted that the cost of funding is of great importance. In this regard, in our work, an attempt is made to optimize the funding structure based on its cost through the use of statistical modeling.

Method of research. To solve this problem, we used models of games with nature. In particular, the Brown-Robinson iterative method, namely the analytical method using the von Neumann theorem, as well as the model of Hurwitz, Savage, Bayes and Wald.

The idea of the Brown-Robinson method is to repeatedly fictitiously conduct a "game" with a given matrix A = (a_{ij}). One draw of the "game" is called an iteration, the number of which is unlimited. With an increase in the number of iterations N, the mixed frequencies of applying pure strategy by the players approach their mixed optimal strategies [12]. Calculations are made under the assumption that players want to increase their winnings (reduce losses). It is assumed that they do not know their optimal strategies. Players make moves in accordance with the principle: the future is similar to the past, taking into account all the iterations made. The first strategy (for example, the first player) is chosen arbitrarily - possibly with the aim of increasing the possible gain.

The next s-move of the 2nd player (after s moves of the 1st player) is selected by choosing a strategy, j_s as:

$$\sum_{N=1}^{S} a_{iNjs} = \min_{1\le j\le N} \sum_{N=1}^{S} a_{iNj} = v_{min}(s)s$$

где i_1, j_1 – pairs of players strategies on 1, …, s steps; v – "game" price.

And the choice of the (s+1) 1st move of the 1st player, (after the s moves of the 2nd player) is the choice of strategy i_{s+1} according to the condition:

$$\sum_{N=1}^{S} a_{i(s+1)jN} = \max_{1\le i\le m} \sum_{N=1}^{S} a_{ijN} = v_{max}(s)s$$

The price of the game ν is known to satisfy the inequality $\nu_{min}(s) \le \nu \le \nu_{max}(s)$ [13].

The Bayesian criterion for wins allows you to choose the maximum of the expected elements of the efficiency matrix with a known probability of possible states:

$$B = \max_i \left\{ \sum_{j=1}^{n} q_j a_{ij} \right\}$$

где q_j – вес средневзвешенных эффективностей.

Wald's criterion is designed to select from the considered strategies options the option with the highest performance indicator from the minimum possible indicators for each of these options [14]. The criterion directs the decision maker to a cautious line of conduct aimed at gaining and minimizing possible risks at the same time.:

$$W = \max_i \min_j a_{ij}$$

где a_{ij} – значения эффективностей в матрице.

This criterion ensures maximization of the minimum gain that can be obtained by implementing each of the strategy options.

The Savage criterion is a criterion of extreme pessimism, but only with respect to risks. It implies the worst performance state for player A, at which the risk of each of the pure strategies is maximized.:

$$S = \max_i \min_j r_{ij}$$

The Savage criterion allows you to choose a strategy option with a lower risk compared to a higher, initially expected level of risk.

The Hurwitz criterion weighs pessimistic and optimistic approaches to the analysis of an uncertain situation and is designed to select some middle element of the efficiency matrix that differs from the extreme states - from the minimum and maximum elements:

$$H = \max_i(\gamma \max_j a_{ij} + (1-\gamma) \min_j a_{ij}$$

где γ – optimism coefficient, 0≤γ≤1.

The Hurwitz criterion allows avoiding borderline states when making a decision - unjustified optimism and extreme pessimism regarding expected returns - and choosing the most likely strategy option that provides the best efficiency.

Results. Table 1 shows the difference in percentages between attracted resources and assets. When funding, it is important to allocate them to the relevant assets as resources become available. In this case, the urgency of liabilities and bank assets is not taken into account, and only interest expenses and income are taken into account. Thus, funding is aimed at increasing the profitability of operations.

Table 1 - Data on the spread in bank funding rates

	Liability 1	Liability 2	Liability 3	Liability 4
Asset 1	2,5	3	3,7	3,5
Asset 2	2,1	3,2	4	2,8
Asset 3	3	4,1	3,2	3,8
Asset 4	2,2	3,4	3,8	3,3

Consider our case as a game of two parties (assets and liabilities), whose interests are opposite. In this case, the income of a certain asset is equal to the loss of liability. It should be noted that there is complete information about the results of the choice of an asset or liability.

Applying the Brown-Robinson method for an asset, one of the n rows of the efficiency matrix A should be selected, and for the liability, one of the columns of the same matrix.

First of all, we check the matrix for the presence of a saddle point. If it is, then we write out the solution in pure strategies. We believe that the option is chosen for the asset in such a way as to obtain the maximum income, and for the liability - vice versa. As a result, we obtain the following efficiency matrix (table 2).

Table 2 - Brown-Robinson decision matrix

Показатели	L_1	L_2	L_3	L_4	$a = \min(A_i)$
A_1	2.5	3	3.7	3.5	2.5
A_2	2.1	3.2	4	2.8	2.1
A_3	3	4.1	3.2	3.8	3
A_4	2.2	3.4	3.8	3.3	2.2
$b = \max(B_i)$	3	4.1	4	3.8	

Determine the guaranteed efficiency (profitability), determined by the lower price $a = \max(a_i) = 3$, which indicates the maximum net strategy A_3. Top cost effectiveness $b = \min(b_j) = 3$.

The saddle point (3, 1) indicates a solution to a pair of alternatives (A_3, L_1). The optimization price is 3.

Now check the matrix for dominant rows and dominant columns. According to the Brown-Robinson method, the *i*-th asset strategy dominates its *k*-th strategy if $a_{ij} \geq a_{kj}$ for all $jЭN$ and at least one j $a_{ij} > a_{kj}$. In this case, the *i*-th strategy (or line) is dominant, the *k*-th is dominated.

Similarly, the *j*-th strategy of a liability dominates its *l*-th strategy if for all *jEM* $a_{ij} \leq a_{il}$ and at least one *i* $a_{ij} < a_{il}$. In this case, the *j*-th strategy (column) is called dominant, the *l*-th dominated.

From the position of the liability yield, strategy L_1 dominates strategy L_2 (all elements of column 1 are less than elements of column 2), therefore, we exclude the 2nd column of the matrix. Probability $q_2 = 0$.

From the position of a liability loss, strategy L_1 dominates strategy L_3 (all elements of column 1 are less than elements of column 3), therefore, we exclude the third column of the matrix. Probability $q_3 = 0$.

Strategy A_1 dominates strategy A_2 (all elements of row 1 are greater than or equal to the values of the 2nd row), therefore, we exclude the 2nd row of the matrix. Probability $p_2 = 0$.

Strategy A_3 dominates strategy A_1 (all elements of row 3 are greater than or equal to the values of the first row), therefore, we exclude the first row of the matrix. The probability $p_1 = 0$.

As a result, we obtain solutions to strategies (table 3).

Table 3 - Decisions after the exclusion of dominant assets and liabilities

Indicators	L_1	L_4
A_3	3	3.8
A_4	2.2	3.3

We reduced the 4 x 4 matrix to the 2 x 2 matrix. We solve the problem by the geometric method, which includes the following steps:

1. In the Cartesian coordinate system on the abscissa axis, a segment is laid out whose length is 1. The left end of the segment (point x = 0) corresponds to strategy A_1, the right to strategy A_2 (x = 1). The intermediate points x correspond to the probabilities of some mixed strategies $S_1 = (p_1, p_2)$.

2. On the left axis of the ordinates, the winnings of strategy A_1 are postponed. On a line parallel to the ordinate axis, from point 1 the winnings of strategy A_2 are postponed. The solution of the game (2 x 2) is carried out from the position of assets, adhering to the maximin strategy. Neither assets nor liabilities have dominant and duplicate strategies. The maximum optimal asset strategy corresponds to point N, for which the following system of equations can be written:

$p_1 = 1$

$p_2 = 0$

Optimization price y = 3

Now we can find the minimax strategy of the liability by writing the corresponding system of equations, excluding the strategy L_2, which gives a clearly greater loss in liability, and therefore $q_2 = 0$. $q_1 = 1$ (Figure 1).

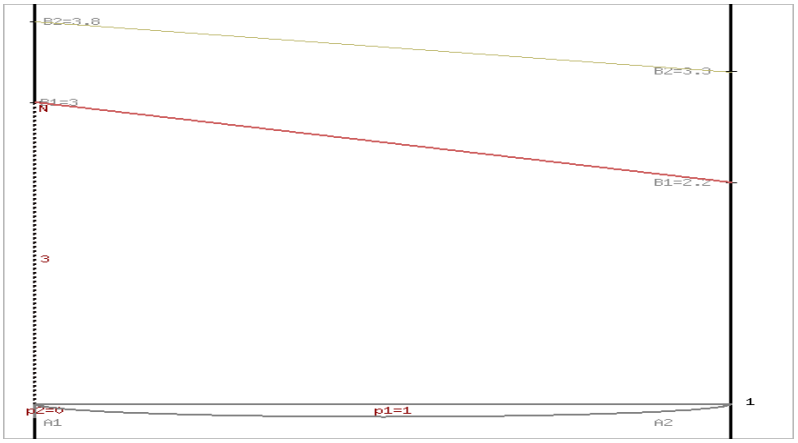

Figure 1 - Graphical optimization solution

Consider the application of the Bayes, Savage, Hurwitz and Wald criteria to optimize the funding structure for profitability.

According to Bayes criterion, the optimal strategy is the (net) Ai strategy, in which the average asset income is maximized or the average risk r is minimized.

Counting Values $\sum(a_{ij}l_j)$

$\sum(a_{1,j}l_j) = 2.5*0.25 + 3*0.25 + 3.7*0.25 + 3.5*0.25 = 3.175$

$\sum(a_{2,j}l_j) = 2.1*0.25 + 3.2*0.25 + 4*0.25 + 2.8*0.25 = 3.025$

$\sum(a_{3,j}l_j) = 3*0.25 + 4.1*0.25 + 3.2*0.25 + 3.8*0.25 = 3.525$

$\sum(a_{4,j}l_j) = 2.2*0.25 + 3.4*0.25 + 3.8*0.25 + 3.3*0.25 = 3.175$

The results are listed in the matrix (table 4).

Table 4 - Bayes Decision Matrix

A_i	L_1	L_2	L_3	L_4	$\sum(a_{ij}l_j)$
A_1	0.625	0.75	0.925	0.875	3.175
A_2	0.525	0.8	1	0.7	3.025
A_3	0.75	1.025	0.8	0.95	3.525
A_4	0.55	0.85	0.95	0.825	3.175
p_j	0.25	0.25	0.25	0.25	

Choose from (3.175; 3.025; 3.525; 3.175) maximum element max=3.53. Therefore, the optimal strategy is N=3.

According to Wald's criterion, the optimal strategy is a pure strategy, which in the worst conditions guarantees maximum profitability, i.e. $a = \max(\min a_{ij})$.

Wald's criterion directs statistics to the most unfavorable conditions, i.e. this criterion expresses a pessimistic assessment of the situation (table 5).

Table 5 - Vald decision matrix

A_i	L_1	L_2	L_3	L_4	$\min(a_{ij})$
A_1	2.5	3	3.7	3.5	2.5
A_2	2.1	3.2	4	2.8	2.1
A_3	3	4.1	3.2	3.8	3
A_4	2.2	3.4	3.8	3.3	2.2

Choose from (2.5; 2.1; 3; 2.2) maximum element max=3, that mean the choice of strategy N=3.

Savage's minimum risk criterion recommends choosing the one at which the maximum risk value is minimized in the worst conditions, i.e. provided by $a = \min(\max r_{ij})$.

Find the risk matrix. In this case, risk is seen as a measure of discrepancy between the different possible outcomes of adopting certain strategies. The maximum yield in the *j*-th column $b_j = max\ (a_{ij})$ characterizes the favorable position.

1. Calculate the 1st column of the risk matrix.

$r_{11} = 3 - 2.5 = 0.5$; $r_{21} = 3 - 2.1 = 0.9$; $r_{31} = 3 - 3 = 0$; $r_{41} = 3 - 2.2 = 0.8$;

2. Calculate the 2nd column of the risk matrix.

$r_{12} = 4.1 - 3 = 1.1$; $r_{22} = 4.1 - 3.2 = 0.9$; $r_{32} = 4.1 - 4.1 = 0$; $r_{42} = 4.1 - 3.4 = 0.7$;

3. Calculate the 3d column of the risk matrix.

$r_{13} = 4 - 3.7 = 0.3$; $r_{23} = 4 - 4 = 0$; $r_{33} = 4 - 3.2 = 0.8$; $r_{43} = 4 - 3.8 = 0.2$;

4. Calculate the 4th column of the risk matrix.

$r_{14} = 3.8 - 3.5 = 0.3$; $r_{24} = 3.8 - 2.8 = 1$; $r_{34} = 3.8 - 3.8 = 0$; $r_{44} = 3.8 - 3.3 = 0.5$ (table 6).

Table 6 - Savage Decision Matrix

A_i	L_1	L_2	L_3	L_4	$\max(a_{ij})$
A_1	0.5	1.1	0.3	0.3	1.1
A_2	0.9	0.9	0	1	1
A_3	0	0	0.8	0	0.8
A_4	0.8	0.7	0.2	0.5	0.8

Choose from (1.1; 1; 0.8; 0.8) minimum element min=0.8, therefore strategy N=3.

In the rightmost column, calculate the average risk (table 7).

Table 7 - Verification of the results obtained for Savage

A_i	L_1	L_2	L_3	L_4	r_i
A_1	0.5	1.1	0.3	0.3	0.55
A_2	0.9	0.9	0	1	0.7
A_3	0	0	0.8	0	0.2
A_4	0.8	0.7	0.2	0.5	0.55

The minimum value of average risks is 0.2. Therefore, above this price, designing an experiment becomes impractical.

The Hurwitz criterion is the criterion of pessimism - optimism. The strategy for which the relation: $\max(s_i)$, где $s_i = y \min(a_{ij}) + (1-y)\max(a_{ij})$.

The Hurwitz criterion takes into account the possibility of both the worst and the best position for both the asset and the liability.

We are counting s_i.

$s_1 = 0.5*2.5+(1-0.5)*3.7 = 3.1$

$s_2 = 0.5*2.1+(1-0.5)*4 = 3.05$

$s_3 = 0.5*3+(1-0.5)*4.1 = 3.55$

$s_4 = 0.5*2.2+(1-0.5)*3.8 = 3$ (table 7).

Table 7 - Hurwitz decision matrix

A_i	L_1	L_2	L_3	L_4	$\min(a_{ij})$	$\max(a_{ij})$	$y \min(a_{ij}) + (1-y)\max(a_{ij})$
A_1	2.5	3	3.7	3.5	2.5	3.7	3.1
A_2	2.1	3.2	4	2.8	2.1	4	3.05
A_3	3	4.1	3.2	3.8	3	4.1	3.55
A_4	2.2	3.4	3.8	3.3	2.2	3.8	3

Choose from (3.1; 3.05; 3.55; 3) maximum element max=3.55, therefore strategy N=3.

Discussion. As a result of applying the Brown-Robinson method and various criteria of Bayes, Wald, Savage and Hurwitz, in all cases the strategy for asset A3 was chosen. The results obtained suggest that it is necessary to use the available funding resources (liabilities 1,2,3 and 4) to finance asset 3, since in this case the highest spread in percent is achieved.

Thus, the use of dynamic programming, a combination of its various methods, makes it possible to optimize the funding strategy. Of course, in practice, the bank can consider not 4 types of liabilities for financing 4 types of assets, as was presented in our case, but much more, which will significantly increase the electivity and allow several possible options.

To further optimize the funding strategy, namely, in order to determine the optimal amount of use of the funds of each liability for financing asset 3, dynamic programming should also be used. This topic will be discussed in a future publication.

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ЕКІНШІ ДЕҢГЕЙДЕГІ БАНКТЕРДЕ ҚОРЛАНДЫРУ СТРАТЕГИЯСЫН ОҢТАЙЛАНДЫРУ

Аннотация. Қорландырудың банк қызметі үшін бірінші кезектегі маңызы бар екендігі белгілі. Ресурстарды қалыптастыру мақсатында банктер қорландыру стратегиясын қалыптастырады, бқл оларды тиісті активтерге орналастыру барысында барынша табыстылық алуды қамтамасыз етеді. Мұнда қорландырудың қандай көздерін пайдалану және қандай активтерге оңтайлы бағыттау мәселесі туындайды.

Мақалада автор банктерді қорландыру стратегиясын оңтайландыру үшін динамикалық модельдеу әдістерін, атап айтқанда ойын теориясын қолдануды ұсынады. Браун-Робинсон әдісін, Байес критерийлерін, Сэвидж, Вальд және Гурвицаны қолдану қорландыруды оңтайландыру бойынша алға қойылған міндеті үшін қолданылады.

Түйін сөздер: қорландыру стратегиясы, банктік қорландыру, Браун-Робинсон әдісі, динамикалық модельдеу.

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ОПТИМИЗАЦИЯ СТРАТЕГИИ ФОНДИРОВАНИЯ В БАНКАХ ВТОРОГО УРОВНЯ

Аннотация. Как известно, фондирование имеет первоочередное значение для банковской деятельности. В погоне за ресурсами банки формируют стратегию фондирования, которая обеспечивает получение наибольшей доходности при их вложении в соответствующие активы. Здесь возникает вопрос, какие источники фондирования задействовать и в какие активы оптимальней направить.

Автор предлагает применить методы динамического моделирования, а именно теории игр для оптимизации стратегии фондирования банков. Применение метода Брауна-Робинсона, критериев Байеса, Сэвиджа, Вальда и Гурвица используется для поставленной задачи оптимизации фондирования.

Ключевые слова: стратегия фондирования, банковское фондирование, метод Брауна-Робинсона, динамическое моделирование.

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INFLUENCE OF INTERNATIONAL MIGRATION OF LABOR FORCE ON THE ECONOMY OF KAZAKHSTAN

Abstract. Today, Kazakhstan is an example of stability, relative prosperity and tranquility not only in Central Asia, but also in the CIS. Its standard of living is comparable to the Russian one and is an order of magnitude higher than that in Central Asian states. However, in the field of employment and migration in the country there are still certain problems. Migration mobility is an attempt to mobilize one's own resources and those of a family, relatives, clan, diasporas, public institutions in places of origin and achievement to expand life opportunities, increase one's status, and accelerate upward social mobility. International labor migration has become an integral part of the modern system of the world economy, the norm of existence of most states. The presence of foreign workers in the developed countries of the world has turned from a temporary phenomenon into a structural element of the economy.

Keywords: migration, labor force, outflow, mobility, employment, labor.

INTRODUCTION

Kazakhstan is a non-existent participant of global migration processes, living in the vicinity, where it is going, and transit. In Kazakhstan, the new migration situation is shaped, the strongest rooted transgranchemic migrations, migration outflows are formally "shaped" from the migrants from the country of "dalnegu zubeyjya". Differentiation and intensities of migration processes emerge in all society, changes in its value and qualitative parameters. In recent years the structure of the modern Kazakhstani system has been gradually transforming to the level of external labor migration. The application of the labor economics is economically justified, but also exacerbates the need for external labor migration, which defines the lifelong lifestyle of the commonwealth of society [1].

As for international labor migration in Kazakhstan, it is basically, economically. The following are the next ones: the separation of the economic development of the individual countries, as well as national differences in the size of the pricelist. The greatest number of internally displaced migrant workers constitutes the specialties of the working professions.

In the present time, the first plan will be a problem of finding exclusively populous invasive migration, but not the best of parameters. It has a primitive value in recent development of migration processes and scenarios in their own future. Modern modern transgranial migraotic processes actuate the question of adapting migrants to the society, their own interconnectivity, conflict situations. It is important to note that regional and national security issues in Central Asia are characterized by a number of migration threats and intensified migration threats. The geopolitical aspect of migration of national minorities in the ethnic context of migrations. Ethnic migration is a threat to stability, security and social security. The emergence of a datacentation in a polyethnic, polyconfessional country, where people were driven by a high level of positive compliments, is a distressing fact.

MAIN PART

As a world practice, in the same way that the culture of the cultivation diversity is shaped by ethnical communities, it is possible to regard as a whole a multi-cultural society. The formation of ethnic minorities in the region and in the region is intensified by the fact that migrants are regarded as indecisive, as economic incapacity, public order and national identification, and the migrants are regarded as the second-largest society.

Migration is one of the ways in which migrant workers and millions of people benefit from solving the social and economic problems of self.

Migration forms a variety of forms: tragedy, family, recreational, tourist and other. From the main point of view, the focus is on understanding the problem of the market of labor migrants.

The market runs a wider range of diversified workflows that redistribute national minorities and national and regional markets. Market businesswomen are also in the market with other markets, such as: goods and services, capitals. Working hard, moving from one to the other, presents itself as a commodity, making international labor migration.

Legal labor migration has many positive socio-economic effects for Kazakhstan as a host country. Cheap labor is pouring into the country's economy, demographic problems are being solved. Informal and legal relations in the field of migration and the status of illegal labor migrants in Kazakhstan are not natural. Illegal migration in all its forms carries a risk to migrants. Since the status of illegal migrants is vulnerable, they often become victims not only of crime, but also are abused by law enforcement agencies, exploitation by employers who use the work of lawless and dependent people. The same can be said of recipient accounts, where a significant share of GDP is created by foreigners. This dependence will continue to grow in the context of the demographic crisis and the reduction in labor resources in individual countries of the region (Kazakhstan).

Table 1 - External migration of Kazakhstan

	Everything			External migration		
	balance of migration	approx	screw	balance of migration	approx	screw
Everything	-674	9 466	10 140	-29	4	33
0	-242	400	642	-1	0	1
3 - 5	5	830	825	-1	0	1
0 - 6	-378	2 009	2 387	-5	1	6
7 - 17	-193	1 382	1 575	-5	0	5
0 - 13	-554	3 005	3 559	-10	1	11
0 - 15	-549	3 184	3 733	-10	1	11
16 - 62 (57)	-177	5 843	6 020	-16	3	19
63 (58) and above	52	439	387	-3	0	3
From 0 to 4 years	-380	1 516	1 896	-4	1	5
5 to 9 years old	-90	1 033	1 123	-3	0	3
10 - 14 years old	-80	547	627	-3	0	3
15 to 19 years old	-35	646	681	-2	0	2
20 - 24 years old	38	1 241	1 203	-5	0	5
25 to 29 years old	-33	1 190	1 223	0	0	0
30 to 34 years old	-79	1 039	1 118	-5	0	5
35 to 39 years old	13	683	670	0	2	2
40 to 44 years old	-14	452	466	-3	0	3
45 - 49 years old	-10	278	288	-2	0	2
50 to 54 years old	-39	199	238	1	1	0
55 to 59 years old	-14	186	200	0	0	0
60 to 64 years old	8	178	170	0	0	0
65 to 69 years old	13	121	108	-3	0	3
70 to 74 years old	5	70	65	0	0	0
75 to 79 years old	21	51	30	0	0	0
80 to 84 years old	4	26	22	0	0	0
85 and above	-2	10	12	0	0	0
Up to the working age	-549	3 184	3 733	-10	1	11
Workable age	-177	5 843	6 020	-16	3	19
Over the age of working age	52	439	387	-3	0	3
16 to 29 years old	-31	2 989	3 020	-7	0	7

The participation of migrants in illegal labor not only excludes social legal protection, but also undermines the basis for regulating migration processes within the country at the interstate level. In

particular, the effectiveness of interstate labor migration is significantly reduced, risks are created for the demographic security of donor countries and recipients of labor, and as a result, the feasibility and possibility of achieving integration of sending and receiving countries in the labor sphere is called into question.

It is very difficult to assess the real extent of potential labor migration in Kazakhstan due to the existence of illegal labor flows. However, the available data show that the country has virtually no regions, including remote northern ones, where there would be no labor migrants from Central Asian countries. Kazakhstan, which, like other neighboring states, began to build a new economic structure, the attraction of foreign labor was an important growth factor. On the other hand, the outflow of labor migrants also becomes a significant phenomenon. As a result, already in the first half of the 1990s. Legally registered labor emigration of citizens of Kazakhstan has developed ("export" and "import" of labor).

 According to current population records, in January-June 2019, 75792 people arrived in the capital and 62151 people left (migration balance +13641 people). Moreover, the negative migration balance is observed mainly due to external migration (-463 people). There is a positive balance on internal migration (+14104 people). In January-June 2019, compared with January-June 2018, the number of arrivals in the city of Nur Sultan increased by 75.6%, and those who dropped out increased by 63.2%. The main migration exchange of the city occurs due to interregional migration: those who arrived in January-June 2019 account for 36956 people, those who left - 22852 people. In the migration growth of the population of the capital, the share of arrivals from the Akmola region is 21%, Karaganda - 9.2%, Turkestan - 11.5%, East Kazakhstan - 7.9%, Almaty - 7.4% and other regions - 43 %

The city of Nur-Sultan has a positive migration balance with the CIS countries: with Uzbekistan (+49 people), the Kyrgyz Republic (+15 people), Azerbaijan (+6 people), Tajikistan (+3 people), Turkmenistan (+1 people) and Ukraine (+1 people). With other countries, the positive balance of population migration was mainly formed with China (+74 people), Mongolia (+16 people), Turkey (+11 people) and Georgia (+1 people).

In the structure of migrants by nationality, the largest share is held by Kazakhs - 89.7% of the total number of arrivals and 88.3% of the number of departures. Among the arrivals and departures, the share of Russians is 4.9% and 5.9%, Uzbeks - 0.9% and 1.1%, Ukrainians - 0.7% and 0.8%, Tatars - 0.7% and 0, 7%, Germans - 0.5% and 0.6%, other nationalities - 2.6% and 2.6%, respectively.

The countries accepting labor receive the following benefits:

 the competitiveness of goods produced by the country increases due to lower production costs associated with a lower price of foreign labor;

 foreign workers, presenting additional demand for goods and services, stimulate production growth and additional employment in the host country;

 when importing skilled labor, the host country saves on the cost of education and training;

 Foreign workers are often seen as a specific shock absorber in the event of crises and unemployment. They can be fired;

 foreign workers are not provided with pensions and are not taken into account when implementing various kinds of social programs.Speaking about economic security, the following are among the most significant threats.

Migrations (primarily domestic) can cause serious damage to regional markets, the economic and labor potential that has formed earlier in a particular region.

Excessive concentration of migrants within a specific territory is fraught with a quick and sharp aggravation of the unemployment problem in the corresponding regional labor market; similarly, the outflow of labor from the territories of disposal may exacerbate the decline in production in certain sectors of the economy.

For the same reason, access to housing and social services can be narrowed at the regional level (and in a milder form at the national level). This means that, firstly, there will be additional factors of social differentiation of the population, and secondly, the threat of marginalization of its new part.Due to the fact that a certain (often significant) part of migrants cannot find work or does not work in their specialty, the threat of loss or irrational use of the qualification potential of migrants becomes real, and there is also a threat of a decrease in their motivation to work. Since the labor of certain categories of migrants is used in

the shadow economy, and some illegal migrants are directly involved in illegal activities, there is a threat of criminalization of the economy precisely under the influence of migration.

To the extent that external migration is accompanied by the export and transfer of capital abroad, it can threaten the foreign economic and financial position of the donor country. In the light of the problem posed, the task of researchers is to correctly determine migration trends in the context of society's transformations, to establish the extent and extent of the impact of migration problems on the preservation of national, regional and global security. The practical continuation of basic research should be scientific advice on overcoming migration problems and related threats to the national and regional security of Central Asia [4].

One of the "suppliers" of illegal migrants is China. Intensive immigration of Chinese people to Central Asia has been going on since the beginning of the 1990s, after bilateral relations began to develop, trade contacts were established in the border zone. The uncontrolled entry of a large number of Chinese citizens into the territory of the Republic of Kazakhstan caused an aggravation of the criminal situation, so during the negotiations a visa-free regime of mutual trips was established only for owners of diplomatic and service passports.

External labor migration has both its advantages and its disadvantages. In the short and medium term, the pluses include: lowering the demographic burden on the domestic labor market, an additional amount of currency (transfers), which contributes to an increase in consumer activity of the population, and the prevention of social disasters. The disadvantages should include: deterioration in the quality of the country's labor resources, "brain drain" - the outflow of the most qualified personnel from the country, and it is irrevocable, which in the long run can cause a decrease in the republic's competitiveness in the world market.

Favorable economic conditions (high world energy prices) contributed to a significant improvement in the economic situation in Kazakhstan and the development of new trends: a reduction in travel abroad and an increase in internal migration, a change in the structure of migrant employment. [5]

The problem of labor migration should be depoliticized, and the rights and security of migrants should become a priority for the negotiation process. In order to maximize the benefits of labor migration and minimize shortcomings, it is necessary to stimulate interstate dialogue and cooperation in the field of labor migration at least between the largest regional economies - Russia, Uzbekistan and Kazakhstan. The rapid economic development of Kazakhstan has made the country attractive to foreign workers and investors.

CONCLUSION

It must be recognized that migration policy should be closely linked to the program of socially oriented activities - social protection, social adaptation and integration of immigrants. The proper organization of migration policy is one of the conditions for the security of the state and society, for the normal development of the economy. The activity, energy of self-organization and identification of migrants in the main areas of life can complement the lack of policy and self-organization of the indigenous population, manifested in socio-demographic losses, flaws in the educational system, and lack of labor. The essence of the functions of social work with immigrants and its various directions is to maintain a complementary social environment or to change the social environment in the direction of its greater complementarily for people who change their place of residence and fall into another social environment. At the same time, the immigrant himself receives help in activating his abilities to overcome difficult life situations. In other words, with the help of social work, a system of social relations and ties can be formed, maintained, changed, which includes an immigrant, members of his family in a new place, the activity of such layers increases, and their losses in activity are compensated.

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ХАЛЫҚАРАЛЫҚ ЕҢБЕК КҮШІНІҢ ҚАЗАҚСТАН ЭКОНОМИКАСЫНДАҒЫ ӘСЕРІ

Аннотация. Бүгінгі таңда Қазақстан тұрақтылықтың, салыстырмалы өркендеудің және тек қана Орталық Азиядағы емес, ТМД-дағы тыныштықтың үлгісі болып табылады. Оның өмір сүру деңгейі ресейлік деңгеймен салыстырылады және Орталық Азия мемлекеттеріндегі деңгейден гөрі үлкен. Алайда, елдегі жұмыспен қамту

және көші-қон саласында белгілі бір проблемалар бар. Көші-қонның ұтқырлығы - бұл өз ресурстарын және отбасы мүшелерін, туыстарын, кландарын, диаспораларын, қоғамдық институттарын шығу және қол жетімді жерлердегі өмір сүру мүмкіндіктерін кеңейту, мәртебесін көтеру және әлеуметтік мобильділікті жеделдету үшін жұмылдыру әрекеті. Халықаралық еңбек көші-қоны әлем экономикасының қазіргі жүйесінің ажырамас бөлігі болды, көптеген мемлекеттердің өмір сүру нормасы. Әлемдік дамыған елдерде шетелдік жұмысшылардың болуы уақытша құбылыстардан экономиканың құрылымдық элементіне айналды.

Түйін сөздер: көші-қон, жұмыс күші, кету, ұтқырлық, жұмыспен қамту, жұмыс күші.

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ВЛИЯНИЕ МЕЖДУНАРОДНОЙ МИГРАЦИИ РАБОЧЕЙ СИЛЫ НА ЭКОНОМИКУ КАЗАХСТАНА

Аннотация. На сегодняшний день Казахстан является примером стабильности, относительного благополучия и спокойствия не только в Центральной Азии, но и в СНГ. Его жизненный уровень сопоставим с российским и на порядок превышает аналогичные показатели в государствах Центральной Азии. Однако и в сфере занятости и миграции в стране все еще есть определенные проблемы. Миграционная мобильность – это попытка мобилизовать собственные ресурсы и ресурсы семьи, родственников, клана, диаспор, общественных институтов в местах исхода и достижения для расширения жизненных возможностей, повышения своего статуса, ускорения восходящей социальной мобильности. Международная трудовая миграция стала неотъемлемой частью современной системы мирового хозяйства, нормой существования большинства государств. Присутствие иностранных рабочих в развитых странах мира превратилось из временного явления в структурный элемент экономики.

Ключевые слова: миграция, рабочая сила, отток, мобильность, занятость, труд.

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MANAGEMENT ACCOUNTING, INNOVATIVE ECONOMY, MANAGEMENT

Abstract. In conditions of high complexity and uncertainty of the business environment, the information generated in management accounting is the basis for managers to make rational management decisions. The conditions of an innovation-oriented market economy are changing the traditional idea of management accounting and require the development of its separate areas in enterprises in order to generate information sufficient for effective innovation management, analysis of customer preferences of customers in innovative products and proper monitoring of the implementation of innovative projects. Therefore, in the course of the study it was determined that one of the important areas of development of management accounting is management accounting of innovations. Management accounting of innovations includes not only accounting as such, but also an analysis of the innovative environment and innovative potential of the enterprise, the formulation of innovative goals and objectives of the enterprise, monitoring the achievement of innovative goals, which are described in more detail in this study by the authors of the article.

Key words: management accounting of innovations; information; control; transformation.

INTRODUCTION

In the context of the study, management accounting refers to the system of the information management subsystem regulated by internal documents, the purpose of which is to provide managers with the information necessary for them to make informed strategic and tactical management decisions.

In foreign economic practice, management accounting is one of the most important components of both the decision-making process and the accounting system of the enterprise as a whole. Its role is great, including in providing an innovative type of economic development. The list of management accounting functions at the present stage has expanded significantly and is not limited to issues of managing production and distribution costs, monitoring the timeliness and quality of execution of decisions made, and rationing costs. Competition conditions impose the responsibility of innovation managers on the analysis of the micro and macroeconomic environment, the study of technical, organizational, marketing innovations that exist on the market, etc. Based on this, their information needs are formed, which determine the need for the formation and development of managerial accounting, which ensures effective management of innovative activities of the enterprise.

MAIN PART

The introduction of innovative technologies in production was one of the reasons for the emergence of a cost-management system for the target cost - the target-costing system. The cost management process using this system includes the steps of: planning and developing a new type of product; management and financial cost accounting; development of a budget for costs; management control and analysis of deviations of actual costs from target; making decisions on cost reduction issues. Management control for manufacturing enterprises is a method based on timely information provided, combining the operational management of the economic side of the activity. Given the specifics of production processes, information for management is collected on the basis of internal regulatory documents: on the planning and implementation of innovative production processes, financial and managerial accounting, control and

analysis. In the management of cost control, a study of the product is carried out, on the one hand, as a whole and as a system that includes other components that are in interaction, and on the other hand, as parts of another system (metasystem) of a higher level, in which the analyzed product interacts with the rest production subsystems. It is legitimate to say that management control for an organization is a certain stage, which provides information transparency regarding the quality of the progress of innovative production processes. Issues on the introduction of managerial control in recent years are widely discussed in the Republic of Kazakhstan in connection with increased competition among manufacturers.

The lack of a universal methodology for managerial control makes it difficult to obtain competitive advantages, which in turn requires streamlined scientific knowledge and practical experience in organizing managerial control, without which manufacturers cannot count on the effective implementation of innovations and further development. As you know, under the market management system, manufacturing enterprises operate in harsh conditions of competition between manufacturers, so the activities of production are aimed at winning sales markets. In accordance with this, management control will be focused on ensuring performance indicators of production functioning: recognition of the manufacturer of innovative products by market entities, timely adaptation of innovative production systems and organization management to the constantly changing market conditions. Innovation is becoming a strategic parameter for the development of enterprises and the economy as a whole, and the introduction of managerial control will help ensure the organization of production and activity planning, taking into account all factors of the process of setting prices for manufactured products, guaranteeing the achievement of goals in accordance with the strategy of the enterprise.

It is established that the role of management accounting in information and analytical support for management is:

a) in the formation of information about the external and internal environment of the enterprise, necessary for the preparation of plans for its financial and economic activities;

b) in terms of the prepared plans for the financial and economic activities of the enterprise in specific terms (budgeting), taking into account the possibilities of the most efficient use of resources by each structural unit;

c) in conducting timely monitoring of budget execution on the basis of information on the achieved planned values of indicators and the reasons for deviations from them;

d) informing employees about the goals of the enterprise and the amount of remuneration for achieving these goals;

d) in the formation of information on the costs of the enterprise for all necessary analytical features suitable for effective cost management.

The transformation of production factors occurs along the path of their intellectual and informational content. In this regard, new requirements arise for the organization, forms and methods of enterprise management. The specifics of innovation management is due to the complex and controversial nature of innovation. The successful existence of an enterprise in a competitive market is determined by the correct selection of innovative development tools. The key role in this process is played by the formation of the information base of innovative activity, which underlies the process of adopting strategic objectives and tactical decisions to achieve the organization's development goals. The solution to the problem of filling the information vacuum that exists in the innovative segment of the business entity can be achieved by organizing a specific module of managerial accounting and analysis, accumulating data relating to this direction of the enterprise development.

The development of entrepreneurship in the industrial sector is most promising in the creation and development of innovative enterprises. The need to transfer the economy of Kazakhstan to an innovative path of development is a recognized point of view among the intellectual and power elite. The prospect of being a raw materials appendage of the global economy is not very impressive. In the meantime, oil remains the key article of Kazakhstani exports, which provides the main influx of currency into the country and taxes to the budget.

An innovative business is the organization of the production of a fundamentally new product or the production of a well-known one using the latest technology or equipment. As a rule, such a business is based on a fruitful scientific and technical idea. Innovative activity in Kazakhstan is characterized by insufficient activity with significant scientific potential.

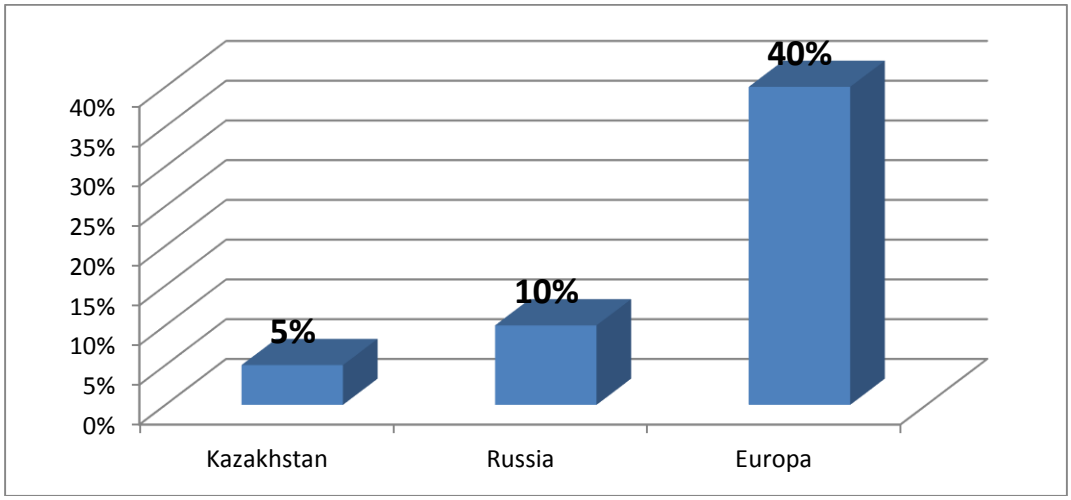

Figure 1 - The share of investments in the development of innovative enterprises

Today in the Republic of Kazakhstan about 5% of domestic enterprises develop and master innovations. In Russia, the share of innovation-active enterprises is approximately 10%, in Eastern Europe - up to 40%. [2]

The problems associated with the process of reflection in the accounting of business transactions related to innovative activities include:

- the absence in management accounting of strictly regulated standards and prevailing legislation specific to financial and tax accounting;
- inappropriateness to detailing the objects of innovation activity of accounts and accounting registers;
- poorly developed methods of calculating the objects of innovative implementation;
- significant differences that exist in assessing the cost of directly innovative technologies, innovative, organizational and marketing activities in fact, which does not allow to refer these processes to a particular account.

In order for management accounting to become one of the elements of a real mechanism ensuring the success of innovations, its development must be carried out in the following areas:

- the definition of innovation as an object of management accounting;
- ensuring the formation in the management accounting system of information on innovative costs at the places of their occurrence and responsibility centers. The solution of the first problem, undoubtedly, requires the allocation of certain components of innovative processes, for example, research, development work and the definition of methods for their accounting.

Cost accounting for innovation has its own characteristics and depends on:

- on the types of production (individual, serial, mass);
- a specific stage of innovation;
- financial capabilities of the enterprise;
- a method of developing an innovative product (the presence or absence of an enterprise's own research units). Depending on the degree of its innovative activity, an enterprise can carry out an innovative process for implementing a project on its own or use the services of third-party organizations.

One of the main differences between the management accounting of innovations and traditional management accounting is the concentration on external factors that influence the innovative activity of the enterprise.

We highlight some features of management accounting innovation:

- accounting and analysis of external factors affecting the innovative activity of the enterprise;
- accounting and analysis of non-financial factors;
- the presence of a system of indicators of the effectiveness of innovation.

The costs of implementing innovative activities should be reflected in the accounting system of costs that are associated with the creation and implementation of innovative projects, the procedure for financial support of the research activities of the enterprise.

Currently, one of the shortcomings of innovation is that there is no single system of accounts and accounting registers to reflect the costs and income and financial results of research activities at the enterprise, the existing accounting registers, accounting accounts do not provide reliable analysis of innovative products and its impact on the financial performance of the enterprise.In large innovative companies in the management accounting system, the formation of costs at their places of origin and responsibility centers is important in order to control and analyze the cost structure of innovative projects.

The presence of a large number of structural units has a decisive influence on the formation of a management accounting system. The organization of management accounting of costs for the implementation of innovative developments depends on their purpose. The structural unit can perform work for internal consumption of the company or for external contractors.

In order to get this profit, it is necessary to observe the conditions:

- legalize the existence of intellectual property, that is, properly formalize the rights to it;
- reflect the presence of intellectual property in the accounting of the enterprise. An economic entity of any form of ownership must be able to competently analyze the situation on the market for products (services), keep track of the trends in demand for its products or services (services), secure a market "niche" and be seriously prepared in the field of entrepreneurial activity, marketing, know the legal , legal basis of relations with partners.

The tactic of ignoring such actions will inevitably turn out for enterprises in the future a complete loss of the competitive ability of their products in foreign and domestic markets.

The process of commercialization of the innovation sphere can conditionally be reduced to the following:

• in the active entry of enterprises, firms, organizations into the market of scientific and technical products;

• in the ability to find a customer, master the art of an entrepreneur, i.e. search for the customer (consumer) for your idea or development;

• in the ability to advertise them;

• the ability to write in magazines, make its way to television, etc.

Intellectual property is an object of property that can not only be owned, used and disposed of, but also (if properly documented) used in the authorized capital and in the economic activity of an enterprise as intangible assets.The use of intellectual property in the authorized capital allows the enterprise and authors - creators of intellectual property to receive the following practical advantages:

• form a statutory fund of considerable size without diversion of funds and provide access to bank loans and investments (intellectual property can be used along with other property of the enterprise as an object of collateral when obtaining loans);

• depreciate intellectual property in the authorized capital and replace intellectual property with real money (capitalize intellectual property). At the same time, depreciation is legally included in the cost of production (not subject to income tax);

• authors and enterprises - owners of intellectual property to participate as founders (owners) in the organization of subsidiaries and independent companies without diverting funds. The use of intellectual property in economic activity will allow:

• document ownership rights and put intellectual property on the balance sheet as property of the enterprise. This makes it possible to depreciate intellectual property and form the corresponding funds for depreciation at the expense of the cost of production;

• receive additional income from the transfer of rights to use intellectual property, as well as provide reasonable regulation of prices for products of innovative activity of an enterprise depending on the volume of transferred rights to use intellectual property;

• pay royalties to individuals (authors) bypassing the payroll fund with the inclusion of costs in the cost (without traditional deductions to insurance and other funds and without limiting the size of payments with attributing the cost of paying royalties to the cost of production - “other expenses”).Currently, at the enterprises of the Republic of Kazakhstan, the share of intangible assets in the total mass of all assets is significantly lower than at similar enterprises in countries with developed market economies. Consequently, practical experience in organizing the accounting and valuation of intangible assets in enterprises of our country is not enough. Investments in intangible assets are repaid during a certain period

due to the additional profit received by the enterprise as a result of their use, as well as due to depreciation charges. However, recently there has been growing economic interest in increasing the profitability of the enterprise through the use of the exclusive right of the enterprise to the results of intellectual activity.

CONCLUSION

Management accounting operates with a wide range of tools, which include: strategic budgeting, strategic derivative balance sheet, economic value added model, strategic analysis, cost accounting by type of activity, balanced scorecard, etc. If innovative products are intended for use in structural divisions of the company, then the costs of their implementation are transferred to the parent organization for further distribution to internal units.

In conclusion, I would like to emphasize once again that the management accounting of innovations as a modern, quite promising, actively developing area of management accounting allows you to create an accounting system that meets the conditions of an innovation-oriented market economy, making maximum use of the resources available to the organization, and is most important an information source when making the most optimal decisions in managing innovation.

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БАСҚАРУ ЕСЕБІ, ИННОВАЦИЯЛЫҚ ЭКОНОМИКА, БАСҚАРУ

Аннотация. Іскерлік ортаның күрделілігі жоғары және белгісіздігі жағдайында басқару есебінде қалыптасатын ақпарат менеджерлердің ұтымды басқару шешімдерін қабылдауы үшін негіз болып табылады. Инновациялық-бағдарланған нарықтық экономиканың шарттары Басқару есебі туралы дәстүрлі көзқарасты өзгертеді және инновацияны тиімді басқару үшін жеткілікті ақпарат қалыптастыру, инновациялық өнімдегі тапсырыс берушілердің тұтынушылық қалауына талдау жүргізу және инновациялық жобалардың іске асырылуын тиісті бақылау мақсатында оның кәсіпорындарда жекелеген бағыттарын дамытуды талап етеді. Сондықтан зерттеу барысында Басқару есебін дамытудың маңызды бағыттарының бірі инновацияларды басқару есебі болып табылатыны анықталды. Инновацияны басқару есебі тек қана есепке алуды ғана емес, сонымен қатар кәсіпорынның инновациялық ортасын және инновациялық әлеуетін талдауды, кәсіпорынның инновациялық мақсаттары мен міндеттерін тұжырымдауды, инновациялық мақсаттарға қол жеткізуді бақылауды қамтиды.

Түйін сөздер: басқару есебі инновациялар; ақпарат; басқару; трансформациясы.

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УПРАВЛЕНЧЕСКИЙ УЧЕТ, ИННОВАЦИОННАЯ ЭКОНОМИКА, УПРАВЛЕНИЕ

Аннотация. В условиях высокой сложности и неопределенности деловой среды информация, формируемая в управленческом учете, является основой для принятия менеджерами рациональных управленческих решений. Условия инновационно-ориентированной рыночной экономики изменяют традиционное представление об управленческом учете и требуют развития его отдельных направлений на предприятиях с целью формирования информации, достаточной для эффективного управления инновациями, проведения анализа потребительских предпочтений заказчиков в инновационной продукции и должного контроля за реализацией инновационных проектов. Поэтому в ходе исследования определено, что одним из важных направлений развития управленческого учета является управленческий учет инноваций. Управленческий учет инноваций включает в себя не просто учет как таковой, но также анализ

инновационного окружения и инновационного потенциала предприятия, формулировку инновационных целей и задач предприятия, контроль достижения инновационных целей, о чем более подробно в данном исследовании представлено авторами статьи.

Ключевые слова: управленческий учет инноваций; информация; управление; трансформация.

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EFFECTIVE MANAGEMENT OF HUMAN CAPITAL AS THE BASIS FOR THE DEVELOPMENT OF NATIONAL ECONOMY

Abstract. One of the priorities of the institutional and structural reforms implemented by Kazakhstan in the years of its independence is the formation of systemic conditions for the development and growth of the country's human capital. The issue of the development of human capital has always been in the focus of both conceptual documents that determine the development strategy of the state and society, and real actions undertaken by the political leadership of the country. Entering the forefront of human capital is one of the modern global trends. Human capital is the main economic resource of the 21st century, increasing the country's GDP, which has become the main productive and social factor in the development of the economy of the Republic of Kazakhstan.

The transition of the Republic of Kazakhstan to a market economy raised the question of the need to create effective systems that ensure high quality human resources, the peculiarity of which is that:

- firstly, the more people are involved in professional activities, the more they accumulate life and professional experience, the less time they need for a high-quality solution of professional tasks, the greater their value;
- secondly, this is the most complex object of social management;
- thirdly, the professionalization of activities requires a large capital intensity for the formation of professionals;
- fourthly, the high efficiency of the activities of professionals in the organization is achieved by creating a rational management of their capabilities.

Keywords: human potential, human resources, human capital, competitiveness.

Introduction - An important area of effective human capital management as the basis for the development of the national economy of the Republic of Kazakhstan is the task of the qualitative growth of human capital, which acts as a driving force for modernization processes. To this end, educational programs are being developed and updated, the task of which is to train specialists based on advanced knowledge and practices. In addition, attention is paid to the development of the scientific field as a transfer of new technologies to all relevant areas and sectors.

The new quality of the country's development, associated not with the raw materials economy and the era of “oil abundance”, but based on breakthrough technologies, a competitive market economy, good governance, and a good banking system, is determined by the quality of human resources living and working in Kazakhstan.

In a global context, the competitiveness of a country's human resources is becoming a more significant factor than its availability of raw materials. The competitiveness of human resources determines the competitiveness of the state at the present stage.

The modern economy is called the economy of effective human capital, which emphasizes its main role as a productive factor in the development of the state and society.

Outlined priorities for the further development of Kazakhstan, such as a new quality of industrialization based on the achievements of the fourth industrial revolution, digitalization of various sectors of the country's economy, development of resource potential based on integrated information technology platforms, the widespread introduction of “smart technologies” (in the agricultural sector, transport and logistics sphere, construction and utilities sectors, the sphere of city management, etc.) are directly related and determined, first of all, to honors human resources, they can be realized only through the efficient operation of the country's citizens in all sectors of the economy.

Human capital is becoming the most important factor in the country's economic growth, the basis of its sustainable development, the creation of a "smart economy". A deep imbalance of people's opportunities and choices arises from income inequality, as well as education, health, voice, access to technology and exposure to shocks. The gap in levels of human development is a reflection of the inequality of access to education, health care, employment, credit and natural resources, due to gender and group affiliation, disparities in income and place of residence.

Literature review – Since its inception, economic science has paid attention to the study of human abilities, their place and role in social production. For many years, within the framework of economic science, scientists have made attempts to develop a working model of a person that allows the most accurate description of human behavior in terms of economic laws.

For the first time, the model of "economic man" was developed by representatives of classical political economy. W. Petty, the ancestor of British political economy, when calculating national wealth, proposed, along with property, to include the person himself with his creative abilities and suggested evaluating them the same way. He considered people to be the main wealth of the country and tried to measure their value [1].

In the XVIII century. A. Smith developed the ideas of W. Petty. However, unlike W. Petty, A. Smith did not focus on the person himself, but on his abilities and skills. He emphasized the importance of education in increasing the country's wealth. Fixed capital, according to Smith, consists of machines and other tools, from buildings, from land, as well as from acquired and useful abilities of all members of society [2].

K. Marx considered human production as consumer production, where labor is not only reproduced, but there are also tendencies for its improvement. The main source of wealth accumulation, he considered the productive abilities of people. The productive forces of labor, the creative abilities of man, primarily intellectual, are reproduced only in the process of consumer production: "What really" accumulates ", but not as a dead mass, but as something living, this is the art of the worker, the degree of development of labor [3] .

Accumulation is a constant preservation and at the same time a transformation of the already perceived, realized. " In the framework of his theory, a person's ability to work is a commodity, and belongs to the personality of each individual employee. In the production process, abilities take the form of working capital, already belong to the capitalist as part of the total product and are used by him to obtain surplus value [4].

There are many approaches to determining the components of human capital.

The most generalized approach is the approach of Yu. G. Bychenko, according to which structurally human capital is as follows [5]:

- biological human capital - the value level of physical abilities to perform labor operations, the level of public health;

- cultural human capital - a set of intellectual abilities, education, skills, moral qualities, qualifications of individuals who are used or can be used in work and legitimize the possession of status and power.

B. M. Genkin believes that human capital is a combination of such qualities as natural abilities, health, education, professionalism, mobility, which are a source of income for a person, his family and society [6].

I.A. Nikitin and V.I. Romanchin believe that human capital is a specific reserve of knowledge, skills, abilities, motivation and human health, which are formed as a result of investments and rationally and effectively applied in the process of labor with the aim of increasing the income of an individual, organization.

S. A. Dyatlov by human capital means a certain stock of health, knowledge, abilities, skills and motivations of a person accumulated as a result of investments that are expediently used by him in a certain sphere of social reproduction and contribute to the growth of his income, increase in labor productivity and production efficiency [7].

A. V. Koritsky emphasizes that the most important types of investments in a person are the costs of education and training in the workplace, increasing the level of knowledge of the employee and increasing the amount of human capital in the enterprise. Important are the costs of protecting health and medical

services, reducing the incidence and mortality of employees, as well as the costs of labor migration, childbirth, which are a form of reproduction of human capital [8].

R. I. Kapelyushnikov and A. I. Dobrynin consider human capital as a stock of knowledge, abilities, skills and motivations embodied in a person [9].

M. M. Kritsky allocates human capital as a certain form of life, while he proposed a methodology for assessing human capital at the stages of its development [10].

Methodology – Creating the necessary conditions to ensure a decent standard and quality of life for citizens is the main task of any state. The standard of living of the population, as a comprehensive indicator, reflects such aspects as the welfare of the population, the accumulation of human capital and the level of human development. Many countries of the world, pursuing various policies, implementing reforms and implementing various kinds of transformations, strive to increase the level of well-being of citizens, thereby ensuring social, economic and political stability in society.

The decisive influence on the formation of a modern understanding of the development process was provided by the theoretical developments of Nobel Prize winner Amarty Sen, in particular, his work "Development as an Empowerment", published in 1989 [11].

A. Sen considers the development process not as an increase in material or economic well-being, but as a process of expanding a person's ability to live a long and healthy life, have access to knowledge, do more things, and so on. At the same time, the process of expanding opportunities is primarily associated with the expansion of the freedom of choice of a person.

Mikhail Prokhorov considers the problem of human capital management in two aspects:

- in terms of the effectiveness of an innovative economy;
- from the point of view of the humanization of the process [12].

The human capital index is a weighted average of four indicators:

- the average duration of education is the average number of years of education received by the adult population of the country (aged 25 years and older), with the exception of years during which a citizen re-took the same education course.
- adult literacy - the proportion of citizens over the age of 15 who can consciously read and write short simple sentences on the topic of everyday life;
- The expected duration of schooling is the total number of years of schooling that a child of a certain age in the future can count on, assuming that the probability of his or her stay at school at a certain age is equal to the current rate of enrollment for students of this age;
- the total share of students - the ratio of the total number of students at all levels of education (primary, secondary, higher), regardless of their age, to the total population that has reached the age corresponding to these levels of education.

The total indicator of human capital for country "x" is a weighted arithmetic average with the following distribution of shares: one third falls on the component "adult literacy", while two-ninths on the other three components (total share of students, expected and average duration of study) [13]:

The total indicator of human capital =
1/3 x Z-value of adult literacy +
2/9 x Z-value of the total share of students +
2/9 x Z-value of the expected duration of training +
2/9 x Z-value of the average duration of training.

In a narrower sense, human capital is understood as the totality of knowledge, skills used to meet the diverse needs of a person and society as a whole. For the first time, the term was used by Theodor Schulz, and his follower Gary Becker developed this idea, substantiating the effectiveness of investments in human capital and formulating an economic approach to human behavior [14].

In his publications Noskova K.A. describes the modernization of the country's economy, which must begin with the modernization of human capital. The priority and mechanism for the successful development of industry or trade, the introduction of innovative technologies are people, human capital. Human capital is an integral part of the "intellectual capital" of the organization, which represents the difference between the market value and the book value of the company. The competitiveness of human capital is a priority for the state and is aimed at the quality of education and the formation of a system of institutions that create competitive conditions [15].

Economic estimates of human capital have become widely used both at the microeconomic and macroeconomic levels to determine the value of national wealth, social losses from wars, illnesses and natural disasters, in the field of life insurance, the profitability of investments in education, healthcare, migration and for many other purposes [16].

In economic theory, three main approaches to solving the problem of measuring human capital have been identified:

1) Indicator based on the natural characteristics of human capital, which includes the following indicators:

- literacy rate of the population;
- the average number of years of study per person;
- the proportion of workers with different levels of education;

2) Scores for the quality of knowledge of students according to the results of international test trials.

3) Cost based on accounting for the growth of an individual's income with the growth of human capital.

Ultimately, human capital is determined by the physical health of a person and the share of world, national, corporate cultural capital acquired by a person in the process of socialization, training, work, and advanced training [17].

In world practice, various indicators are used to assess the development of human capital, the most significant of which is the human development index (HDI) or human development index (HDI). When determining the success of a country in the development of human capital, more than 50 indicators are taken into account [18].

Thus, the analysis of various approaches to the definition of human capital showed that in the scientific literature it is customary to consider it in a narrow and broad sense.

In 2018, Kazakhstan took 58th place among 189 countries in the ranking of the Human Development Index. Our country is among the states with a very high level of this indicator. The top 5 rankings include Norway, Switzerland, Australia, Ireland and Germany. The lowest rates are in the Republic of Niger, the Central African Republic, South Sudan, Chad and Burundi (Table 1) [19].

Table 1 – Comparative analysis of indicators of the human development index by country for 2018

Country	Indicators				
	Human development index	Population size	Average life expectancy	Estimated number of years spent on education	GDP per capita
Norway	0,953	6000000	82,3	17,9	68012$
Switzerland	0,944	8600000	83,5	16,5	57625$
Australia	0,939	25000000	83,1	22,9	43560$
Ireland	0,938	4700000	81,6	19,6	53754$
Germany	0,936	81300000	81,2	17	46136$
Russia	0,816	146800000	71,2	15,5	24233$
Kazakhstan	0,800	18500000	70	15,1	22626$
Uzbekistan	0,710	31300000	71,4	12	6470$
Turkmenistan	0,706	5500000	68	10,8	15594$
Kyrgyzstan	0,674	6200000	71,1	13,4	3255$
Tajikistan	0,650	9100000	71,2	11,2	3317$
Note – compiled by authors according to https://ru.sputniknews.kz/infographics/20181007/ 7497756/kazakhstan-razvitie					

So, Kazakhstan, according to the study, rose in this ranking by two lines in comparison with last year - to 58th place. Analysts rated the Human Development Index at 0.8 out of 1. Thus, the republic was included in the number of countries with the highest level of human development. It was noted that life expectancy in 2017 was at birth 70 years. The expected years of study in the country are 15.1 years, while on average, studies in the country last 11.8 years.

Many countries of the former USSR fell into the group of states with a high level of human development. In particular, Georgia took 70th place, Azerbaijan - 80th, Armenia - 83rd, Ukraine - 88th. At the same time, Moldova and Tajikistan fell into the category of countries with an average level of development (112th and 127th places).

The level of education of the population of Kazakhstan, regulated by the Law of the Republic of Kazakhstan "On Education" dated July 27, 2007, is relatively high and approaches the average level of the OECD member countries [20]. Among the adult population aged 25 years and above, about 40% have secondary education as the highest level of education received, 30% have a college diploma, and 25% have higher education (Figure 1) [21].

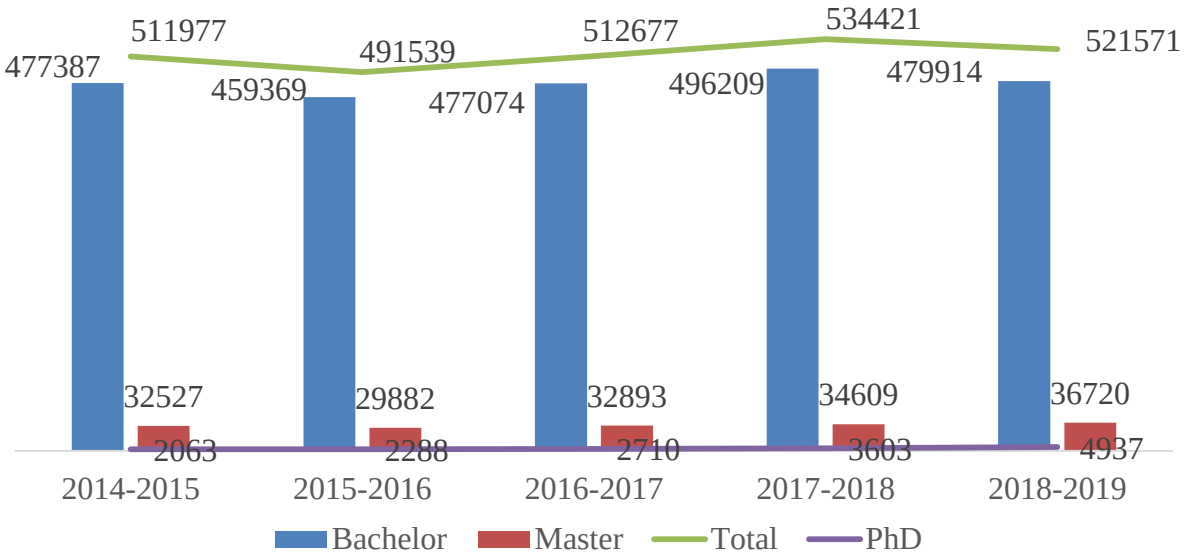

Figure 1 - Dynamics of the contingent of universities in Kazakhstan for the period from 2014-2019, in people
Note – Compiled by the author based on the source: National Report on the Status
and Development of the Education System of the Republic of Kazakhstan

In regional comparison, the largest number of students falls on the city of Almaty, the South Kazakhstan region and Astana, the lowest indicators in the Mangystau and North Kazakhstan regions.

High numbers of students are explained by the predominance of a larger number of young people and the number of universities in these regions. A slight decrease in the number of students compared to the 2016-2017 academic year was recorded in Almaty (-90 people) and Kyzylorda regions (-97 people) (Table 2) [21].

Table 2 - Dynamics of the contingent of students in the regional context of the Republic of Kazakhstan for 2015-2018 (people)

№№	Region	Number of universities	Academic year		
			2015-2016	2016-2017	2017-2018
1.	Total	130	459369	477074	496209
2.	Akmola	4	9267	8455	9441
3.	Aktobe	6	20336	21004	21829
4.	Almaty	3	9051	922	9342
5.	Atyrau	3	10014	11012	12046
6.	East Kazakhstan	7	26842	27969	29334
7.	Zhambyl	3	18950	19662	20874
8.	West Kazakhstan	4	26963	29919	31392
9.	Karaganda	9	36976	41738	42629
10.	Kostanay	7	19014	20057	20534
11.	Kyzylorda	3	10055	10070	9973
12.	Mangystau	2	3976	5081	5167
13.	Pavlodar	4	12703	13566	14537
14.	North Kazakhstan	2	4560	5235	6027
15.	South Kazakhstan	12	70827	71323	79423
16.	Astana city	17	51235	51800	52369
17.	Almaty city	44	128707	130761	131292
Note - Compiled by the author on the basis of the source: National report on the status and development of the education system of the Republic of Kazakhstan					

In the context of the age structure of the contingent of universities, a high quantitative indicator of students in the age group of 18-21 years. A significant increase in the number of students in the age group of 25-29 years (+5 531 people) is noted.

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the growth rate of students in the age category of 60 years and older is recorded (Table 3) [22].

Table 3 - Age structure of students studying in Kazakhstan
for the period from 2015-2018 (people)

Age	Academic year		
	2015-2016	2016-2017	2017-2018
Under 17 years old	1646	2332	2097
17	32962	35491	37233
18-21	293331	296111	299934
22	39734	39705	41432
23	25407	28645	29082
24	18734	20611	21022
25-29	23135	25515	31046
30-34	12127	14708	16482
35-39	7166	8026	10229
40-49	4216	4953	6466
50-59	895	935	1151
60	16	24	35
Total	459369	477074	496209
Note - Compiled by the author based on the source https://economy.gov.kz			

In the structure of the gender composition of students studying in the country's universities, 292,364 women and 242,057 men prevail.

Thus, the development of a competitive national economy is impossible without high-quality human resources, where education plays a significant role, the role and importance of which has been recently considered as the main factor in socio-economic progress. As noted by specialists from the Organization for Economic Co-operation and Development (OECD), “the rate of basic long-term economic growth in OECD countries depends on maintaining and expanding the knowledge base.

The comparative advantages of countries are less and less determined by the wealth of natural resources or cheap labor and more and more by technical innovations and the competitive application of knowledge. Economic growth today is as much a process of accumulating knowledge as a process of accumulating capital [23].

Today, the requirements for social and humanitarian education are increasing due to the complexity of social and communicative processes, the intensification of international competition, the active development of advanced technologies, the diversity and complexity of problems that are significant for society in the long term [24].

According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan in 2017, the republican budget expenditures on the education system in Kazakhstan amounted to 458,636 million tenge. In a number of budget programs, compared with 2016, there was a significant reduction in costs (Figure 2) [22].

However, the amount of funding under the budget program 100 "Training of specialists with higher, postgraduate education and the provision of social support to students" increased by 4.5%. In the higher education system of Kazakhstan, the distribution of state resources is mainly focused on 3 programs.

In 2018, there was an increase in the volume of the state order for personnel training (Figure 3) [22].

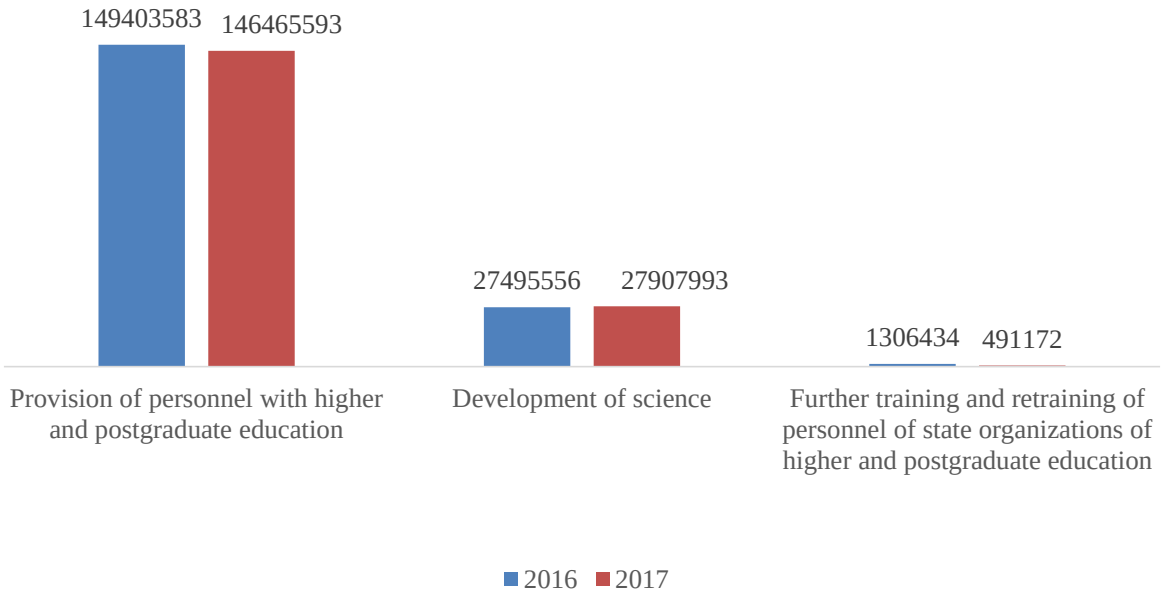

Figure 2 - Implementation of budget programs of the Ministry of Education and Science of the Republic of Kazakhstan in the field of higher and postgraduate education for 2016-2017, in thousand tenge
Note - Compiled on the basis of the source: Electronic resource: Data of the Ministry of National Economy of the Republic of Kazakhstan for 2016-2017,//https://economy.gov.kz

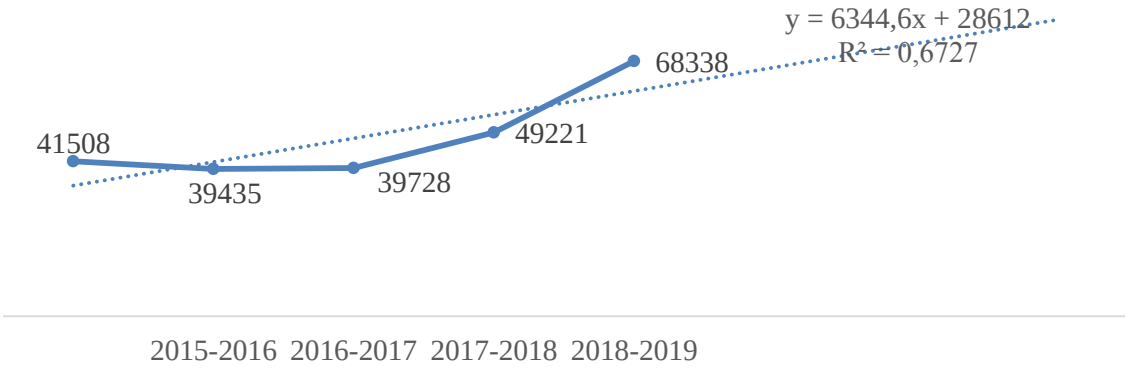

Figure 3 - Dynamics of the state order indicator for the training of personnel of the Ministry of Education and Science of the Republic of Kazakhstan for the period from 2014-2019
Note - Compiled on the basis of the source: https://economy.gov.kz

Of these, the funds allocated by the Ministry of Education and Science of the Republic of Kazakhstan for training in undergraduate, graduate and doctoral programs testify to their increase as of 2019 (Figure 4) [21].

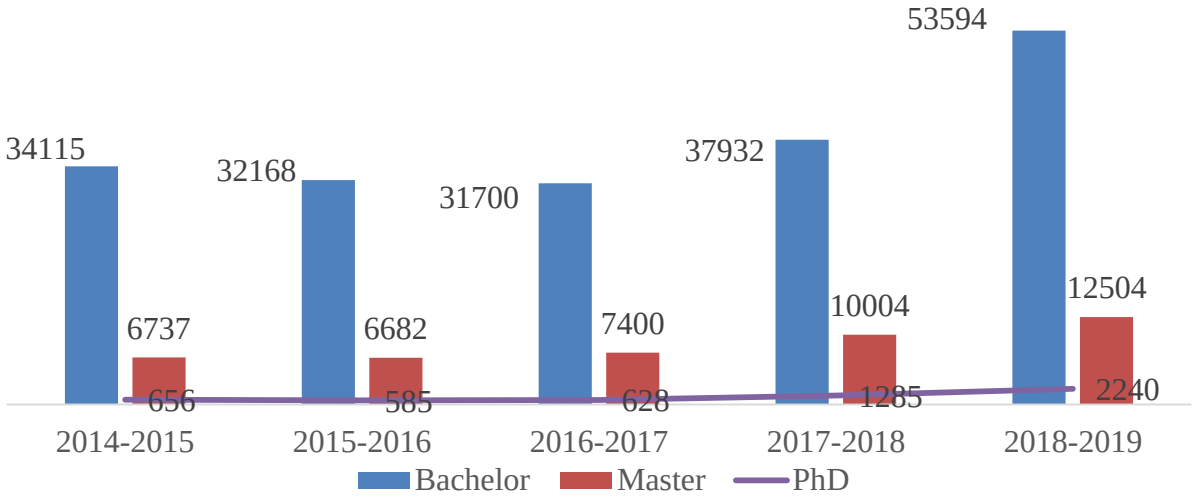

Figure 4 - Dynamics of the indicator of the state order for the training of the Ministry of Education and Science of the Republic of Kazakhstan in undergraduate, graduate and doctoral studies for the period from 2014-2019
Note - Compiled by the author based on the source: National Report on the Status and Development of the Education System of the Republic of Kazakhstan (for years of independence), IAC, 2017 - p.21

Taking into account the implementation of the Nation's Plan "100 concrete steps" on five institutional reforms and the "Five Social Initiatives of the President", as well as the main provisions of the President's annual messages to the people of Kazakhstan, the key priorities of the country's socio-economic policy are also improving the quality of human capital by ensuring accessibility and improving education, transforming the health system, productive employment, and a fair social security system through nature [25].

Human capital is becoming the most important factor in the country's economic growth, the basis of its sustainable development, the creation of a "smart economy". The progress of the Kazakhstani quality assurance system is underscored by the recognition of two Kazakhstani agencies, IAAR and NAOKO (formerly IQAA) at the international level. In 2016, IAAR and in 2017 IQAA became full members of ENQA successfully entered the EQAR.

To improve the position of Kazakhstani universities in global rankings, it is necessary to develop a strategy for the internationalization of higher education in Kazakhstan. This strategy will include key issues such as:

- improving the quality of education,
- attracting foreign students (educational hub),
- international reputation of universities,
- the quality of research and scientific development,
- attraction of foreign scientists,
- academic mobility of students and faculty, etc.

The adoption and implementation of such a program document will allow Kazakhstani universities to enter new markets for educational services.

In general, this will contribute to improving the quality of higher education and the high level of preparation of Kazakhstani students for the global labor market, as well as the accumulation of high-quality human capital in the country.

Conclusions - Human capital is the most significant resource of society, which characterizes the pace of economic development and scientific and technological progress.

The increasing importance of human capital as a driving factor in the development of the economy has led to the concept of sustainable development, in which the formation of a strategy for managing human capital becomes one of the key development factors [26].

Modern practice of training and development of human resources in leading companies has achieved significant results. The costs of training and staff development began to be perceived as investments in the

development of human resources that could bring a positive economic effect in the future. The effectiveness of such investments is expressed not only in increasing the company's income, but also in increasing the loyalty and motivation of employees as a whole.

Investments in human capital are the most profitable investments of the state. Given that Kazakhstan is preparing for a more advanced technological and digital future, the country has the opportunity to equip its youth with health, knowledge and skills that will enable them and their country to succeed. The Human Capital Index is a very useful tool to compare Kazakhstan and see what else needs to be done [27].

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ҰЛТТЫҚ ЭКОНОМИКАНЫ ДАМЫТУДЫҢ НЕГІЗІ РЕТІНДЕ АДАМИ КАПИТАЛДЫ ТИІМДІ БАСҚАРУ

Аннотация. Қазақстан өз тәуелсіздігі жылдарында іске асырып жатқан институционалдық және құрылымдық реформалардың басымдықтарының бірі елдің адами капиталын дамыту мен өсіру үшін жүйелі жағдайларды қалыптастыру болып табылады. Адам капиталын дамыту мәселесі әрқашан мемлекет пен қоғамның даму стратегиясын айқындайтын тұжырымдамалық құжаттардың, сондай-ақ елдің саяси басшылығы қабылдайтын нақты іс-әрекеттердің фокусында болды. Адам капиталының бірінші жоспарына шығу-бұл қазіргі заманғы әлемдік үрдістердің бірі. Адам капиталы – Қазақстан Республикасының экономикасын дамытудың негізгі өндірістік және әлеуметтік факторына айналған елдің ЖІӨ-ні арттыратын XXI ғасырдың басты экономикалық ресурсы.

Қазақстан Республикасының нарықтық экономикаға көшуі адам ресурстарының жоғары сапасын қамтамасыз ететін тиімді жүйелерді құру қажеттілігі туралы мәселе қойды, олардың ерекшелігі::

- біріншіден, адамдар кәсіби қызметке көп кірген сайын, олардың өмірлік және кәсіби тәжірибесі көп жиналады, соғұрлым оларға кәсіби міндеттерді сапалы шешу үшін аз уақыт қажет, соғұрлым олардың үлкен құндылығы бар;
- екіншіден, бұл әлеуметтік басқарудың күрделі нысаны;
- үшіншіден, қызмет түрлерін кәсібилендіру кәсіпқойлардың қалыптасуы үшін үлкен капиталды қажет етеді;
- төртіншіден, ұйымдағы кәсіпқойлар қызметінің жоғары тиімділігіне олардың мүмкіндіктерін ұтымды басқаруды құру арқылы қол жеткізіледі.

Кілтті сөздер: адам әлеуеті, адам ресурстары, адам капиталы, бәсекеге қабілеттілік

УДК 331.5.

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ЭФФЕКТИВНОЕ УПРАВЛЕНИЕ ЧЕЛОВЕЧЕСКИМ КАПИТАЛОМ КАК ОСНОВА РАЗВИТИЯ НАЦИОНАЛЬНОЙ ЭКОНОМИКИ

Аннотация. Одним из приоритетов институциональных и структурных реформ, реализуемых Казахстаном в годы своей независимости, является формирование системных условий для развития и роста человеческого капитала страны. Вопрос развития человеческого капитала всегда находился в фокусе как концептуальных документов, определяющих стратегию развития государства и общества, так и реальных действий, предпринимаемых политическим руководством страны. Выход на первый план человеческого капитала - это одна из современных мировых тенденций. Человеческий капитал – главный экономический ресурс XXI века, повышающий ВВП страны, который превратился в основной производительный и социальный фактор развития экономики Республики Казахстан.

Переход Республики Казахстан к рыночной экономике поставил вопрос о необходимости создания эффективных систем, обеспечивающих высокое качество человеческих ресурсов, особенность которых состоит в том, что:

- во-первых, чем больше люди включены в профессиональную деятельность, тем больше у них накапливается жизненного и профессионального опыта, тем меньше времени им требуется для качественного решения профессиональных задач, тем большую ценность они представляют;

- во-вторых, это сложнейший объект социального управления;

- в-третьих, профессионализация видов деятельности требует большой капиталоемкости для становления профессионалов;

- в-четвертых, высокая эффективность деятельности профессионалов в организации достигается созданием рационального управления их возможностями.

Ключевые слова: человеческий потенциал, человеческие ресурсы, человеческий капитал, конкурентоспособность.

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ECONOMIC AND SOCIAL NEED FOR STATE SUPPORT

Abstract. This article aims to identify the positive and negative aspects of state support for small and medium-sized businesses. The authors also reviewed the global experience of SME support. The contribution of the SME sector to GDP in most developed countries ranges from 50% to 60%. In Kazakhstan, SMEs in 2018 provide only 21% of GDP. This is a low value, requiring significant adjustments. In the course of the work, an analysis of the Government's financing of government programs was conducted, since government programs for financing the economy are highly efficient.

Keywords: government support, small and medium businesses, GDP, GNP.

Introduction. The state policy in the Republic of Kazakhstan in relation to private entrepreneurship is aimed at forming a middle class through the development of small businesses focused on the creation of new high-tech industries with the highest added value[1].

To achieve this goal, as one of the stages of the implementation of the strategy of industrial-innovative development of the Republic of Kazakhstan, a solution to the task of developing the infrastructure of entrepreneurship is provided.

The infrastructure to support entrepreneurship is a complex of organizations that provide favorable conditions for the creation, functioning and development of private entrepreneurship.

In the Republic of Kazakhstan, such organizations include:

1. State and organizations created on the initiative of the state;
2. Non-governmental organizations;
3. Commercial organizations.

Depending on the functional orientation, the structure of infrastructure institutions is defined as follows:

1. State support and assistance at the stages of the formation, functioning and development of business;
2. Financial support;
3. Information and analytical support;
4. Support in the field of education and staff development;
5. Logistical support.

Comparison of the organizational and functional structures allows you to create a matrix of participation of infrastructure institutions in the development of entrepreneurship in Kazakhstan[2].

Without exception, all organizations promoting entrepreneurship have their advantages and disadvantages due to the influence of various factors. When making decisions with respect to entrepreneurs, some of them are motivated by social goals, while others may have people interested in meeting their own interests.

It should be noted that the development of entrepreneurship is impossible without state support, the creation of a favorable business climate, the implementation of financial and non-financial instruments to support small and medium-sized businesses.

Methods. When writing the article, general scientific and special methods were used, such as: system analysis method; content analysis method; comparative analysis method; method of analysis and synthesis; system approach method.

Results. An important indicator of the effectiveness of state support is the level of development of entrepreneurship, in particular, the state of small and medium-sized businesses. Although in Kazakhstan for the effective development of business there are all the necessary prerequisites (natural, labor, financial, etc.), small and medium businesses are developing unevenly and at a slow pace compared with the leading countries of the world [3].

In this regard, in order to increase state support and enhance the development of entrepreneurship, the President of Kazakhstan issued a decree in 1997, which became the basis for the formation of the Small Entrepreneurship Development Fund JSC. Currently, the JSC "Small Entrepreneurship Development Fund" is called JSC "Entrepreneurship Development Fund" Damu "and implements a strategy to support entrepreneurship for 2012-2022. The main program of promoting entrepreneurship development in Kazakhstan and its support using public finances and instruments is the Business Road Map 2020 program. The amount of funding allocated for the implementation of this program for the five-year period (2015-2019) is provided in the amount of 276 billion tenge. [4-8]

Small business in Kazakhstan generates 25.6% of GDP, and the share of people employed in SMEs is 36% of the national labor market.

In the scale of the national economy, the popularity of entrepreneurship in Kazakhstan is increasing, but the pace of activity is quite small - the levels of entrepreneurial activity in the Republic of Kazakhstan are two times lower than the world average (63% in GDP and 47% of the number of employees).

Among the regions, the greatest influence of SMEs in the formation of the gross regional product is observed in Astana - 46% of GRP, West-Kazakhstan region (40%) and Almaty (29%)[9].

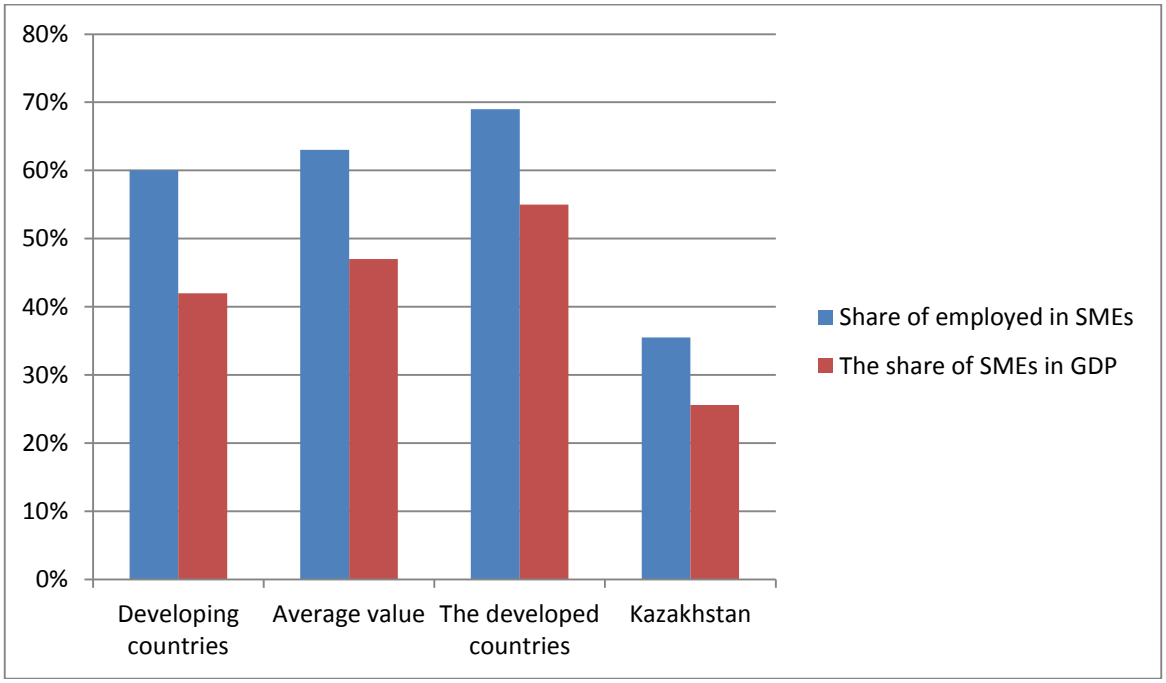


Figure 2 - The share of SMEs in GDP
Compiled from source data[9].

In the structure of SMEs, there is a traditional dominance of individual entrepreneurship entities engaged in trading activities and areas that do not require high qualifications. At the same time, the world trend is considered the transition to the production of products with high added value, the introduction of innovative, efficient production mechanisms ("Kazakhstan 2050"). [1]

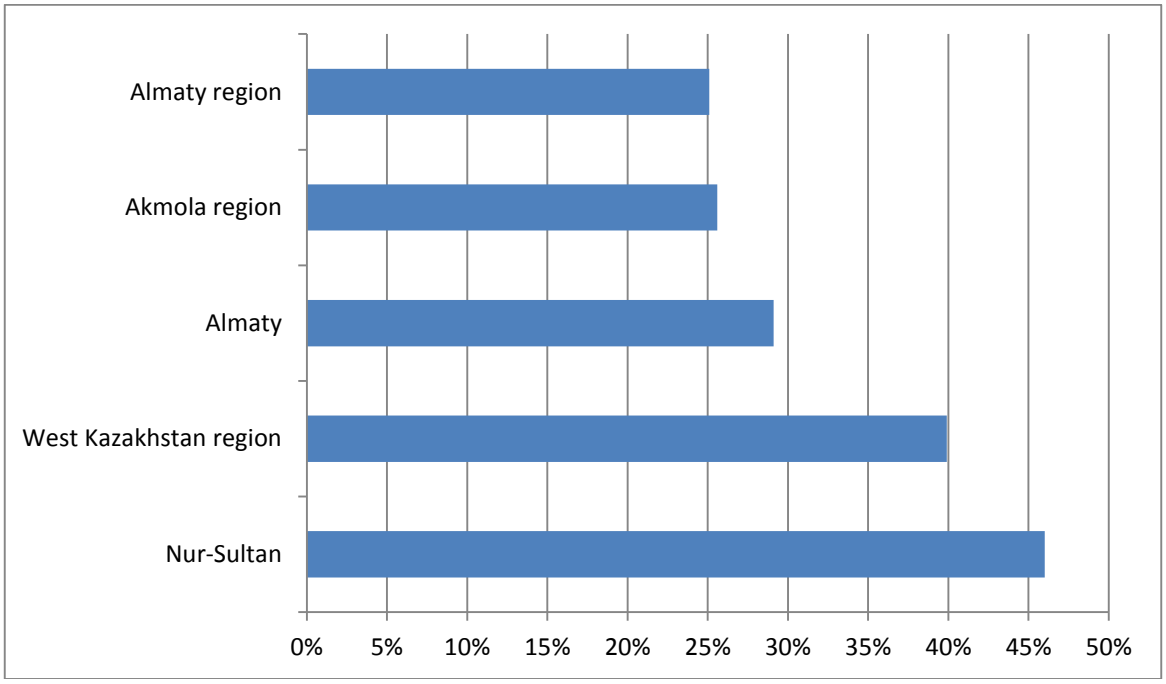
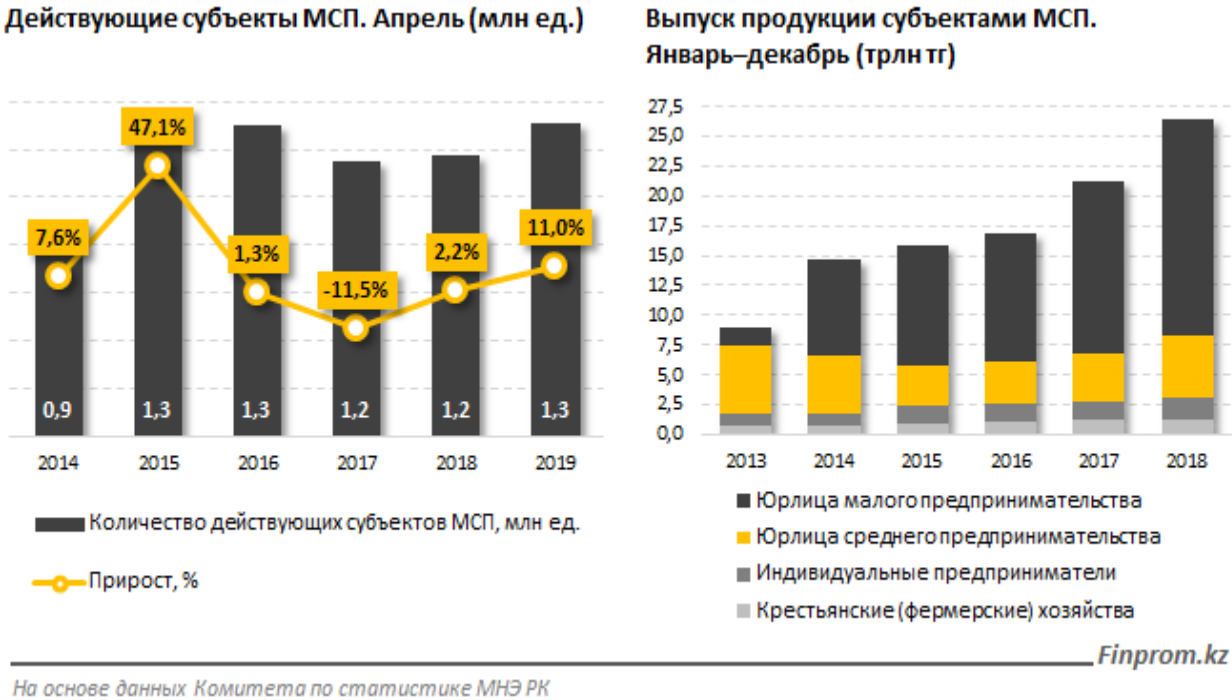


Figure 3 -Employment in SMEs
Compiled from source data[9].

The number of small and medium-sized businesses was 1.3 million. This is an 11% increase compared with 2018. This is reported by Finprom.kz.

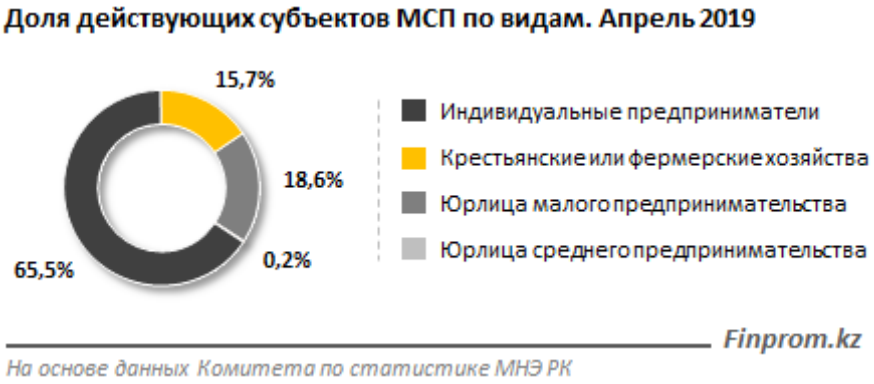
The volume of production by small and medium-sized businesses (SMEs) in January – December 2018 reached 26.5 trillion tenge, with an annual growth of 25.3% at once. This is the maximum rate in recent years. SMEs include legal entities of small business, legal entities of medium business, individual entrepreneurs, peasant or farm enterprises[10].

The largest production volumes fall on small enterprises: 18.2 trillion tenge (share - 68.7%). Medium-sized enterprises produced products at 5.2 trillion tenge, individual entrepreneurs - by 1.8 trillion tenge, peasant or farm enterprises - by 1.3 trillion tenge.

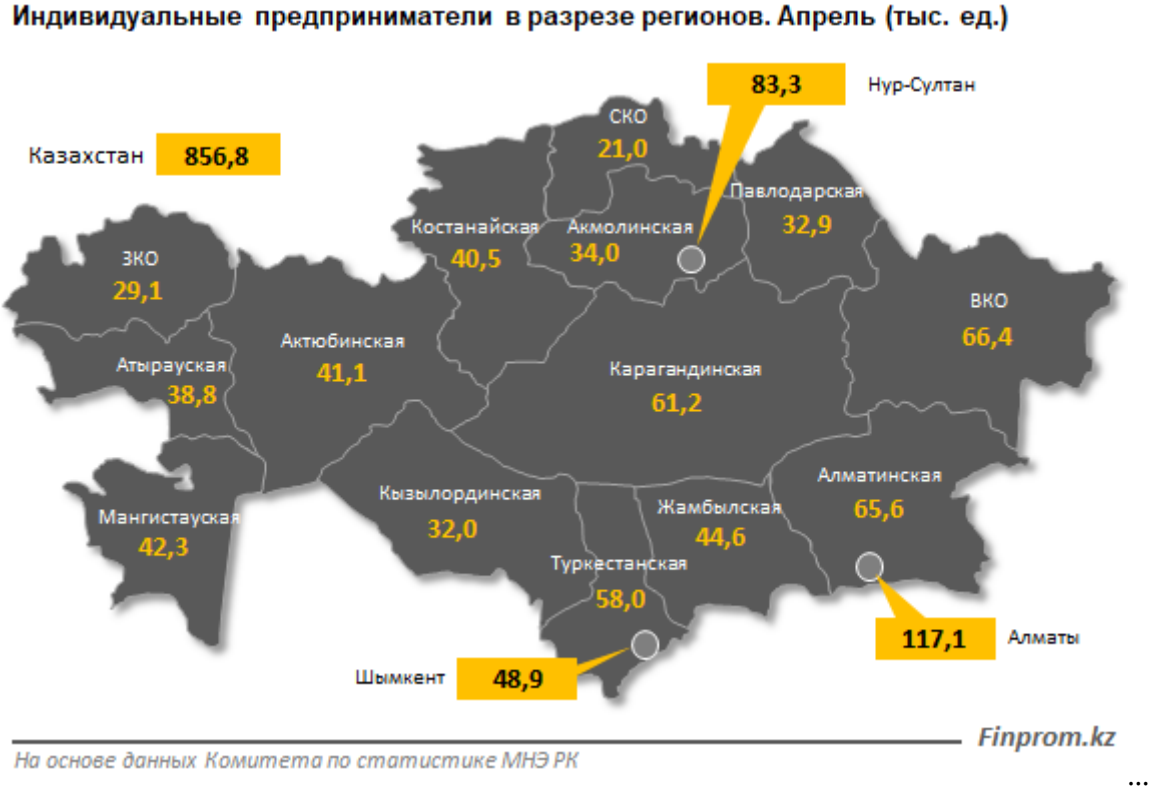


На основе данных Комитета по статистике МНЭ РК

At the same time, the number of leaders is IP. Thus, by the end of April, the share of individual entrepreneurs was 65.5% of SMEs, or 856.8 thousand. The number of small enterprises was only 243.3 thousand (18.6%). Another 205 thousand SMEs accounted for peasants and farms (15.7%).



Individual entrepreneurs are mainly located in Almaty: 117.1 thousand individual entrepreneurs - 7.9% more than a year earlier. 83.3 thousand individual entrepreneurs are operating in Nur-Sultan, another 66.4 thousand in the East Kazakhstan region. The three regions listed above account for 31.1% of the total number of IP in the country[11].



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Since 2015, there has been an active growth in lending to SMEs. The number of loans issued by banks has increased 2.3 times since 2014. Compared with January of last year, the volume of loans increased by 29% and amounted to 3 trillion. tenge However, according to ADB, only 19% of SMEs receive loans, while the rest refinance income or take loans from other sources. This is due to the fact that most enterprises have a bad credit history or do not have the necessary documents.

The direction of loans reflects the main activities of enterprises: trade (37%), construction (13%), industry (13%) and other sectors not related to the main sectors of the economy (24%). [9]

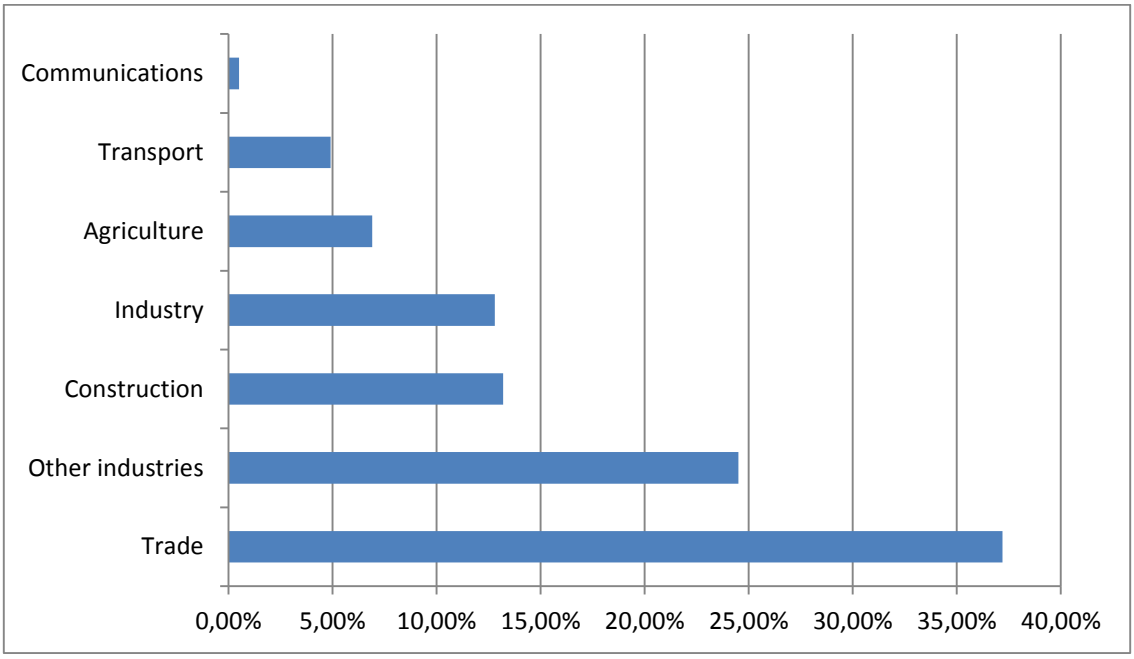

Figure 5 - Lending structure by sector for 2018
Compiled from source data[9].

In addition to the well-known state programs, loans to MFIs for the period up to 2020 were also actively involved in the development of SMEs from 2015 to 2017. This year, the third tranche of $ 200 million under the ADB project has been launched.

The project aims to increase the availability of SME financing, to increase the number of borrowers and the number of loans issued by more than 20%. It also includes a gender policy in such a way that at least $ 50 million will go to lending to female entrepreneurship. Also, at least $ 120 million will be allocated for lending to enterprises outside of Almaty and Astana.

The World Bank (IBRD) this year will allocate another $ 9.24 million for the SME competitiveness project. The goal of the project is to strengthen government programs and increase the competence of SMEs. [11]

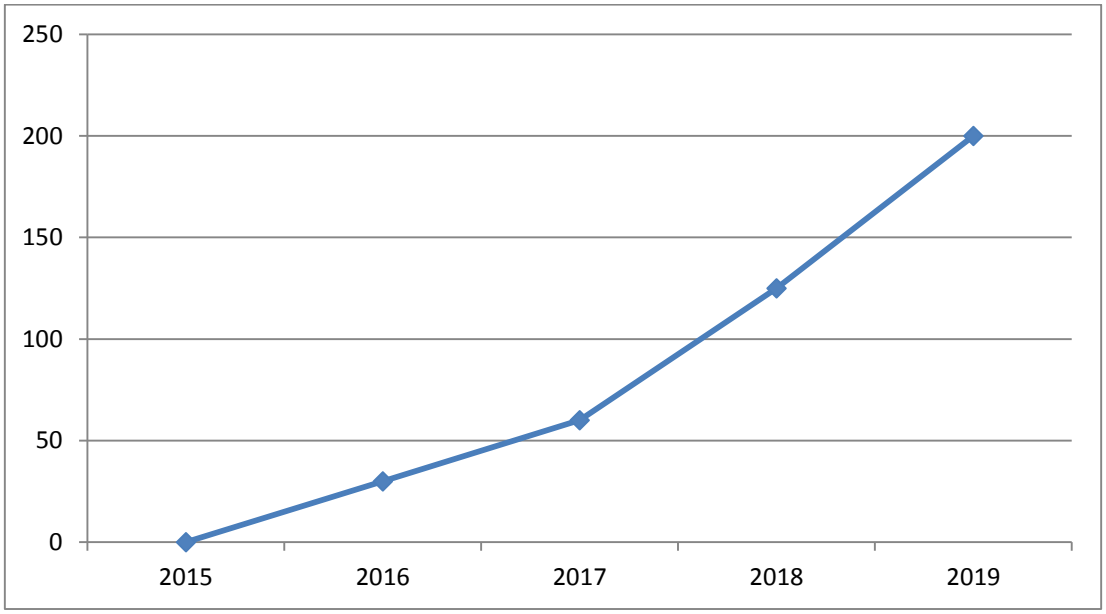

Figure 6. Number of SMEs that are in the process of becoming “accredited suppliers” for large companies (units)
Compiled from source data[6].

A supplier development program is currently being developed, the role of which will be to increase market connections for SMEs with large local and multinational corporations in the oil and gas, railway and steel sectors. Within the framework of the project, KIIR specialists will be provided with modern market tools for the development of clusters.[12]

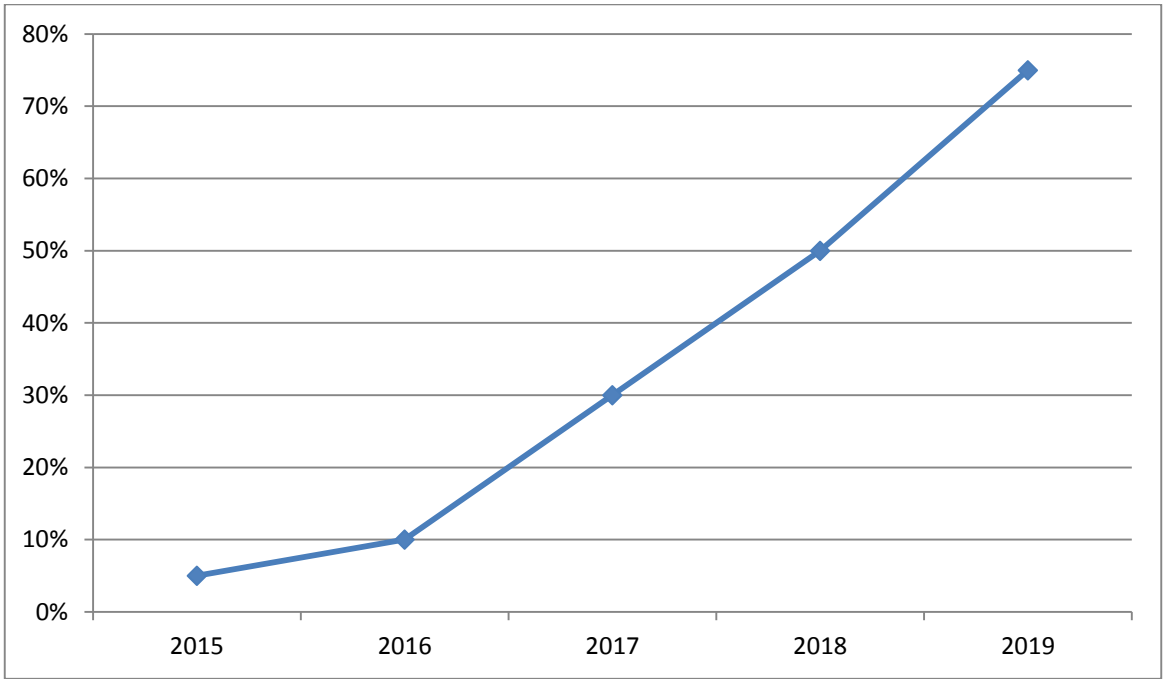

Figure 7 - Percentage of SMEs involved in improving management and business practices
Compiled from source data[6].

By the end of the project, it is planned to increase the number of "accredited suppliers" for large companies - from zero in 2015 to 200 by 2019. The percentage of SMEs involved in improving management and business practices will increase from 5% in 2015 to 75% by 2019 [13].

The growth rate of the economy of Kazakhstan in 2018–2022, according to forecasts of the MNE of the Republic of Kazakhstan, will be 3.1–4.2% with an annual incremental increase. Including in 2018, according to the forecast of the ministry, economic growth should reach 3.1%.

The economy of Kazakhstan will develop at the level of growth rates of the world economy, which, according to a revised estimate of the International Monetary Fund, in 2018–2019 will amount to 3.9% per year. The growth will be sustained by a gradual recovery in demand, as well as the maintenance of commodity prices. At the same time, a steady and progressive economic dynamics is expected due to a higher increase in gross capital formation (at the level of 5.0–8.4%), moderate and steady growth in population consumption (at the level of 2.0– 2.5%) and net exports (at the level of 2.2–2.6%) [14].

Monetary policy in 2018–2022 will help create the necessary conditions for the development of the investment market and stimulate lending activity in the banking sector. The average annual growth rate of second-tier banks in the upcoming period is expected to be at the level of 3.7%, deposits of residents over this period will increase at the level of 8.0%. The level of money supply will be adequate to the development of the economy, in general, the planned value of monetization will be on average within 42.1%.

The recovery of the country's economic growth and increased government attention are creating new development prospects for SMEs. To expand the production of SMEs and ensure employment of the population through its involvement in private business, government support programs will be continued. The "Enbek" program will contribute to the development of entrepreneurship among the unemployed and unproductively employed by expanding microfinance in cities, developing preferential microcredit in villages and basic entrepreneurial skills. The budget of this program in 2018 will be increased by 20 billion tenge on behalf of the Head of State in the framework of five social initiatives [15].

At the regional level, a set of measures will be taken to develop mass entrepreneurship, reduce all types of business costs. A rating of cities and regions for the ease of doing business with the establishment of a special award will be introduced.

Within the framework of the Unified Program of Business Support and Business Road Map 2020, government support measures will be continued to reduce the cost of loans through subsidy tools, partial guaranteeing of bank loans, construction of the missing infrastructure, provision of government grants, training, and consulting services to entrepreneurs. As additional measures to support entrepreneurship, work will continue within the framework of funds allocated from the National Fund under the joint action plans of the Government and the National Bank. To maintain additional liquidity in the lending market, work will be continued to attract credit lines from international financial organizations.[16].

Discussions. Summarizing, we can say that the state of small and medium-sized businesses in the Republic of Kazakhstan is at the stage of development and occupies an average position in the performance evaluation. Thus, we can conclude that small and medium enterprises are developing at a slow pace in our country. In the scale of the national economy, the popularity of entrepreneurship in the Republic of Kazakhstan is increasing. The greatest development of SMEs is observed in Astana, WKO and Almaty. In the structure of SMEs, the largest number of constituent entities are self-employed, mainly engaged in trading activities.

The study showed that the state support of small and medium-sized businesses has a number of problems, among which the following can be highlighted:

1) excessive tax and fiscal burden for the non-resource sector of the economy and citizens with low and medium income levels impede economic development;

2) the system of tax benefits is not effective enough;

3) low share of tax revenues in the structure of regional and local budgets and their high dependence on transfers, as well as low motivation of regional and local authorities to create conditions for the development of entrepreneurial activity;

4) a high proportion of the “shadow” economy and public sector enterprises create additional pressure on law-abiding commercial enterprises;

5) fiscal policy is unstable, which increases the financial risks of enterprise taxation. Tax policy has mainly fiscal goals and does not contribute to solving the problem of growth of future budget revenues due to tax incentives for business.

First of all, it should be noted that the main goal of state support for small and medium-sized businesses should be to increase the revenue base of the budget, which should be achieved by expanding the tax base as a result of the following strategic goals, and not by increasing tax rates and withdrawing money from the economy. As the main strategic objectives of state support for small and medium-sized businesses, the following should be highlighted:

 Promote the promotion of growth of business activity of enterprises and increase their number;

Facilitating the stimulation of an increase in labor productivity in the economy as a whole;

 Promoting the promotion of economic diversification and reducing the dependence of the revenues of the consolidated budget on the commodity sector of the economy.

In our opinion, the reform of financial policy in the Republic of Kazakhstan should be carried out in two stages:

At the first stage it is necessary to ensure the recovery of the growth of the national economy. At this stage, it is necessary to adopt a package of depreciation benefits in order to stimulate investments in the modernization of old and the creation of new enterprises with high productivity in the non-oil sector.

At the second stage, it is necessary to achieve high rates and quality growth of the national economy. At this stage, it is necessary to carry out a full-fledged tax reform, which will create conditions for high-quality and sustainable growth of the national economy, diversification of the economy and growth of the level and quality of life of the population.

Let us consider in more detail the activities that need to be implemented within these stages in the tax regulation system of the Republic of Kazakhstan.

At the first stage, it is proposed to reduce the tax burden on new and dynamically developing sectors of the national economy. To this end, it is proposed to use such a tool of tax regulation as tax holidays for new enterprises of the production sphere and benefits for paying income tax, property tax, to establish

benefits for contributions to insurance funds for enterprises that introduce new equipment and technologies and create high-performance workers places[17].

At the second stage, it is proposed to bring the structure of tax revenues in accordance with the objectives of stimulating the growth of the national economy - it is necessary to reduce direct taxes on production by increasing indirect taxes on consumption and taxes on natural rents. For this we can recommend a number of activities:

1. It is necessary to improve the efficiency of tax administration, to simplify the financial reporting system for small and medium businesses.

2. In order to create a system of tax motivation of local authorities for the development of entrepreneurial activity and attracting investments, it is necessary to improve the system of distribution of tax revenue sources between different levels of the budget system.

3. It is necessary to increase the efficiency of the tax motivation for the transition to Kazakhstani jurisdiction, which can be achieved by certain benefits on income tax and property tax.

4. It is necessary to introduce a new budget rule: in case of an increase in tax revenues, return 50% of growth to the economy by lowering rates or providing additional targeted benefits.

5. Adopt a law that enshrines the General Principles for the creation, introduction and collection of non-tax payments, as well as the General rules for their administration.

It is necessary to focus the work of the government in collecting taxes, especially from the informal sector, in order to reduce corporate tax rates for developing manufacturing enterprises, in order to simplify administration, especially for small and medium businesses.

To reduce the tax burden on new and dynamically developing industries that create high-performance jobs, we can offer the following recommendations:

1. For existing production facilities that provide the right of tax credit for income tax, value added tax, property tax, land tax at 50% of the value of the acquired new technological equipment and technologies.

2. Ensuring the availability of an investment tax credit for amounts invested in the creation / expansion of production (introducing a simpler procedure for granting an investment tax credit, expanding the grounds for obtaining an investment tax credit, lifting restrictions on the amount of credit - 50% of the amount of taxes).

3. Introducing a moratorium on increasing the tax burden on production (with the exception of the mining activity).

To create a system of incentives for the working population to pay insurance premiums in the pension and medical insurance system through reducing the rate of deductions to the joint part of the system. It is necessary to ensure the stability of the rules in the long term, subject to the non-increase of the general level of rates:

1. Refuse to tax the minimum income of individuals and impose taxes on overconsumption.

2. Return the targeted payment of insurance premiums above the statutory limits of the annual income of an individual or recognize at the state level the actual action in Kazakhstan on the progressive scale of taxation of personal income.

It is necessary to pay special attention to reforming the system of tax benefits. For this, it is necessary to develop and implement a methodology for assessing the effectiveness of tax incentives at the macro and microeconomic level based on the achievement of strategic objectives.

Thus, the proposed recommendations will help solve problems and will increase the effectiveness of state support for small and medium-sized businesses.

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ЭКОНОМИЧЕСКАЯ И СОЦИАЛЬНАЯ ПОТРЕБНОСТЬ В ГОСУДАРСТВЕННОЙ ПОДДЕРЖКЕ

Аннотация. Данная статья направлена на выявление положительных и отрицательных сторон государственной поддержки малого и среднего предпринимательства. Авторы также рассмотрели мировой опыт поддержки малого и среднего предпринимательства. Вклад сектора МСП в ВВП в большинстве развитых стран колеблется от 50% до 60%. В Казахстане МСП в 2018 году обеспечивают только 21% ВВП. Это низкое значение, требующее значительных

корректировок. В ходе работы был проведен анализ государственного финансирования государственных программ, поскольку государственные программы финансирования экономики являются высокоэффективными.

Ключевые слова: государственная поддержка, малый и средний бизнес, ВВП, ВНП.

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МЕМЛЕКЕТТІК ҚОЛДАУДЫҢ ЭКОНОМИКАЛЫҚ ЖӘНЕ ӘЛЕУМЕТТІК ҚАЖЕТТІЛІГІ

Аннотация. Бұл мақалада шағын және орта бизнеске мемлекеттік қолдаудың оң және теріс аспектілерін анықтау көрсетілген. Авторлар сондай-ақ ШОБ қолдау көрсетудің әлемдік тәжірибесін қарады. Көптеген дамыған елдерде ШОК секторының ЖІӨ-ге қосқан үлесі 50%-дан 60%-ға дейін. Қазақстанда, ШОБ-ті 2018 жылы ЖІӨ-нің тек 21% ғана қамтамасыз етеді. Бұл айтарлықтай түзетулерді талап ететін төмен көрсеткіш. Жұмыс барысында Үкіметтің мемлекеттік бағдарламаларды қаржыландыруына талдауы жасалды, өйткені экономиканы қаржыландырудың мемлекеттік бағдарламалары өте тиімді.

Түйін сөздер: Мемлекеттік қолдау**,** шағын және орта бизнес, ЖІӨ, ЖҰӨ.

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ANALYSIS OF MORPHOLOGICAL PECULIARITIES OF THE STATE AREA OF THE REPUBLIC OF KAZAKHSTAN

Abstract. In modern conditions, space and location are not only considered to be the second category of public policy and become an important factor in the socio-economic development of the country. The main purpose of this article is to provide a comprehensive geographical analysis of the morphological features of the state territory of Kazakhstan to ensure geopolitical security of the country. Authors calculate the compactness index of the state territory of the country and the functional level of the capital, defines the geographical environment of the Republic of Kazakhstan. The results of the analysis allow to determine the advantages and disadvantages of morphological features of the state territory for the purpose of taking comprehensive measures for its strengthening and development.

Keywords: territory of the state, morphology of the territory, size of the territory, functional rank of the capital, geographical center of the state.

INTRODUCTION

For the whole geopolitical orientation, the basic concepts of "state", "territory", "space", which are the starting point of scientific-oriented analysis, remain constant. Their interaction is the basis of any geopolitical research.

The relevance of this research is related to the question of how successful promotion of geopolitical interests of the country depends on the quality of political organization and state of its geopolitical potential. The focus of the work on geopolitical situation assessment in the Republic of Kazakhstan is focused on the qualitative characteristic of traditional geographical characteristics. In this study, authors used the mathematical methods for the first time with regard to the state territory of the Republic of Kazakhstan that made the new knowledge reliable and undeniable.

Using mathematical methods allows constructive thematic interpretation of the collected facts, connects the recorded data to the appropriate classification categories, allows to restore or supplement missing data and logical structures with missing parts of phenomena or processes. The geo-political situation has been created for cartographic visualization.

Research Materials and Methods. During the research, authors used statistical, mathematical, cartographic and geographic information. The statistical data of the Statistical Committee of the Ministry of National Economy of the Republic of Kazakhstan became the basis of the study (http://stat.gov.kz). 1: 15,000,000 scale maps were used. ArcGIS was used to map the results obtained. The calculations presented in the work are performed in accordance with the methodologies and formulas described in [1].

MAIN PART

The state territory is the natural habitat of the population and the state's functioning. Within the boundaries of the State, it includes a portion of the surface, typical airspace, characteristic of the properties and resources created by natural and human activity overland and territorial waters, surface and water areas. As a special resource, the territory of the state may be the length (area), geographical features, certain types of natural landscapes, the level of economic development, etc. is described. Within the boundaries of the country, all the structures and systems of the country are geographically integrated,

which ensures the integrity of the territorial organization of society, the development of productive forces and cultural development. Space is one of the basic concepts of geopolitics. The spatial position of the country determines the potential or weakness of each state.

The famous Soviet economist Georgiev NN Baransky described this in Kazakhstan as follows: "All the centers here are in the periphery, and in the center there are non-human settlements" [2, p. 246]. Thus, the vulnerability of Kazakhstan within the region occupying ninth place in the world is hidden - all large territorial production facilities of the country are located on a narrow strip of perimeter of its borders.

In his review article, Russian geopolitician V. Tymbursky writes about the Kazakhstani space: "The general political and geographical value of the massive array of Semipalatinsk-Almaty-Aktobe, which has many strategic objects of Russia, rarely inhabited, will be found. The integration of uneven zones in the periphery of these triangles is impeded by the growing political space, and this space is attempting to consolidate this capital by moving the capital to Astana, located in the center of the northern line of the triangle, near the Russian border. "[3] The above two opinions are enough to emphasize the importance of a thorough study of the morphological, quantitative and qualitative characteristics of the territory of Kazakhstan.

At present, there are many typologies in the world. One of the leaders is the largest country with a territory of about 1 million km2 - 3 million km2. The country's territory is 2724,900 km2.

Territory of the state is not the only element of its morphological peculiarities. An important parameter is the configuration and shape of the country. Thus, compactness contributes to the greater integration of the territory, the equal accessibility of individual regions, the prolongation of communications, the creation of a border and checkpoints system. Territories that are fragile or geographically fragmented are more vulnerable and have not developed uniformly.

Results and discussion. Depending on the forms and forms of the state, several types of states are divided into: states with inaccurate or defective forms, compact states, fragmented states, enclaves.

Typology is also important for the population. According to this, at the beginning of 2018 there are 18,157,337 people (according to the RK Statistics Committee data) Kazakhstan is the category of middle-sized countries (10 million to 50 million people). The population density of 1 km2 is 6.6 gallons, which in turn affirms that the country is a rarely inhabited state.

In political geography, various quantitative parameters are used to describe the compactness and other morphological features of the state.

The compactness of the area can be determined using the Ik1 index, which compares the length of borders and the area of the state territory:

$$I_{k1} = \sqrt{\frac{S}{0{,}282L}},$$

Where S is the area of the territory, L is the length of the state border.

The length of Kazakhstan's borders is 13394 km on the land and 600 km in the Caspian Sea (source: the Committee on Statistics of the Republic of Kazakhstan). The total area of the country is 2724900 km2. Thus, Ik1 = 26.2. For France (including the coastline), it is 17.52 and the Spanish (with the coastline) is 16.12. Thus, the smaller the index, the smaller the country.

The compactness of the territory can also be expressed by the value of the State Border Index (Ik2) per 100 km2.

$$I_{k2} = \frac{L}{S}(100\ км^2)$$

According to this formula for Kazakhstan this index is 0.51. For France - 1,15, for Spain - 1,37, for Belarus - 1,39, for Luxembourg - 13,88, and for Australia - 0,33. The following patterns of legality are observed - the more index is bigger, the more compact territory is. However, the significant disadvantage of this method is the dependence of the index on the size of the area, relief, and rigidity.

Compactness of the area can be determined by comparing its shape with perfect figures (circle, square). For this purpose, the Haghete-Horton (Ik3) index can be used:

$$I_{k3} = \frac{1{,}27S}{L^2{}_{max}},$$

Here S is the longest line (the diameter of the outlined circle) passing through the area of the state territory (km2), the center of the measured area Lmax - km. Ik3 varies from 0 to 1, its value is equal to 064, for a triangle is 0.42, hexagonal is 0.83.

As noted above, the territory of Kazakhstan territory is 2724,900 km2, the longest line passing through the center is 3000 km [4]. Ik3 is 0.38 and is approximate to approximately the triangle, which in turn affirms the idea of the triangle [3].

The offered indexes allow to quantitatively evaluate the compactness of the state territory. Kazakhstan is one of the long-lasting and negative states of the world. The low-efficiency Kazakhstan territory is low, as the length of the borders is high, communications are low and the connection of separate regions is weak. And in this case, if the capital of the country is not in the center, it will be difficult to control the "gloomy political space". Therefore, the capital of the country should be moved closer to the center.

The geographical position of the capital, its place in the system of population settlement, political and economic functions determine the effectiveness of control and control of the whole state.

The functional level of the capital is determined on the basis of its place of residence in the urban population of the country. The numerical functionality of Astana can be determined by the proportionality index

$$(D_f=\frac{P1s}{P2}),$$

where P1s is the population of the capital, P2 is the largest city population after the capital. If Df <1.5, the capital of the capital in the states where the capital is not the largest city in the country is "advantageous" (irregularity); The functional rank of the main city is defined as 1.5 <Df <2.5, and Df> 2.5 - is recognized as the dominant. According to the method [1], Nur-Sultan belongs to the capital assigned to all the signs.

According to the Committee on Statistics of the Republic of Kazakhstan, by the beginning of 2018 the population of Nur-Sultan was equal to 1030577 people, and in Almaty - 1801993 people. Thus, the Nur-Sultan's proportionality index was 0.57, which indicates its "advantageous" position.

The perfect state of the capital is its location in the center of the country. The numerical value of its actual state can be determined by the eccentricity formula (Es):

$$E_s=\frac{CS}{R},$$

where CS is the arithmetic mean of the four diagonals ranging from central to state center (geodesic, geometric or demographic potential), R through the center of the state to 45 ° across the state border. If Es = 1, the condition of the capital is central, in the range 0 <Es <50 - center, 50 <Es <100, and if Es> 100 is peripheral.

There are several ways to determine the geographic location. In this study, the central parallel between the far north and south points and the central meridian intersection between the western and eastern points are recognized as a geographical center. The remote points of the Republic of Kazakhstan are: 55 ° 26 'in the north; in the south - 40 ° 56 'N; in the west - 45 ° 22 '. east - 87 ° 18 'in the east.

Baikonur village of Zhangeldinskiy rural district of Ulytau district of Karaganda region was defined as the center. Its coordinates are 47 ° 34 'Nm. and 66 ° 10 '. R is 29 cm or 4350 km. CS is 10.7 cm or 1605 km long. The scale of the reports was 1: 150000 maps. The city of Nur-Sultan, with a Es value of 0.36, has a central place.

CONCLUSION

The study has allowed to define the following situation: the relatively low state of the state territory of Kazakhstan is relatively low and the peripheral regions of the country are highly active, with no "preference", geographically located in the center, even though the situation of the capital city is relatively low. This, in turn, reflects the differentiation of the regions. The current situation is likely to cause a degree of vulnerability to emergence and resistance to geopolitical risks.

Given these factors, in the future, it is necessary to formulate the basis of the territory, develop growth poles and suggestions for the creation of a unified human settlements system for the effective development of the state.

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АНАЛИЗ МОРФОЛОГИЧЕСКИХ ОСОБЕННОСТЕЙ ГОСУДАРСТВЕННОЙ ОБЛАСТИ РЕСПУБЛИКИ КАЗАХСТАН

Аннотация. В современных условиях пространство и местоположение не только считаются второй категорией государственной политики и становятся важным фактором социально-экономического развития страны. Основной целью данной статьи является предоставление комплексного географического анализа морфологических особенностей территории государства Казахстан для обеспечения геополитической безопасности страны. Авторы рассчитывают индекс компактности территории государства страны и функционального уровня столицы, определяют географическую среду Республики Казахстан. Результаты анализа позволяют определить достоинства и недостатки морфологических особенностей территории государства с целью принятия комплексных мер по ее укреплению и развитию.

Ключевые слова: территория государства, морфология территории, размер территории, функциональный ранг столицы, географический центр государства.

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫ МЕМЛЕКЕТТІК АУМАҒЫНЫНЫҢ МОРФОЛОГИЯЛЫҚ ЕРЕКШЕЛІКТЕРІН ТАЛДАУ

Аннотация. Қазіргі жағдайда кеңістік пен орналасу мемлекеттік саясаттың екінші санаттағы категориясы ретінде ғана қарастырылмай, елдің әлеуметтік-экономикалық дамуындағы маңызды факторға айналады. Бұл мақаланың негізгі мақсаты - елдің геосаяси қауіпсіздігін қамтамасыз ету үшін Қазақстанның мемлекеттік аумағының морфологиялық ерекшеліктеріне жан-жақты географиялық талдау жүргізу. Авторлар елдің мемлекеттік аумағының ықшамдық индексін және елорданың функционалдық дәрежесін есептейді, Қазақстан Республикасының географиялық ортасын анықтайды. Талдау нәтижелері оны нығайту және дамыту бойынша кешенді шаралар қабылдау үшін мемлекет аумағының морфологиялық ерекшеліктерінің артықшылықтары мен кемшіліктерін анықтауға мүмкіндік береді.

Түйін сөздер: мемлекет аумағы, аумақтың морфологиясы, аумақтың ықшамдылығы, астананың функционалды рангі, мемлекеттің географиялық орталығы.

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USING OF FOREIGN EXPERIENCE OF IMPLEMENTATION MONETARY POLICY IN KAZAKHSTAN

Abstract. The paper is of particular interest to consider the features of the functioning of the banking system in Japan, the United States and the United Kingdom and their experience in implementing monetary policy. Economically leading countries, such as the United States, Japan and the United Kingdom, are less and less using direct directive regulation of the economy, preferring market methods, which gave a tremendous impetus to the development of financial infrastructure.

The paper presents a reasonable need to revise the methods for developing and implementing monetary policy in the country for four reasons. First, the lessons of the ongoing global financial crisis make it necessary to adjust the country's monetary policy. Secondly, the main trends in the development of the world economy require changes in the national economy, which require a review of the policies of central banks. Thirdly, chronic deviations from the targets of the money supply force us to take a closer look at how central banks should pursue monetary policy. Fourthly, the monetary policy pursued should be coupled with indicators of the implementation of the state's industrial and innovative policy, as the world experience in the development and implementation of monetary policy considered in the paper teaches.

Keywords: corporation, transition, priorities, monetary market, liberalization, mechanism,bureaucracy, nonfinancial sector, growth, lending capital, manufacture, interest rate, implement, refinance, self-financing, redistribution.

Introduction. Monetary regulation is a dynamic field of the economy's regulation by the state. Over the period of 1970s-1980s, the system of monetary regulation went through quality changes which enabled to solve a wider range of economic problems. It was exactly at that time that a structural approach was realized both in theory and in practice. Apart from traditional goals, it includes the issues of manufacture activities from the perspective of anti-cyclic regulation, as well as monetary goals of control over credit and the issues of medium-term and long-term investment**(**Kidwell, 2000**:**41-60**;**. Dolan,2015**;**Moiseev, 2015**)**.

The leading economies, such as the USA, Japan and Great Britain tend to be using directive regulation of economy to the lesser extent. They prefer market mechanisms, which resulted in a huge impetus to the development their financial infrastructures **(**Sbornikstatei, 1995:Ch.1**)**.

Market agents have also greatly contributed to this process. Due to the above, there were changed the mechanisms of functioning on the part of the monetary sphere and economy taken as a whole. At this point in time, the advanced economies' monetary System is in the process of fast transformation, which contributes to the emergence of new socio-economic relations within their own economies, as well as in developing and emerging (transitional) economies.

One of the requirements of an economy's stable development is forming a clear mechanism of monetary regulation. The country's monetary policy is a very democratic instrument for affecting an economy, which does not destroy the sovereignty of most business entities. Ideally, monetary policy

should ensure price stability, full employment and economic growth. Monetary policy leads to changing the indicators of major macroeconomic parameters. This happens due to the fact that my means of monetary methods, one can change money supply in the economy. The ultimate goal of the monetary policy is assistance to the economy in reaching the volume of production characterized by full employment, no inflation rate, and the economic growth.

Main part. The issues of monetary policy's efficiency are of primary importance in the period of capital markets' fast development and emerging numerous financial innovations. Wrong actions of the monetary authorities can result in most grave consequences, a vivid example of which is the crises of the 1990s not only in developing countries, but in advanced economies as well. In this context, the consequences of the ongoing world financial crisis, whose sources are rooted in the USA, can be treated as a certain lesson. America has become the world power exclusively due to the full set of the monetary regulation. In this context, the development of the optimal policy of monetary regulation is of special importance at this point in time. To be more specific, there is a growing interest in updating the central bank's policy in the United States in the light of changes on stock and mortgage markets that occurred at the beginning of the new century. The monetary policy of the United States has been considered in the proceedings of further authors, Dolan, Edwin J.; Campbell, Colin D. "Money, Banking and Monetary Policy" and Friedman, Milton "The Role of Monetary Policy". The application of rules in monetary policy is almost the only contribution of the new classical macroeconomics to the development of economic policy measures. The world experience of central banks was summarized and made in a publication of Moiseev, S. R. "Money-credit policy. Theory and practice". The theory of how money and capital markets around the globe work to fulfill the varied roles of facilitating savings and investment, making payments, supplying credit, accumulating wealth, supplying liquidity, protecting against risk, and supporting public policy have been proposed by Peter RoseS. "Money and Capital Markets The financial system in an Increasingly Global Economy". To consider the features of the banking system in the UK explains how these instruments differ from banknotes. The size, structure and backing arrangements of existing schemes mean that local currencies are unlikely to pose a risk to the Bank's monetary and financial stability objectives was taken in a literature of . Naqvi M., James Southgate J. "Banknotes, local currencies and central bank objectives" and Saville R. "Bank of Scotland: A History, 1695 - 1995". The methods of developing and implementing monetary policy in Japan have been proposed in the literature of Yano J. On the Process of Financial Liberalization of the Japanese Economy and Braginski S.V. "Monetary policy in Japan"

Methodology. The methodological basis of the article was the scientific works and publications of domestic and foreign scientists devoted to the study of the features of the functioning of the banking system in Japan, the USA and the UK and their experience in implementing monetary policy. In the work on the article, general scientific methods of systematization and classification of data, analysis and synthesis, methods of logical, comparative, and system analysis were used. When performing the work, the data of statistical and research information of the economic survey of Japan, the USA, and the UK were used. The article presents a comparative analysis of methods for developing and implementing monetary policy in Kazakhstan.

The obtained results (conclusions). World economy has generated vast experience of performance by monetary and financial institutions, which enables to assess its role in the general monetary regulation of the economy, as well as maintain the market liquidity and efficient making payments and savings flow into investments. In conditions of our country's transition to market economy, it is quite interesting to get acquainted with foreign experience of solving a number of problems in the field of financial and economic stabilization, in particular, on the basis of the most developed countries of the world, such as Japan, the USA and Great Britain.

Turning to the experience of the Japanese economists in the field of monetary regulation, it is necessary to point out the following. Manufacturing corporations in Japan used to have weak financial possibilities in the first after-war decades; therefore, the banking system played a crucial role in forming the conditions for fast growth of industry in the 1950s-1960s **(**Dolan,2015; Sbornikstatei, 1995:Ch.1; Rose,1994; Lavrushin, 2015:Ch.18**)**.

The main feature of Japan's banking system's performance over almost the whole after war period has been a high degree of control on the part of the government. Based on such instrument as CB

subsidized loans to the private financial sector, the state bureaucracy in fact regulated both interest rates and directions of lending, which enabled to relatively successfully implement state priorities **(**Statistical Overview, EPA, 1993:1-17 andEPA, 2008:2-13;Yano, 2000:2-23**)**.

At the same time, in the focus of such regulation's mechanisms there were two factors: an extremely high demand for money on the part of nonfinancial sector and constant excess of the loans amount over the cash amount on bank deposits. In the subsequent period, a gradual growth of the role of self-financing, and, respectively, a lesser dependence of industrial corporation on bank lending, eventually undermined the possibilities of CB administrative management and became one of the reasons for Over the recent decade, the main feature of Japan's modern market of borrowed capital was an artificial structure and tight regulation of interest rates. However, liberalization of interest rates over the recent decade was conditioned not so much by the ideas of effectiveness in mind, but rather by the necessity of placing a huge amount of state bonds on the market combined with the pressure from outside, and long-term loan's rates still do not look like market ones.

What concerns the CB instruments of monetary policy, such classical means as manipulating refinance rate and reserve requirements, as well as open market operations with securities in Japan over several post-war decades had little effect, unlike direct quantity rationing of loans in conditions of artificially undervalued level of interest rate.

The situation has somewhat changed lately: the weakening of tension on the market of lending capital, its internationalization, as well as appearance of alternative in the form of the growing stock market have greatly diminished an objective economic basis of administrative regulation and forced Japan to revise its attitude towards traditional, classical instruments. There has increased flexibility of interest rates, and refinance rate grew to the market level. In 1971, the Bank of Japan started operations on bill (promissory notes) market, and later it started dealing with state bonds operations by means of open bond subscription. Eventually, there was formed a market of the government short-term capital, and in addition, mass operations on other markets began. All this testifies to the radical change of the regulation model in the credit-financial sphere, with a focus on indirect methods of regulation mediated by banks' liquid positions being a direct subject of credit expansion (Braginski, 2004: 112-188).

The core of the approach to this policy was the idea of selective support, a kind of "artificial selection of enterprises". It was the government that initiated the reforms. Here it actively used a double effect of understatement of interest rates.

On the one hand, administrative fixing interest rates on an extremely low level (from 1962 to 1977) artificially exceeded the rate of capital accumulation by means of redistributing the resources in favor of the banking sector. On the other hand, regulation of loan rates and the shortage of lending capital created in this way enabled CB and the government to direct it to major corporations of heavy industry and exporting sectors in a command way.

The main point of the pursued policy is that neither the Bank of Japan, nor the government found it possible to put aside the solution of the problem of redistribution of funds and, accordingly, the available rare resources to the spontaneous market process. One of the reasons for the country's fast economic recovery in the 1950s – 1970s was exactly the ability of the state authorities to avoid excessive dependence on short-run interest in initial accumulation and make use of all the available power of public enforcement for observing the "rules of the game".

One could find similar features in the mechanism of control over money supply on the part of the Bank of Japan. Without relying on indirect control, the Bank used to intervene (for a short period of time) in the processes on the market of bank lending. The Bank ofJapan directly controlled the formation of the main part of money supply. The attempts to impact the investment demand by means of money supply regulators have a limited effect in case they are applied to prevent the decline bailout.

Lowering interest rate or liberalization of lending resources supply per se cannot be an incentive for production investments. The basis of high investment demand in Japan was the confidence of business in the economy's future, which determined a high capital return rate. That is why the understated interest policy on the market of lending resources and loan rationing were aimed primarily at distribution of funds from population and small business in favor of major corporations able to perform efficient investment.

One of the most serious difficulties that the U.S. economy has encountered at this stage is inflation. This problem was especially acute in the 1970s. For instance, the annual inflation rate over the decade

trebled from 4% to 13% (Friedman, 1993:17- 72, 1963, 1959). The reason for such situation in the United States was the loss of confidence in the way the U.S. economy was managed.

The position of the U.S. dollar on overseas foreign exchange markets weakened, whereas the interest rates for borrowing them on the lending resources market significantly grew. Scholars and researchers concluded that there was a necessity to establish control over monetary aggregates, meaning that velocity of money circulation expressed by the ratio of nominal volume of production to the value of population's demand for money resources is a quite stable and predictable indicator (Keynes, 1999:110-117).

$$V=Y/M \quad (1)$$

V – Velocity of money supply circulation;
Y – Nominal volume of production;
M – Amount of money supply in circulation.

Based on the above formula (1), it was proposed to combat inflation. If the velocity is stable, the desired volume of production can be reached by setting a value of money supply in circulation.

It should be noted that in practice this process is more complicated, as the choice of the monetary variable influences the level of interest rates, which, in its turn, affects "the degree of attraction for keeping money resources on accounts", i.e. velocity of money circulation. The value of nominal income can be expressed in the following way (Mishkin, 1989; Simpson, 1992: 27-34).

$$Y=P*y \quad (2)$$

Y – Growth of nominal income;
P – Rate of inflation;
y – Rate of real production growth.

It was admitted that the current rate of real production growth will approach the potential growth rate of volumes, as well as resources involved in economic activity and their productivity. Monetary policy will not be able affect a long-term trend of production volume growth, otherwise this impact will be negative because monetary system will destabilized, and there will be barriers on the way of capital investment in economy.

With the above conditions in place, the change of nominal income growth rate will mean similar changes of inflation rate. It follows from here that eliminating inflation and restoring control in the field of price formation requires slowing down money supply growth.

The U.S. monetary policy is based on the above concept. On the basis of this policy, the U.S. Congress passed a bill which obliges the Federal Reserve System (FRS) to establish the limits of growth for money supply and loans growth. In addition, there was passed the "Act on full employment and balanced growth". In this Act, there were denoted the goals of monetary policy: maintaining a high employment rate and price stability To accomplish this, FRS was instructed to fix and announce the value of money supply and lending resources for the next year, which should affect an expected performance of the economy and inflation rate.

While admitting that it is not always possible to maintain a desirable ratio between money supply growth and the rate of economic development, the U.S. legislation does not oblige FRS to fully observe the parameters of money supply that are declared by it. However, in case discrepancy takes place, FRS should explain its reasons. The values of money supply and credit issuance are announced every year in February, and they are later adjusted in the report submitted to the Congress in June.

This report also contains preliminary estimates of the denoted values for the next year.

This policy pursues three main goals: first, restriction of price rise; second, informing the public community about the future FRS strategy so that legal entities and physical persons could adjust their economic behavior to the intentions of the central bank; and third, the enhancement of Central Bank's [FRS] accountability for the actions taken and accomplishing the goal set (fig. 1).

Figure 1 - **Main goals of policy of FRS**(estimated by the authors, based on the [12, 16])

The Bank of England is formally independent of the government, although it is operating under the supervision of HM (Her Majesty's) (Denejnaya, 2009;Moore, 1990).

The Bank of England's role is very complicated. It supervises and regulates monetary spheres. This function and those related to it involve the Bank in the orbit of the national economic policy, where, apart from profound knowledge, skillful political maneuvering is required. The implications behind all the Bank's decisions are complex and oftentimes controversial:

- Interests of domestic monetary policy are in conflict with the objectives of stabilization of the pound sterling.
- Financing budget deficit by issuing new loans undermines the government's anti-inflationary attempts.
- Control over the volume of loans is in contradiction with stimulating competition among banks, and so on(Naqvi, 2008:17-23;Saville, 1996). Nevertheless, in the UK, monetary methods of regulating the economy are still among the major instruments of state monopolistic intervention, and the CB role in them is especially significant due to the fact that there are practically no credit institutions in the country which are state-owned. The first goal of the central bank is maintaining the values of the national currency. Monetary policy is to contribute to the stabilization of the real value of the monetary unit of measurement. In Great Britain, monetary policy is performed by means of regulating an interest rate.

Reaching price stability in the UK currently has got two directions (fig. 2).

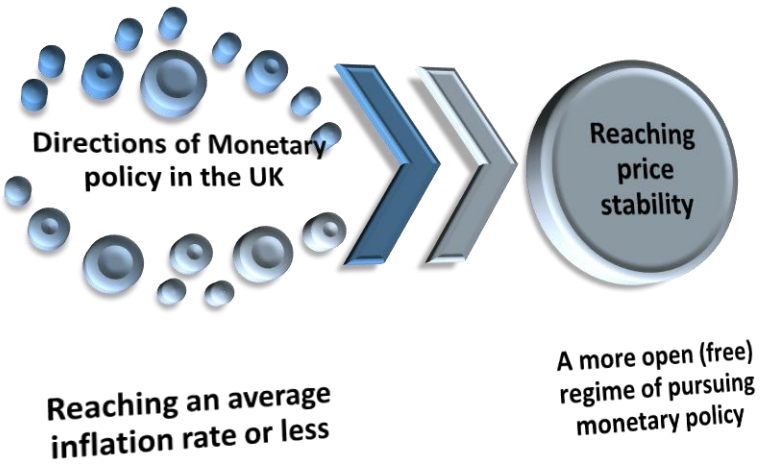

Figure 2 - **Directions of Monetary policy in the UK**(estimated by the authors, based on the [17, 19]**)**

Pursuing monetary policy, which in the first place means fixing the level of interest rates providing the achievement of the inflation target, is imposed on the Bank of England and the Treasury (The Bank of England, unlike the other banks, cannot act independently of the government). The Act on the Bank of England passed in 1946 empowers the Treasury with the right to issue instructions to the Bank of England. Even though in reality the Treasury never used this right, the relationships between them assume that the final decision on interest rates is taken by the Chancellor of Exchequer. Nevertheless, the Bank of England plays a very important role in taking decisions. While preparing the Report on inflation and interest rates, the Bank of England takes into account internal and external economic and monetary factors which will deal with inflation during the following two years. The Bank's Council on interest rates contains information about the changes that impact industry and trade in various regions of the country that is represented by the agents of Bank of England. After a decision on methods of monetary policy has been passed, Bank of England starts acting by means of using the mechanisms described below. Performing its role on internal money markets, Bank of England influences interest rates in the short-term period. Being the bank of the government and the bank of the banks, the Bank of England is able to quite precisely forecast the nature of payment flow from the accounts of the government to those of commercial banks, and vice versa, as well as to act with regard to the situation. When the flow of payments from banks' accounts to the accounts of the government exceeds the reverse flow, there emerges a situation in which the bank's liquid assets inventories are decreasing, and there is lack of funds on money market. Otherwise, there is excess of cash; however, a more typical situation is the deficit eliminated by Bank of England which fixes such interest rate that funds are guaranteed for every day.

The Bank of England uses discount houses as intermediaries to avoid working with each bank individually. These are specialized dealers with a stock of trade promissory notes in which major banks place excessive cash. Discount houses make use of borrowing services by the Bank of English which can provide cash, having purchase securities of discount houses or having granted loans to them. The rates at which these operations are performed impact interest rates for the economy as a whole. When the Bank of England changes this rate, commercial banks as a rule immediately change their base rate used for determining deposit rate and lending rate of interest.

Interest rates influence domestic monetary conditions, such as the terms of lending, consumers demand, investment, the output of products, and prices. They can also affect the price of the pound sterling against other foreign currency. With other equal terms in place, the higher interest rates are, the higher foreign resources are attracted to the pound sterling, and thus, they impact its exchange rate against other currencies. Short-term interest rates and foreign exchange intervention are the principal instruments of monetary policy in Great Britain. In the past, other instruments were applied as well. For example, in the early 1980s, the Bank of England sold more public debt than it was necessary to meet the needs of the government in order to reduce money supply in circulation. This policy was abolished in 1985. The other instruments included the introduction of special "ceilings of bank lending" (abolished in 1971); requirements to banks to keep their reserves in the Bank of England in accordance with the degree of how fast their deposits were growing (abolished in 1980); publication of the guidance on bank lending aimed at reducing the amount of loans issued to clients. One of the major instruments of monetary policy is reserve policy based on changing the requirements of CB to obligatory (minimal) reserves of commercial banks and other credit institutions.

All the main instruments of monetary control are aimed, in the first place, at regulating the balances with reserve accounts of credit institutions in CB or the terms of adding funds to those accounts. At this point in time, minimal reserves have got a double purpose(Financial Conduct Authority, June 2013:113):

- They should provide a constant level of commercial banks' liquidity;
- They serve as a CB instrument for regulating money supply, and commercial banks' solvency and creditworthiness.

The regulation by CN of the reserve requirements in question directly impacts the amount of commercial banks' working assets, hence, their monetary potential. Parallel to increasing reserve requirements, commercial banks' working assets are decreasing, and vice versa. In fact, reserve requirements are part of cash (money) reserves which commercial banks must always keep in the form cash, deposits in CB, or securities as security of their obligations on attracted deposits and received loans and credits.

The basis of the banks' cash is their clients' deposits. In banking practices, the share of bank reserves that must be kept on CB special accounts by law, got the name of "reserve requirements". Since their proportion is the greatest, they have the leading position in the system of obligatory reserves. Normally, the minimal balance of commercial banks' deposits to CB – reserve requirements – is determined by the national banking legislation in percentage to the respective items of assets or liabilities of the credit institutions. Reserve requirements can vary with regard to the period of activity, amount of banks' assets and liabilities, types and amount of the deposits attracted by them (demand, notice, saving, special, and other deposits) both in the local currency and foreign exchange, as well as depending on the depositor's nationality (resident, non-resident), banks' region of operation, and other terms.

The Bank of England's Department of Registration keeps a register of "first-class" securities holders. This is the main method of data processing activity. Every year, as many as a million or so securities accounts and half a million transfers are taken into account. In addition, the Bank of England has got a Central Gilts Office (CGO), which processes automated payments of the "first-class" securities holders. This is a very important instrument of the "first-class" securities market at present. The issues of monetary policy's efficiency are of primary importance in the period of

Capital markets' fast development and emerging numerous financial innovations.

Wrong actions of the monetary authorities can result in most grave consequences, a vivid example of which is the crises of the 1990s not only in developing countries, but in advanced economies as well. In this context, the consequences of the ongoing world financial crisis, whose sources are rooted in the USA, can be treated as a certain lesson. America has become the world power exclusively due to the full set of the monetary regulation. In this context, the development of the optimal policy of monetary regulation is of special importance at this point in time. To be more specific, there is a growing interest in updating the central bank's policy in the United States in the light of changes on stock and mortgage markets that occurred at the beginning of the new century.

In Europe, central banks' economists are involved in searching for similar structures of transmission mechanism of the Euro zone countries for pursuing single monetary policy. In Europe, monetary problems are a priority in the theory and practice of the market economy management.

In Japan, attempts are made to target different economic variables for the purpose of escaping stagnation that is place there for over a decade now.

Conclusion.The revision of methods of developing and implementing monetary policy in Kazakhstan is relevant at least for four reasons. First, the lessons of the ongoing world financial crisis determine the necessity to adjust the country's monetary policy. Second, the main trends of the world economy's development require changes in the national economy; hence the revision of the National bank of Kazakhstan policies is needed. Third, permanent deviations from benchmarks of money supply targets indicate inadequate macroeconomic policies, especially by monetary authorities.

Fourth, the monetary policy of the National bank of Kazakhstan pursued should be coupled with the indicators of the state's industrial-innovative policy being implemented.

In Kazakhstan consigning to oblivion the reproduction role of money in economy and the idealization of the exchange concept have resulted in the detachment of the monetary sphere from the real sector of economy (Kaliyeva, 2009:10-14).

As a matter of fact, the modern world is now witnessing a great growth of the financial sector's importance, which resulted in the fact that a country's economic situation is assessed not so much on the basis of the main goods and services manufacture as was the case in the 19th – 20th centuries, but rather with regard to the financial indicators, i.e. budget, balance of payments, exchange rate, and public debt.

As the Japanese experience shows, it is necessary to overcoming the current orientation of monetary authorities at the financial market and ensuring its interconnection with the state of the economy's real sector. Unlike market forces, the state has got a well acknowledged and exclusive right of compulsion, i.e. the right to restrict the freedom of choosing economic entities, which is necessary to exercise in order to reduce the gap between financial and industrial capitals. And we should use the idea of selective support, a kind of "artificial selection of enterprises" with a double effect of understatement of interest rates, as it was in Japan.

For expeditious and effective regulation of means in the money market it is necessary to make use of the English experience of account of the houses

Based on the American experience, it should be as the main objectives of the monetary policy of the National Bank of Kazakhstan to determine the following:

- Restriction of price rise. In order to significantly reduce inflation, pricing control should be restored;
- Informing the public community about the future National Bank of Kazakhstan strategy so that legal entities and physical persons could adjust their economic behavior to the intentions of the central bank;
- The enhancement of the National Bank of Kazakhstan accountability for the actions taken and accomplishing the goal set.

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ҚАЗАҚСТАННЫҢ АҚША-НЕСИЕ САЯСАТТЫҢ ЖҮЗЕГЕ АСЫРУДАШЕТЕЛДІК ТӘЖІРИБЕСІ

Аннотация. Мақалада Жапония, АҚШ және Ұлыбританиядағы банк жүйесінің жұмыс істеу ерекшеліктерін және ақша-несие саясатын жүзеге асыру тәжірибесін қарастыру ерекше қызығушылық тудырады. АҚШ, Жапония және Ұлыбритания секілді экономикасы жағынан дамыған елдерде қаржы инфрақұрылымын дамытуға айтарлықтай серпін беретін нарықтық әдістерді ұнататын, экономиканың тікелей директивалық реттелуін қолдануға болады.

Мақалада елде ақша-несие саясатын әзірлеу мен жүзеге асырудың төрт әдісі қарастырылған. Біріншіден, жалғасып келе жатқан жаһандық қаржы дағдарысының сабақтары елдегі ақша-кредит саясатын түзетуді қажет етеді. Екіншіден, әлемдік экономиканы дамытудың негізгі үрдістері орталық банктердің саясатын қайта қарауды талап ететін ұлттық экономиканың өзгеруін талап етеді. Үшіншіден, ақша массасының нысаналы көрсеткіштерінен созылмалы ауытқулар бізді орталық банктердің ақша-несие саясатын қалай жүзеге асыруға болатынын қарастыруға мәжбүр етеді. Төртіншіден, ақша-кредит саясатын мемлекеттік индустриялық-инновациялық саясатты іске асыру көрсеткіштерімен байланыстыруға болады, себебі мақалада қарастырылған ақша-кредит саясатының дамуы мен жүзеге асырылуындағы әлемдік тәжірибе.

Түйін сөздер:корпорация, өтпелі кезең, басымдықтар, ақша нарығы, ырықтандыру, тетік, бюрократия, қаржылық емес сектор, өсім, кредиттік капитал, өндіріс, пайыздық мөлшерлеме, іске асыру, қайта қаржыландыру, өзін-өзі қаржыландыру, қайта бөлу.

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ИСПОЛЬЗОВАНИЕ ЗАРУБЕЖНОГО ОПЫТА РЕАЛИЗАЦИИ ДЕНЕЖНО-КРЕДИТНОЙ ПОЛИТИКИ В КАЗАХСТАНЕ

Аннотация. В статье особый интерес представляет рассмотрение особенностей функционирования банковской системы в Японии, США и Великобритании и их опыт реализации денежно-кредитной политики. Ведущие в экономическом плане страны, такие как США, Япония и Великобритания, все в меньшей мере используют прямое директивное регулирование экономики, предпочитая рыночные методы, что дало колоссальный толчок для развития финансовой инфраструктуры.

Представлена обоснованная необходимость пересмотра методов разработки и реализации денежно-кредитной политики в стране по четырем причинам. Во-первых, уроки продолжающегося иметь место мирового финансового кризиса обуславливают необходимость корректировки монетарной политики страны. Во – вторых, основные тенденции развития мировой экономики требуют изменений в национальном хозяйстве, которые требуют пересмотра политики центральных банков. В – третьих, хронические отклонения от целевых ориентиров денежного предложения заставляют более пристально взглянуть на то,

как центральные банки должны проводить денежно-кредитную политику. В - четвертых, проводимая денежно-кредитная политика должна быть сопряжена с показателями реализации индустриально-инновационной политики государства, чему учит рассматриваемый в статье мировой опыт разработки и реализации монетарной политики.

Ключевые слова:корпорация, переход, приоритеты, денежный рынок, либерализация, механизм, бюрократия, нефинансовый сектор, рост, ссудный капитал, производство, процентная ставка, реализация, рефинансирование, самофинансирование, перераспределение.

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FINANCIAL SUSTAINABILITY OF ECONOMIC ENTITIES OF KAZAKHSTAN LIGHT INDUSTRY

Abstract: The article analyzes the development of light industry in the market of the Republic of Kazakhstan, by identifying regional features of the development of this industry and comparing their competitive characteristics. The novelty of the research lies in the adaptation of well-known theoretical tools to the peculiarities of the situation under study, as well as in the application of relatively new tools and methods for analyzing the development of light industry enterprises. The relevance of the study lies in the fact that given the significant role of light industry in ensuring economic and strategic security, employment of the working population and raising its standard of living in new geopolitical conditions, it is necessary to pay special attention to the development of this industry and provide it with substantial investment support, as is done by leading world countries.

The study presents some indicators of light industry, characterizing its position in the Kazakhstan market, the level of development of the textile industry, as one of the developed light industry subsector, and directions for the further development of light industry. In the course of the study, techniques and methods of summary, grouping, ranking, coefficients, comparisons, and time series were used.

Keywords: light industry, clothing market, import, export, financial stability, factors and tools, criteria for the level of competitiveness, textile industry.

Introduction - The relevance of the research topic is that at the present stage the change in technological structures has a serious impact on the economic processes occurring in such an economy as light industry. In the conditions of digitalization and innovation economy, substantial amendments to approaches related to the development of technologies are necessary. The need for modernization in the Republic of Kazakhstan is due to the following reasons hindering the development of domestic industry, including indicators of the financial sustainability of economic entities of light industry:

- the use of equipment and technologies that do not meet modern standards, and an outdated range of products. High depreciation of fixed assets, which is more than 70%, where the renovation process is extremely slow and is less than 5%.
- reduction of investment in fixed assets;
- low innovative activity of enterprises due to loans, lack of working capital and funds for technology upgrades.

Low profitability is confirmed by the statistics of return on assets by industry. Large-scale programs of state support for the development of innovative potential do not lead to the necessary economic effect.

According to Mozgolkova, EV, light industry is the most important multi-sector and innovative-attractive sector of the economy, ensuring the strengthening of the defense, economic, social and intellectual security of the country [1].

Light industry is traditionally known as a labor-intensive industry. However, in recent years, the trend is such that it is becoming more and more knowledge-intensive [2]. In this regard, strengthening the competitive position in the industry requires investment in scientific research and their implementation in the production process.

Modern scientific developments are aimed at introducing information technologies into the production process, innovative methods of dyeing and final processing of fabrics, the use of digital color matching methods, the automation of the product design process, the use of "artificial intelligence" in production [3]. Increasing the science-intensiveness of light industry is a necessary measure to withstand the powerful competitive pressure from Asian producers [4].

Methodology – Today, Kazakhstan is at the stage of stable economic growth, a promising goal of which is the further integration of Kazakhstan into the world economic space. Textile and light industry is one of the main sectors of the economy that form the budget in many countries of the world [5]. The raw material base of the cotton and textile industry in Kazakhstan is cotton.

The cotton obtained in Kazakhstan is a medium-fiber type of cotton fiber. The main volume of cotton fiber produced - more than 80% - is export-oriented. The rest is used by such textile enterprises as Alliance Kazakh Russian Textile LLP, Melange JSC, Uteks JSC, NimexTextile LLP. The textile industry of Kazakhstan is represented mainly by enterprises built during the period of the Soviet Union. In the South Kazakhstan region there are several new enterprises that have invested in the modernization of existing and construction of new textile facilities:

- Alliance Kazakh Russian Textile LLP is a joint venture which includes the Kazakh cotton company Myrzakent and the Russian Textile Corporation of Russia, the largest industrial textile holding in Russia. Design capacity - at the level of 15 million square meters. m fabric per year.

- JSC Yuteks is a cotton fiber processing plant, the planned capacity is about 6 thousand tons of cotton yarn per year, which is sold to Russia, Ukraine and the local market.

- JSC "Melange" - an integrated factory producing cotton yarn using local raw materials. The production capacity of the enterprise is on average 5 thousand tons of yarn per year. The company also produces home textiles. Products are sold in Kazakhstan, Russia, Turkey.

- Nimex Textile LLP is a textile factory processing 12 thousand tons of cotton fiber per year. Products - cotton yarn and fabrics.

Over the past two decades, the world has witnessed the transfer of global manufacturing centers of light industry from Europe and the United States to countries that later embarked on the path of industrial development. Currently, 70% of global exports of clothing and textiles account for the countries of Southeast Asia, Turkey, and Latin America. It is necessary to note the unprecedented strengthening of the role of China, which provides more than 30% of total world exports [6].

Today, the share of the textile and clothing industry in the total gross output of the country is 0.4%. For example, in Russia this indicator is 1%, in developed countries such as Germany, France and the USA, the share of textile and light industry in industrial output is 4%, in Italy it is 12%. This allows them to form 20% of the budget and ensure that 75-85% of the domestic market is filled with their own products. In Turkey and China, the share of textiles in GDP reaches 30% (Figure 1) [7].

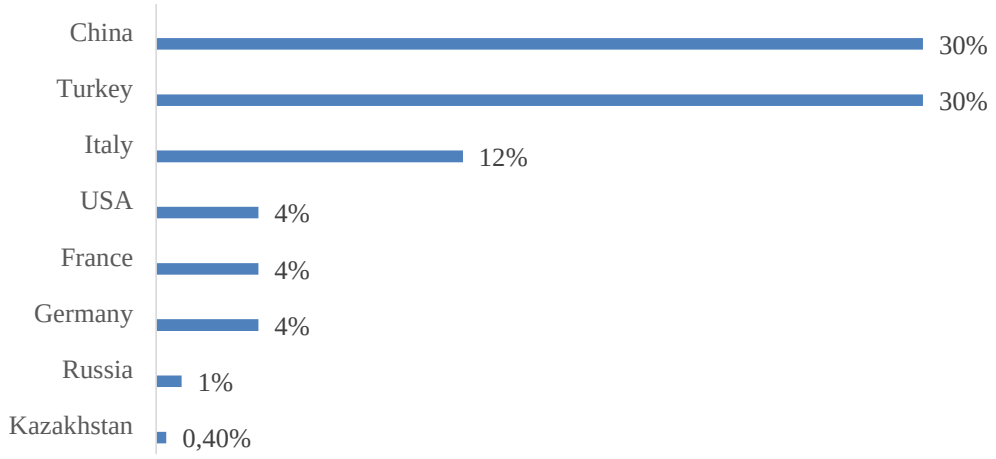

Figure 1 - The share of textile and clothing industry in the total gross output of countries, in %

Note - Compiled by the author

The textile and clothing industry of Kazakhstan covers only 10% of the domestic market demand. At the same time, in order to shape the country's economic security, the volume of domestic production must at least satisfy 30% of domestic demand [8].

In the structure of products of light industry in Kazakhstan, 51% is accounted for by the production of textiles, 38% by clothing and 11% by leather and related products (Figure 2) [9].

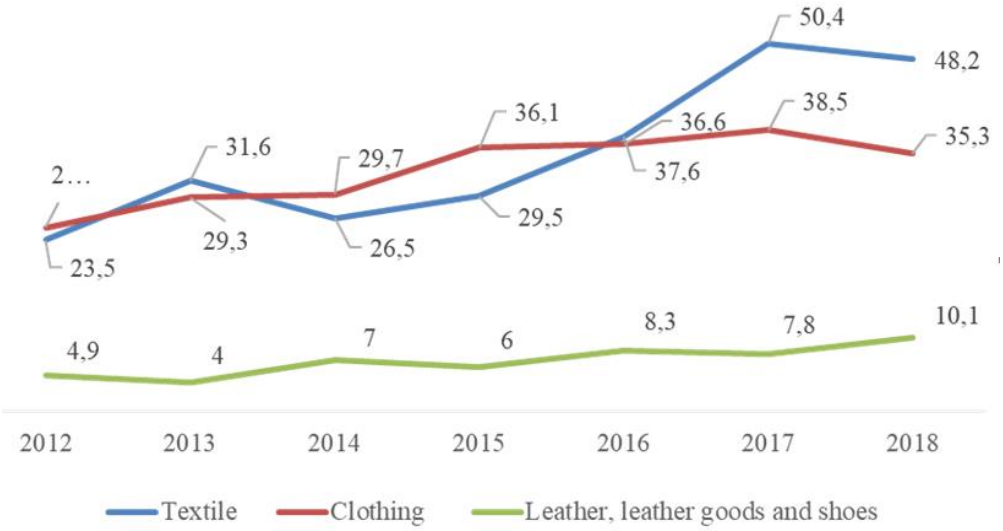

Figure 2 - Dynamics of production volumes of light industry of the Republic of Kazakhstan for the period from 2012-2018, in billion tenge

Note - Based on the source: www.kidi.gov.kz

Based on the data of Figure 2, it can be seen that the textile industry is more dominant in the structure of light industry.

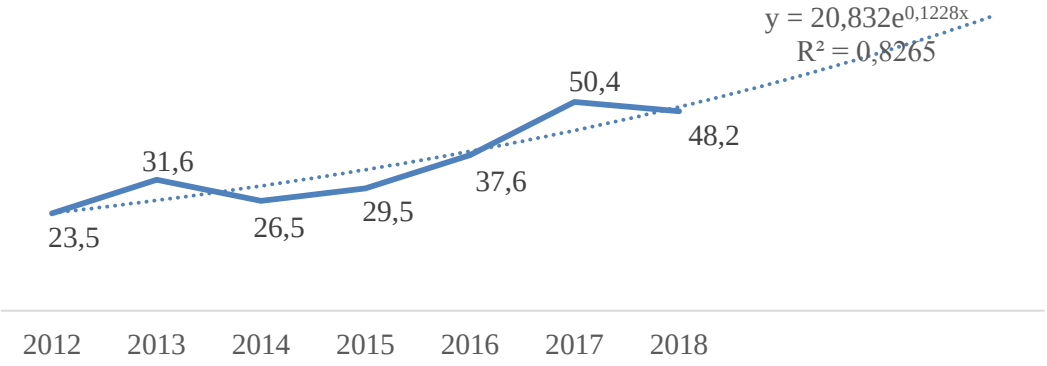

Figure 3 - The forecast values of the development of the textile industry of the Republic of Kazakhstan for 2019-2021 based on the trend model

Note - Compiled by the author

During the research it turned out that most of the production (58%) is concentrated in the southern region. The considered indicators of the development of light industry, both in general and in the regional aspect in the Republic of Kazakhstan, determine the relevance of identifying and researching the factors affecting the financial condition of light industry enterprises, and hence their financial sustainability.

Based on the analysis of regional development of light industry, it was revealed that the main concentration of the industry is observed in three regions of the Republic of Kazakhstan - this is the city of Shymkent, Almaty region and the city of Almaty. Based on this, we presented data for 2018 on the sectoral specialization of these regions (Figure 4) [10].

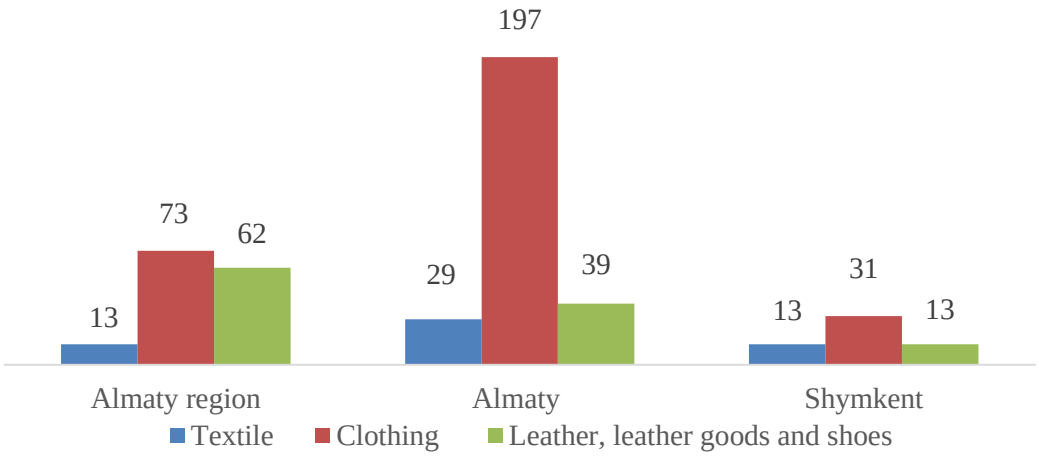

Figure 4 - Sectoral specialization of the southern regions of the Republic of Kazakhstan for 2018

Note - Compiled on the basis of the source: National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" for 2018

In 2018, in the regional context, the main producers of light industry were the following enterprises:

1) South Kazakhstan region - 35%, where you can select the main enterprises of the region: Melanzh JSC, Utex JSC, AzalaTextile LLP, Zhanatalap-MT LLP, Khlopkoprom-Cellulose LLP, Bal Tekstil LLP ;

2) Almaty - 14% with the main enterprises - Kazlegprom-Almaty LLP, KazSPO-N LLP, Kazakhstan Texti-Line PKF - Mimioriki;

3) Almaty region - 12% - Mediateks-N LLP, Glasman LLP, Universal LLP.

Investments in fixed assets in the sphere of light industry at the beginning of 2019 amounted to 913.7 million tenge, almost 13 times more than a year earlier. It should be noted that the growth was secured by the inflow of investments into the production of textiles (from 7.5 million tenge in January of last year 2018 to 902.9 million tenge in January of the current 2019). In 2018, the volume of investments amounted to 72 million tenge. Immediately by 95.2% less than in the same period of 2017.

Table 1 – SWOT – analysis of the development of light industry in Kazakhstan

Strenghs	Weaknesses
The proximity of potential cotton producers - Uzbekistan, Tajikistan, Turkmenistan.	The industry is represented by enterprises built during the Soviet era, as a result of the low level of their technical equipment.
Kazakhstan is in the center of capacious sales markets of the CIS countries and Eastern Europe.	The industry's problems are also low labor productivity.
The compact arrangement of the raw material and processing factories is on the territory of the South Kazakhstan region.	Backward from the world of analog technology.
	High level of concentration and closeness
	State encouragement of innovation (introduction of new technologies, pilot and serial production of new products) in the light industry
Opportunities	Threats
Located in a single market with Russia and Kyrgyzstan in the EAEU, where there are no customs borders and restrictions	Economic and political environment
There is every opportunity to expand markets and export products	Combating counterfeit and contraband products
There is a competitive advantage, as it borders on China	
The use of subsidies, leasing schemes, investment funds, the development of public-private partnership in light industry	
Note – compiled by authors	

Results of a research - In their scientific journals, Shevchenko B.I. singled out the methodological basis for the formation of the policy of light industry enterprises. Analysis of the management system of

light industry enterprises revealed significant shortcomings of the current management structure, which does not fully correspond to the strategic priorities of the industry development, both in the CIS countries and in the Republic of Kazakhstan [11]. On the basis of which, we identified the following disadvantages and advantages, which were considered in the SWOT-analysis of the development of light industry in Kazakhstan (Table 1).

Entering the world market is difficult to achieve without the release of high-quality, original and competitive products. In his publications Ergasheva M.R. argues that before it is necessary to identify factors that influence the development of light industry:

1) internal factors:

- the level and potential of the organization of management in the enterprise;
- perfect technology and equipment;
- the level of professional training of employees in the enterprise;
- financial capabilities of the enterprise;
- the possibility of cooperation with other enterprises and international integration;
- marketing opportunities (opportunities to meet the needs of the market and implement the 4P policy (Product, Place, Prize, Promotion);
- The level of scientific research of the enterprise.

2) external factors:

- institutional policy;
- the market;
- supporting areas;
- infrastructure;
- the level of classification of labor resources [12].

Of course, the development of light industry, and consequently, the formation of the entire structure is influenced by many obstacles (Figure 5).

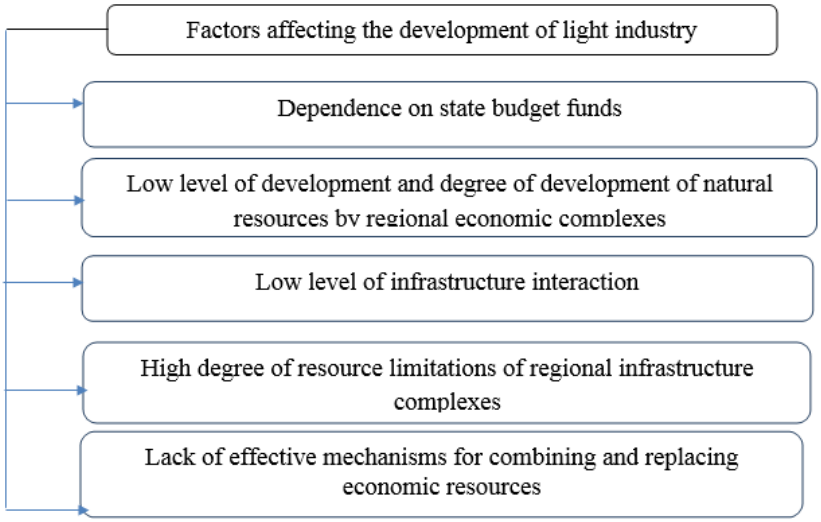

Figure 5 - Factors hindering the development of light industry in Kazakhstan

Note - Compiled by authors

Factors of development of light industry allow us to apply a cluster model of development of the industry, where the cluster approach allows you to mobilize all economic factors in a certain direction. Today, the development of clusters is a widely recognized tool that accompanies economic development and improved competitiveness in developed countries.

Researchers note: "... cluster policy has gained great importance in the clothing and textile industry over the past decade" [13]. The use of the cluster model in the development of the textile industry in Kazakhstan is an important factor in the competitiveness of individual companies and the entire economy. For the domestic light industry, clustering is the only way to ensure competitiveness, since the use of

effective industry support mechanisms such as tax and customs tariff regulation in terms of membership in the WTO is excluded.

Kazakhstan's light industry has a great potential for the successful development of the industry, given the lower cost indicators in production, proximity to raw materials and potential sales markets for the products produced, an attractive investment climate, and a developed transport infrastructure [14]. Kazakhstan has a good scale of market opportunities, both for the development of the textile industry and for a single sector of the cotton and textile industry in the region.

For the systematic implementation of the creation and further development of the cotton-textile cluster in the southern region of Kazakhstan, measures have already been taken at the state level, in particular:

1) Law of the Republic of Kazakhstan on the development of the cotton industry was adopted;

2) Modern laboratories are created for quilting the quality of cotton fiber;

3) A cotton research institute was opened;

4) Work is underway to organize transport and logistics centers;

5) The State JSC Cotton Contract Corporation has commissioned a new cotton cleaning plant;

6) A leasing company of BRK-Leasing JSC was established;

7) By a decree of the President of the Republic of Kazakhstan, the Special Economic Zone “Ontustik” was created, the purpose of which is to create favorable conditions for the processing of cotton fiber produced in Kazakhstan to finished products with high added value [15].

Textile companies in the SEZ are granted significant tax and customs preferences. It is planned to build about 15 textile enterprises on the territory of Ontustik, which will process 100 thousand tons of cotton fiber per year. The main types of production in the SEZ are the production of denim, terry, knitwear, workwear and harsh fabrics, home textiles. The successful development of the SEZ is promoted by such factors as:

- preferential economic conditions;
- access to raw materials, markets, human resources, infrastructure;
- low cost;
- stable investment climate.

The implementation of the “Ontustik” idea assumes an increase in the share of the textile industry in the gross domestic product of the country, the creation of high-tech industries that ensure the competitiveness of domestic products in price and quality, the creation of conditions for attracting investment in the industry and lending to enterprises by second-tier banks, improving the competitiveness of the national economy, which will promote its integration into the global economy.

But for the development of light industry, taking into account the factors considered, it is necessary to strengthen its competitive positions, where necessary:

- track the technological strategy of competitors,
- analyze not only the functional characteristics of products from the point of view of manufacturing technology, but also take into account the requirements of potential buyers.

For example, the textile industry in developed countries is moving to integrated mechanization and automation, which, in turn, increases its capital intensity. With this approach, the resource structure of the industry undergoes a change: high-performance textile equipment replaces skilled workers. The vector of development of the textile industry is shifting from specialization in processed raw materials towards the development of high-tech industries - knitted and carpet production, the use of nonwoven materials (film materials, glass, metallic fibers, paper, etc.) as raw materials; production on the basis of chemical fiber, which is especially important in view of multiplying cooperative ties within the framework of the macro-technology [16].

As noted Trofimov O.V., Efimychev Yu.I. and Shipilov A.G., traditional fundamental technologies that have found widespread use, are currently at the end of their life cycle, as they use standard, well-known to all products with such qualitative characteristics that allow consumers to be perceived, but do not provide a high level of competitiveness [17].

Conducting research and development work for such equipment is impractical due to a slight improvement in the output, therefore it is necessary to invest in the development of new advanced technologies that may be key for the industry.

Financial investments in innovations are not the same in scale and riskiness at different stages of the economic cycle:

- at the stage of recovery and stable economic development, preference is given to improving innovations that require small investments and are less risky;
- at the stage of crisis, preferable innovations that do not require significant investments and substantial state support. Pseudo-innovations are also developing, which are understood as attempts to improve outdated technology, which, in turn, demonstrating a small effect today, in the long run increases the lead over industrialized countries.

Kashitsyna T.N., N.N. Rustamov speaking about the prospects for the development of light industry, Rustamov noted that ensuring the effective implementation of the processes of introducing and commercializing technologies requires targeted and systematic actions from both the state authorities (legislative and executive) and the private sector [18].

Thus, the prospects of Kazakhstan are largely dependent on the degree of its successful integration into the world economy. At the same time, the country faces the task of not integrating into the world economy at any price, but taking a place in it that is adequate to its economic potential. To solve this problem, first of all you need:

- direct financial assistance, including the provision of concessional loans, loans, earmarked grants;
- state encouragement of innovation (introduction of new technologies, pilot and serial production of new products);
- export orientation and promotion of development of foreign economic activity, which includes assistance in insurance, organizing and participating in international exhibitions, providing market information;
- information support of SMEs, including the provision of comprehensive information, the promotion of science in the field of creating new technologies and materials, methods of their use and specific recipients of receipt;
- zero rates on loans for the purchase of equipment;
- organization of work with well-known foreign firms under tolling schemes;
- subsidizing the purchase of raw materials and auxiliary materials for light industry enterprises;
- enterprises exporters return the VAT on export of products in accordance with the Tax Code of the Republic of Kazakhstan [19].

Conclusions - “The focus on the manufacturing sector with high labor productivity is unchanged, it is necessary to develop and test new tools aimed at modernizing our enterprises with a focus on the export of products,” said the Nation Leader N. A. Nazarbayev to the people of Kazakhstan dated January 10, 2017. "New development opportunities in the conditions of the Fourth Industrial Revolution" [20].

For significant changes in the light industry, it is necessary to form an innovative structure that will contribute to the growth of efficiency and effectiveness of business entities. The foundation of such a structure will create conditions for the introduction of advanced technologies and innovative developments into the light industry, actively interacting with business and the market, thus ensuring the most innovative development of the country and improving the financial sustainability of business entities.

The tasks of creating an effective industry system are complex and require the consolidation of state and regional resources, combined with the need to attract significant private financial investments in this sector of the economy [21].

The policy for the development of light industry should be aimed at diversifying and improving the competitiveness of products of light industry with the enhancement of its social efficiency in the framework of the Comprehensive Plan for the Development of Light Industry of the Republic of Kazakhstan. Therefore, at the moment, it is necessary to carry out active work to promote goods in the domestic market and jointly promote the products of the light industry of the Eurasian Economic Union (hereinafter - EurasEC) to the markets of third countries.

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ҚАЗАҚСТАННЫҢ ЖЕҢІЛ ӨНЕРКӘСІБІ ШАРУАШЫЛЫҚ СУБЪЕКТІЛЕРІНІҢ ҚАРЖЫЛЫҚ ТҰРАҚТЫЛЫҒЫН ҚАМТАМАСЫЗ ЕТУ

Аннотация. Мақалада Қазақстан Республикасының нарығындағы жеңіл өнеркәсіптің дамуына осы саланы дамытудың өңірлік ерекшеліктерін анықтау және олардың бәсекелестік сипаттамаларын салыстыру жолымен талдау жүргізілді. Зерттеудің жаңалығы белгілі теориялық құралдардың зерттелетін жағдайдың ерекшеліктеріне бейімделуі, сондай-ақ жеңіл өнеркәсіп кәсіпорындарының дамуын талдаудың жаңа құралдары мен әдістерін қолдану болып табылады. Зерттеудің өзектілігі экономикалық және стратегиялық қауіпсіздікті, еңбекке қабілетті халықтың жұмыспен қамтылуын және жаңа геосаяси жағдайларда оның өмір сүру деңгейін арттыруды қамтамасыз етудегі жеңіл өнеркәсіптің елеулі рөлін ескере отырып, осы саланың дамуына ерекше көңіл бөлу және әлемдік жетекші елдер сияқты оған елеулі инвестициялық қолдау көрсету қажет.

Зерттеуде жеңіл өнеркәсіптің қазақстандық нарықтағы жағдайын сипаттайтын кейбір көрсеткіштері ұсынылған, жеңіл өнеркәсіптің дамыған салаларының бірі ретінде Тоқыма өнеркәсібінің даму деңгейі анықталды және жеңіл өнеркәсіпті одан әрі дамыту үшін бағыттар ұсынылды. Зерттеу барысында жинақтаудың, топтаудың, ранжирлеудің, коэффициенттердің, салыстырудың, динамика қатарының тәсілдері мен әдістері қолданылды.

Түйін сөздер: жеңіл өнеркәсіп, киім нарығы, импорт, экспорт, қаржылық тұрақтылық, факторлар мен құралдар, бәсекеге қабілеттілік деңгейінің критерийлері, тоқыма өнеркәсібі.

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ФИНАНСОВАЯ УСТОЙЧИВОСТЬ ХОЗЯЙСТВУЮЩИХ СУБЪЕКТОВ ЛЕГКОЙ ПРОМЫШЛЕННОСТИ КАЗАХСТАНА

Аннотация. В статье проведен анализ развития легкой промышленности на рынке Республики Казахстан путем выявления региональных особенностей развития данной отрасли и сопоставления их конкурентных характеристик. Новизна исследования заключается в адаптации известных теоретических инструментов к особенностям исследуемой ситуации, а также в применении относительно новых инструментов и методов анализа развития предприятий легкой промышленности. Актуальность исследования заключается в том, что учитывая значительную роль легкой промышленности в обеспечении экономической и стратегической безопасности, занятости трудоспособного населения и повышении его жизненного уровня в новых геополитических условиях, необходимо уделять особое внимание развитию этой отрасли и оказывать ей существенную инвестиционную поддержку, как это делают ведущие мировые страны.

В исследовании представлены некоторые показатели легкой промышленности, характеризующие ее положение на казахстанском рынке, определен уровень развития текстильной промышленности, как одной из развитой подотрасли легкой промышленности и предложены направления для дальнейшего развития легкой промышленности. В ходе исследования использовались приемы и методы сводки, группировки, ранжирования, коэффициентов, сравнения, рядов динамики.

Ключевые слова: легкая промышленность, рынок одежды, импорт, экспорт, финансовая устойчивость, факторы и инструменты, критерии уровня конкурентоспособности, текстильная промышленность.

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DEVELOPMENT OF INNOVATIVE ENTREPRENEURSHIP IN KAZAKHSTAN: TRENDS AND PROSPECTS

Abstract. According to the authors, the success of many innovative projects, the growth of innovative products depends on measures to extend the life cycle of the innovative product - "newly introduced or undergoing significant technological changes". Analysis of economic development in Kazakhstan shows that innovation in the country plays a large role. At the same time, it should be noted that innovation activity in the republic is not yet a source of increasing the country's competitiveness in the world market. Despite the positive experience of a number of initiatives, a significant breakthrough in the field of innovative development of the country's economy did not occur.

Keywords: innovation, entrepreneurship, competitiveness, innovations, products.

INTRODUCTION

Innovative entrepreneurship is a special innovative process of creating something new, the process of managing, which is based on the constant search for new opportunities, focus on innovation. It is associated with the willingness of the entrepreneur to take all the risk of implementing a new project or improving an existing one, as well as the resulting financial, moral and social responsibility.

In general terms, innovative entrepreneurship can be defined as a social technical economic process leading to the creation of the best in its properties goods (products, services) and technologies through the practical use of innovations [1, p. 56].

Entrepreneurship is one of the most active forms of economic activity. The behavior of people, as you know, is exacerbated when they risk something (property, decline in popularity, money, position, etc.). Entrepreneurs do not always know whether they will sell all their goods and services and how profitable. They take risks: after all, the same goods and services come to the market from other manufacturers. This is precisely what creates the conditions for the emergence of such activity, which is expressed in the eternal search for improvement of one's situation in comparison with the existing one, and always forces one to do something in order to prosper and develop.

MAIN PART

The most significant changes, one might say radical, occur on the basis of "new knowledge". Innovations based on new knowledge (discoveries), as a rule, are difficult to manage. This is due to a number of circumstances. First of all, as a rule, there is a big gap between the emergence of new knowledge and its technological use, and secondly, it takes a long time before a new technology materializes in a new product, process or service.

In this regard, innovations based on new knowledge require:

1. A thorough analysis of all necessary factors.

2. A clear understanding of the goal pursued, ie A clear strategic orientation is needed.

3. Entrepreneurial management organizations, since financial and managerial flexibility and market focus are needed here.

From the experience of foreign countries, an innovative agrarian economy is formed when agro-industrial production is based mainly on the basis of innovative activity, which is impossible without new technologies for the formation of a single financial and information space.

Table 1 - State of innovation activity in the Republic of Kazakhstan

	Number of enterprises total, units			Deviation, %	of which are innovative			Deviation, %
	2015	2016	2017		2015	2016	2017	
The Republic of Kazakhstan	31784	31077	30854	0,97	2585	2879	2974	1,15
Akmola	1325	1301	1299	0,98	90	91	98	1,09
Aktobe	1236	1234	1149	0,93	86	115	116	1,35
Almaty	1643	1648	1797	1,09	114	129	146	1,28
Atyrau	1276	1193	1145	0,90	102	101	92	0,90
West Kazakhstan	857	917	932	1,09	35	33	49	1,40
Zhambylskaya	852	834	846	0,99	90	90	96	1,07
Karaganda	2340	2235	2309	0,99	216	238	257	1,19
Kostanay	1502	1438	1475	0,98	218	161	167	0,77
Kyzylorda	846	812	784	0,93	99	91	89	0,90
Mangystau	1027	1060	1131	1,10	41	43	40	0,98
Pavlodar	1354	1286	1292	0,95	65	83	112	1,72
North Kazakhstan	1047	1049	1023	0,98	111	119	115	1,04
Turkestan	884	905	939	1,06	52	60	50	0,96
East Kazakhstan	2091	1985	2010	0,96	240	296	303	1,26
Astana	4103	4003	4039	0,98	541	543	582	1,08
Almaty city	7970	7716	7124	0,89	377	590	550	1,46
Shymkent	1431	1461	1560	1,09	108	96	112	1,04

The number of enterprises in Kazakhstan has a tendency to decline by 3%, however, the number of entrepreneurs introducing innovations is steadily growing by 15%. At the same time, the highest growth of innovative enterprises is observed in Almaty by 46%, in Aktyubinsk by 35% and by 28% in Almaty oblasts.

An innovation based on new knowledge must “mature” and be accepted by society. Only in this case will it bring success. But there are innovations that are sometimes based not on new knowledge, but on ideas. This type of innovation quantitatively and in its consequences covers all other types of innovation. It can be considered the eighth in addition to the above classification. An example of this is the appearance of zippers such as ball pens, spray cans, aerosol cans, ring openers on cans of beer or soft drinks, and much more. Entrepreneurs should always focus on using witty ideas.

But with their use there is a high degree of risk.

In general, speaking of changes based on new and brilliant ideas, it should be emphasized that a number of principles should be guided by their implementation. These include the following:

• All innovations should be focused;

• they should all begin with an analysis of opportunities, and first of all, the sources of innovative opportunities are analyzed;

• Establishing market susceptibility of ongoing innovations.

• Innovations should be simple and directional. They should be aimed at solving only one problem. Simplicity and accessibility are the key to success.

• Following these principles in their practice, an entrepreneur can achieve good results in their work.

But in this case the question arises: how do relatively stable forms of economic activity differ from entrepreneurship in their content (this, as a rule, refers to the organization of work of enterprises that have large production and material assets), which in market conditions also tend to profit as economic basis of their development? This difference lies in the fact that their activities (forms and methods) are based on long-term goals for the development of the enterprise, and the goals include not only making a profit, but also increasing or maintaining a market share for marketing their goods or providing services, creating new types of products and services, radical improvement in the quality of products, constant updating of the assortment, etc.

The need to take into account the long-term development goals of the enterprise is determined by the fact that their implementation is R&D, production time, cooperation, etc. - requires a long time. In addition, it is necessary to increase the efficiency of using expensive equipment, which is possible only on a long-term basis. But this, of course, does not mean that the usual form of economic activity does not include certain elements of entrepreneurial activity. On the contrary, such features of entrepreneurship as mobility and dynamism, the desire to sensitively capture market conditions, etc., are always considered in terms of the implementation of current tactical actions aimed at the successful implementation of strategic goals, taking into account the changing environmental conditions in which enterprises operate.

At the same time, the entrepreneur in his actions proceeds from a long-term forecast and, perhaps, even from the establishment of long-term goals (in this case, as a rule, a profit is taken as a long-term goal) of his development, but this is not decisive for his results activities. He proceeds from the need to obtain a result within a short period, for him it acquires paramount importance, given that he has at his disposal small financial and material resources, accelerated financial assets turnover. This feature of entrepreneurship involves the establishment of appropriate technology for its management.

The Austrian and American economist, political scientist, sociologist and historian of economic thought J. Schumpeter was one of the first to present a comprehensive interpretation of the non-economic motives of entrepreneurship and identified three main groups of such motives:

• the desire to have “his empire” - to be a sovereign master in his own enterprise, which the entrepreneur himself designs and builds, and which, if successful, fully meets his needs, needs, values;

• the will to win - the opportunity, within the framework of one's own “business”, to prove one's own viability, to show courage, intelligence, stamina in the fight against competitors and other environmental factors, to realize oneself as a person;

• the joy of creativity - the ability to do what you love, which is fully consistent with individual interests and attitudes, the ability to see specific results of your own efforts. At the same time, the key factors in motivating an entrepreneur are not factors of the result of activity (income received, social recognition, status, etc.), but factors of the process of entrepreneurial activity (search for a new one, opportunities for the manifestation of personal qualities, struggle and overcoming obstacles to success and etc.) [2, p. 5].

In the message of the President of the Republic of Kazakhstan N.A. Nazarbayev’s people of Kazakhstan “The Strategy of Kazakhstan becoming one of the 50” of the most competitive countries in the world, the second priority says: “To maintain sustainable and dynamic growth of the country's economy, the state is obliged to stimulate demand for high-quality goods and services using fiscal, monetary and credit instruments policy, state regulation of the effective redistribution of the main factors of production".

The main prerequisites for the implementation of the Strategy, look, are:

firstly, ensuring an enabling institutional environment;

secondly, the identification and formation of the innovative potential of business entities.

Currently, the state creates all the necessary conditions. So, special structures have been formed, such as the Kazakhstan Investment Fund, the Export Insurance Corporation and the innovation fund.

Institutional instruments have been introduced that stimulate investment in manufacturing and agriculture.

It is obvious that the sectoral structure of the economy of Kazakhstan, with the dominance of extractive and primary processing sectors, inhibits the development of innovation. It should also be noted that the sectors prevailing in the Kazakhstani economy are characterized by a rather long life cycle of the technologies used, a relatively stable assortment of manufactured products and low rates of its renewal. Therefore, they belong to small medium-tech industries. In high-tech industries, there is an increased tendency to innovate, and the wider the knowledge-intensive industries are represented in the economy, the more developed is innovative activity in it.

There is an incorrect perception by Kazakhstani entrepreneurs of the innovation process itself and its life cycle. The Kazakhstani entrepreneurs see the innovation process not as a means of increasing financial efficiency and competitiveness in any financial and economic state of the country's economy, but as a tribute to fashion that can be financed only if the enterprise is financially stable and has a stable pace of development. Kazakhstani entrepreneurs do not take into account that most of the largest companies in the United States and European Union countries have reached their level thanks not to traditional business activities, but as a result of organizing effective innovation management.

The large share of innovation activity in foreign countries is due to the fact that the competitiveness of innovation-active enterprises is significantly higher than usual. And over time, innovatively inactive enterprises were simply squeezed out of the market. Even in the conditions of the development of integration processes in the territory of the post-Soviet space, Kazakhstani enterprises can be replaced by Russian ones, since the innovative activity of Russian enterprises is almost twice as high as Kazakhstani ones.

Among the innovative products of industrial enterprises, the largest share in innovative products was occupied by products newly introduced or undergoing significant technological changes - 81.2%, products that underwent improvement amounted to 6.2%, and other innovative products - 12.6%. This fact is a positive trend, for example, more than 80% of new or significantly changed technologies are in the manufacturing industry [4, p. 125].

Another important problem is the low level of investment in research and development (R&D). In the absence of demand for technological innovation, the likely success of most technology transfer programs will remain low. In this regard, government policy is very important (targeted programs through government orders or government tasks), aimed at encouraging companies to invest in innovations either through their own laboratories or through orders to scientific organizations. In addition, further improvement of the science management system is necessary in order to concentrate financial resources, human and scientific and technical potential in priority areas of science, and first of all - to meet the needs of the effective development of the real sector of the country's economy, especially in those sectors where Kazakhstan already has competitive results. It should be noted here that the pace of financial investments in R&D should be compatible with the pace of development of human resources that can effectively use investments. It is also necessary to create conditions for the transfer and commercialization of the results of scientific developments and their introduction into economic circulation.

A two-level system of technology parks is being formed in the republic - national science and technology parks and regional technology parks. National technology parks are focused on the creation of new industries in Kazakhstan, which should help ensure the future competitiveness of the Kazakhstani economy.

A distinctive feature of national technology parks is the existence of a special economic zone regime with preferential taxation.

National science and technology parks include, for example, the Information Technology Park

(Alatau), the National Industrial Petrochemical Technopark (Atyrau), the Tokamak Nuclear Technology Technopark (Kurchatov), the space monitoring technology park (Almaty, Astana and Priozersk)

Regional technology parks, including the Almaty Technological Park (Almaty), the Algorithm technology park (Uralsk), and the Business City technology park (Karaganda), are created with the goal of identifying, revealing and developing innovative potential, the region's innovative ability, and meeting the needs of the region's economy in innovative products. At the regional level, the backbone components of technology parks are industrial enterprises of the regions, scientific and academic organizations. Regional technology parks provide a phased increase in the technological level of the economy and create conditions for small and medium high-tech and high-tech businesses.

The further development of technology parks in Kazakhstan is designed to solve the problems of strengthening the links between science and production, the introduction of modern technologies, increasing labor productivity in industry and a general increase in the level of scientific and innovative activity in Kazakhstan.

The review shows that the success of many innovative projects, the growth of innovative products depends on measures to extend the life cycle of the innovative product - "newly introduced or undergoing significant technological changes".

One of the problems of innovative development in Kazakhstan today is the incompleteness of scientific research, their separation from production. In modern conditions, a significant impetus to innovative processes can be given by the development of integration, cooperation at the national and international levels.

CONCLUSION

One of the effective mechanisms of state support of the innovative way of economic development and technological re-equipment of industries based on the use of the latest scientific and technical developments and high technologies could be interstate innovation programs within the EAEU. To implement them, as a rule, the means of the state budget of the EAEU countries and extra budgetary sources are attracted both to finance research and development, and to develop them in industrial production. In general, a balanced combination of interstate innovation programs, national targeted innovation programs, technological development programs, as well as individual innovation projects, will create conditions for saturating the Commonwealth markets with competitive products, and will open up access to world markets, and the country's domestic needs will be satisfied.

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РАЗВИТИЕ ИННОВАЦИОННОГО ПРЕДПРИНИМАТЕЛЬСТВА В КАЗАХСТАНЕ: ТЕНДЕНЦИИ И ПЕРСПЕКТИВЫ

Аннотация. По мнению авторов, успешность многих инновационных проектов, рост выпуска инновационной продукции зависит от мероприятий по продлению жизненного цикла инновационного продукта – «вновь внедренная или подвергавшаяся значительным технологическим изменениям». Анализ экономического развития в Казахстане показывает, что инновационной деятельности в стране отводится большая роль. Вместе с тем необходимо отметить, что инновационная деятельность в республике пока не является источником повышения конкурентоспособности страны на мировом рынке. Несмотря на положительный опыт целого ряда инициатив, заметного прорыва в области инновационного развития экономики страны не произошло.

Ключевые слова: инновации, предпринимательство, конкурентоспособность, нововведения, продукция.

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ҚАЗАҚСТАНДАҒЫ ИННОВАЦИЯЛЫҚ КӘСІПКЕРЛІКТІ ДАМЫТУ: СТАНДАРТТАР ЖӘНЕ ПРОЦЕПТЕР

Аннотация. Авторлардың пікірінше, көптеген инновациялық жобалардың жетістігі, инновациялық өнімнің өсуі инновациялық өнімнің өмірлік циклін ұзарту шараларына байланысты - «жаңадан енгізілген немесе маңызды технологиялық өзгерістерге ұшыраған». Қазақстандағы экономикалық дамуды талдау елдегі инновация үлкен рөл атқаратынын көрсетеді. Сонымен бірге, республикадағы инновациялық белсенділік әлемдік нарықтағы елдің бәсекеге қабілеттілігін арттырудың көзі болып табылмайтындығын атап өткен жөн. Бірқатар бастамалардың оң тәжірибесіне қарамастан, ел экономикасының инновациялық дамуы саласында айтарлықтай серпіліс болған жоқ.

Түйін сөздер: инновация, кәсіпкерлік, бәсекеге қабілеттілік, инновациялар, өнімдер

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PROBLEMS OF FORMATION AND DISCLOSURE OF INFORMATION ON SEGMENTS IN THE FINANCIAL STATEMENTS OF ORGANIZATIONS (IFRS 8)

Abstract. The relevance of the study lies in the fact that due to a fundamental revision of the rules of segment reporting in the direction of their adaptation to changing economic conditions and user requirements, it became necessary to analyze the effectiveness of these new rules, identify difficulties in their application in practice and ways to improve them.

Despite research in the field of segment reporting, there is currently no method for generating information necessary for preparing segment reporting, which allows companies that are not the flagships of the economy and do not have developed management accounting to effectively solve the problem of providing information on operating segment reporting. In this regard, the article discusses the problems of formation and disclosure of information in the financial statements of organizations, since financial and economic data together with the system of external and internal business conditions of an organization allow analyzing the contribution of each type of activity to the overall result of a company and substantively assessing the functioning of each segment.

Keywords: segment reporting, segment, diversification of activities, risk, international financial reporting standards, financial reporting.

Introduction - Modern challenges and threats of the global economy in the conditions of digitalization actualize the solution to the problem of maintaining the financial stability of companies in the Republic of Kazakhstan and ensuring a stable flow of investments into the economy of the country. Growing competition in the context of WTO accession and deepening economic and financial relations, expanding the scope of activities in the framework of horizontal and vertical cooperation, on the one hand, and on the other, the need to offer fundamentally new types of products (services) to meet the needs of the population require changes in management strategies organizations.

Diversification of the activities of many companies actualizes the detailed planning and control over the management of the organization of the effectiveness of new sales points and the results of sales of products (services), has a direct impact on the formulation and management of management accounting in organizations, justifies the need to bring together financial and management accounting. In this connection, accounting becomes not an end in itself, but a means of achieving the goals of the organization's development. One of the current areas of improving financial accounting is reporting on the segments of activity and presentation to the management and management of the organization for production management and making effective economic decisions [1].

One of the current areas for improving financial accounting is reporting on business segments and presenting it for decision-making in the field of production management and making effective economic decisions.

Describing the problems of formation and disclosure of information on the segments of financial statements of organizations, it should be noted that FRS 8 "Operating Segments" is an international financial reporting standard that discloses information about operating segments in annual and interim financial reporting, is effective from January 1, 2009 and regulates disclosure of information about operating segments in the annual and interim financial statements [2].

The firm should allocate information about each individual operating segment in IFRS 8, which, within its organizational structure, was determined at the level of the company's management. Through this approach to disclosing information about segments, users of financial statements have the opportunity to consider the business in detail. Financial and economic information in conjunction with the system of external and internal business conditions of the organization allow you to analyze the contribution of each activity to the overall result of the company and to objectively evaluate the functioning of each segment.

Literature review - In the foreign economic literature there are various factors that influence the choice and detailing of the reporting segments of economic activity, and in this regard, are analyzed and monitored by the management and managers of the organization, as well as other stakeholders.

So, D. Herrmann and W. Thomas (Herrmann D., Thomas W.) in their study indicate that the need for information to be disclosed by company management is often evaluated in terms of two criteria:

- quantitative, i.e. required amount of information disclosed;
- quality, i.e. usefulness of information for users of reporting.

Among the main factors that may affect the disclosure policy, these authors include: the residency of the company, the economic sector, the size of the company and the listing conditions of the stock exchange [3].

In addition to these factors, N. B. Nichols and D.L. Street (N.B. Nichols and D.L. Street) also highlight the “level of investor protection” guaranteed by national legislation [4].

So, Stanford Harris M. (Stanford Harris M.) classifies the main economic factors that may affect the decision to disclose one or another part of the enterprise as an independent segment as follows:

- “competitive environment” of the operating segment;
- motivation due to the planned benefit of disclosure;
- company size.

R.M. Hayes and R. Lundem (Hayes R.M., Lundholm R.) is devoted to analyzing the degree of detail of the information disclosed by segments. According to the authors, “... the meaning of disclosing information on specific segments exists only if they (segments) are characterized by consistently high economic characteristics ...” [5].

According to Yu.V. Lesnova, in practice the management of the organization combines the most "profitable" segments of activity with other segments that show a decrease in profits in order to increase their competitiveness [6].

Some studies by authors such as Alfonsoa E., Holliea D., Yu S.C., as a factor that may influence the decision of the organization’s management to form and disclose information, highlight the size and ownership structure of the company. This is due to the fact that large companies, as a rule, allocate funds for the development of methodological support of accounting and reporting, which leads to a higher level of financial reporting [7].

Foreign authors Glaum M., Schmidt P., Street D., Vogel S. in their scientific publications they consider that the choice of activity segments directly depends on the ownership structure of the enterprise. Thus, in order to reduce administrative and management costs, companies with a more developed organizational structure have a stronger motivation to ensure a high level of transparency of financial reporting [8].

In their publications, Cooke T. on the impact of the size of the stock market and industry-type listing on information disclosure in the annual reports of Japanese listed corporations, notes that the level of information disclosure is directly related to the company's activities in foreign markets. The most detailed information on business segments is provided by companies conducting business in several geographic regions, as well as participating in trading on several stock exchanges [9].

In their studies, Lan Y., Wang L., Zhang X. on the peculiarities of voluntary disclosure of financial statement information indicate that return on equity is one of the factors affecting the level of disclosure of information [10].

There are a number of foreign studies that analyze the impact of IFRS 8 on the performance of an organization. In some countries (USA, Australia, UK) the law provides for more detailed disclosure of information in the financial statements of organizations than in others - for example, in Germany and France [11].

Thus, having considered the views of foreign scientists in the field of studying the formation and disclosure of information on segments in the financial statements of organizations, the author of the article made certain conclusions that users of financial information in the face of Kazakhstani entrepreneurs, managers, shareholders, investors, business partners and government bodies are interested in information, including an assessment of the effectiveness of business entities and allows analytically substantiate ways to improve its efficiency. Such information is not always available solely on the basis of data from the financial statements; therefore, recent changes in IFRS regarding the disclosure of information on operating segments are aimed at increasing the transparency of not only accounting (financial), but also management reporting. But at the moment in Kazakhstan, substantial revision and adaptation of foreign techniques to the modern domestic Kazakhstani system of financial and managerial accounting and presentation of financial statements of domestic economic entities is necessary, taking into account national peculiarities of financial accounting at enterprises.

Methodology–In accordance with the Law of the Republic of Kazakhstan dated February 28, 2007 No. 234-III "On Accounting and Financial Reporting", the purpose of accounting and financial reporting is to provide interested persons with complete and reliable information about the financial position, performance results and changes in the financial position of individual entrepreneurs and organizations [12]. This information is needed by users of financial statements when making economic decisions. Economic decisions made by users require an assessment of the company's ability to create (generate) cash and cash equivalents, as well as the timeliness and stability of their creation.

Information on the performance of companies, in particular on its profitability, is required for:

- assessing potential changes in economic resources that it is likely to monitor in the future;
- forecasting its ability to create cash flows from the existing resource base;
- formation of judgments about the efficiency with which the company could use additional resources.

In this regard, information on the variability of the company's performance, that is, the disclosure of information on segments in the financial statements of organizations, according to IFRS 8, is of great importance.

The basis of IAS 8 is that a firm consists of various components of its business activities. Thus, in the understanding of IFRS 8, operating segments are components of a business that are capable of bringing economic benefits and directly affecting the overall results. These segments include any division of a company that carries out income-generating activities or the distribution of expenses within its function, the results of which are analyzed and taken into account by management when making management plans and decisions. That is, according to "IFRS Operating Segments", it is rational to refer only important areas of the firm's activities to this grouping, on which the firm's business depends to some extent.

IFRS 8 applies to separate financial statements of a company whose debt or equity instruments are traded on the open securities market, or which is preparing to issue any categories of instruments to the open market; applies to the consolidated financial statements of a group whose parent company is required to apply this standard in preparing its separate financial statements. Companies for which the application of standards is not mandatory, but which voluntarily provide information on segments, cannot characterize this information as "segment information" if it has not been fully prepared in accordance with IFRS 8 [13].

Segment reporting is compiled to help users of financial reports [14]:

- understand the performance of the company in past periods,
- assess the risks and profits of the company,
- make more informed decisions regarding the company as a whole.

Segment reporting allows for the analysis of income and expenses, financial results, cash flow, profitability of the organization in the context of business and geographical segments.

Presentation of information on financial reporting segments in accordance with international financial reporting standards is a pressing issue for many companies. A company must disclose information that would allow users of financial statements to evaluate the nature and financial impact of the types of commercial activities that it carries out, as well as the economic conditions in which it operates, disclosing the following information for each period for which a profit and loss statement is presented [15]:

- general information about the segments (description of products and services that generate income for each reporting segment);

- data on segment profit or loss, segment assets and liabilities and the basis for their evaluation;
- reconciliation of data on reporting segments with the data of financial statements for the company as a whole.

The economic literature presents a variety of reporting procedures for business segments, developed on the basis of the previously existing IAS 14 Segment Reporting and Accounting Regulations.

The principles of building segment reporting began to be discussed in the early 1960s, with the advent of corporations, which, in order to optimize the risks and profitability of an organization, began to develop activities in various geographical areas and branches of the economy, to produce various types of products, ie diversify your business. Segmented reporting has allowed us to better assess the profitability and riskiness of such a business.

When diversifying the activities of diversified corporations, segment reports began to help in determining the profitability of a particular type of production and to identify growth opportunities and risk factors in various segments that are part of the overall business.

Results of a research - By detailing the financial statements by segment, the company discloses information regarding the various types of goods and services it produces and the various geographic areas in which the company operates in order to help users of financial statements:

- better understand the performance of the company in previous periods;
- more accurately assess the risks and profits of the company;
- make more informed decisions regarding the company as a whole and its individual divisions [16].

In this regard, there are factors that are taken into account by companies in the allocation of business and geographical segments, which are shown in Table 1.

Table 1 - Factors taken into account by companies in the allocation of business and geographical segments

Segment	№	Factors
Housewifely	1	The nature of the goods or services (agricultural, industrial, etc.)
	2	The nature of the production processes (type of technology used), that is, the type or class of the customer consuming these goods (services), which may be individuals, corporate clients)
	3	Methods used to distribute goods or provide services (direct sales, Internet sales, etc.)
	4	The nature of the regulatory environment - banking, insurance, utilities
Geographic	1	The similarity of political and economic conditions
	2	Special risks associated with operations in a given geographic region
	3	Specialcurrencycontrolrules
	4	Currency risks
Note – compiled by authors		

In turn, with regard to the geographic segment, here it is necessary to note the following points, presented in Table 2, which must be taken into account when providing information.

Table 2 – Providing geographic segment information

№	Indicator	Information
1	Revenuesfromexternalcustomers:	received in the country where the company is registered or operates;
		distributed among all foreign countries from which the company receives revenue;
		received in a separate foreign country, if its value is significant;
		principles for determining the amount of revenue received in different countries;
2	Non-current assets, with the exception of financial instruments, deferred tax assets, assets on payment at the end of employment and rights arising under insurance contracts:	located in the country in which the company is located or is registered;
		located in all foreign countries in which the company has assets;
		located in a separate foreign country, if the value is significant.
Note – compiled by authors		

Application functionality -The basic principle of IFRS 8 is that the company must disclose information in such a way that external users of financial statements can evaluate the content and financial

results of various types of the company's activities, as well as the economic conditions in which it operates. Therefore, when disclosing information by segment, IFRS 8 requires companies to disclose the following information, which is shown in Table 3.

Table 3 - Disclosure of various types of information on segments in the financial statements of organizations

№	Indicator	Information
1	General information	factors used to determine the reporting segments of a company, including the principles of its organization (for example, whether its organizational structure is based on the types of products and services provided, geographical location, jurisdictions or when determining it, a combination of factors was used, and whether segments were combined);
		types of products and services for which each reporting segment receives its revenue.
2	Quantitative information	revenue from sales to external customers;
		revenue from operations conducted with other operating segments of the same company;
		interest income or interest income minus interest expense;
		interestexpense;
		depreciation;
		substantial items of income and expenses;
		the company's share in the profit or loss of associates and joint ventures;
		income tax expense and income;
		material non-monetary items other than depreciation.
3	Descriptive information	principles of accounting for transactions between reportable segments;
		the nature of the differences between the estimates of profit or loss of the reportable segments, as well as the company's profit and loss before tax and discontinued operations. These differences may include accounting policies and policies for the distribution of general business expenses that are necessary to understand the information on the reporting segment;
		the nature of the differences between the asset estimates of the reportable segments and the company's assets. These differences may include accounting policies and policies for the distribution of shared assets that are necessary to understand the information on the reportable segment;
		the nature of the differences between the estimates of the liabilities of the reportable segments and the liabilities of the company. These differences may include accounting policies and policies for the distribution of general obligations that are necessary to understand the information on the reportable segment;
		the nature of changes compared to previous periods in the valuation principles used to determine the profit or loss of the reporting segment, as well as the effect of these changes on the segment profit or loss estimate;
		the nature and effect of the asymmetric distribution between the reporting segments.
Note – compiled by authors		

Table 4 - Differences between IFRS (IAS) 14 and IFRS 8

Analysis	IFRS (IAS) 14	IFRS 8
Methods for estimating revenue, profit or loss, assets and liabilities of segments	IAS 14 required that segment information be prepared in accordance with the same IFRS principles used to prepare consolidated financial statements.	Unlike IAS 14, the new standard does not establish assessment methods, but requires an explanation of how the performance, assets, and liabilities of each operating segment are measured. IFRS 8 requires that the amounts included in the financial statements for each segment are determined in accordance with the same accounting principles used in management reporting. Therefore, now total amounts of revenue, profit or loss, assets and liabilities may differ from each other, and it will be necessary to reconcile them.
SegmentAssignmentRules	IAS 14 provided for a symmetric allocation: if any item is included in the segment's profit or loss, the corresponding assets and liabilities should also be allocated to the assets and liabilities of that segment	They are more flexible than IAS 14. Unlike IAS 14, IFRS 8 allows for independent distribution and assessment of income and expenses, and also suggests the possibility of inclusion in a specific segment of general business expenses. Companies only need to explain in the notes how profit or loss, as well as assets and liabilities are evaluated for each reportable segment. Including companies should describe the most significant cases of asymmetric distribution of elements between segments, which may be based on the accounting policies of the segments, the financial result from domestic sales, the nature of any changes from previous periods [18]
Note – compiled by authors		

The new standard is based on the management approach and management reporting of the company, which allows investors to evaluate the performance of the company based on the same information that management uses when making operational decisions. Therefore, we have shown the differences between IAS 14 and IFRS 8, which are shown in Table 4 [17].

In the conditions of market relations, systematic information on the progress and results of activities of separate divisions of the organization is especially important, allowing for analysis and evaluation of the results. division and give a qualitative assessment of the feasibility and effectiveness of these costs, ensuring control over the costs of the center m responsible.

Thus, in order to stimulate business efficiency, the role of an adequate assessment of the contribution of each segment to the final results of an organization's activities is enhanced. The basis for this assessment is information summarized in the organization's management segment reporting, as the company is required to provide separate information in the financial statements for each operating segment that has been identified as an operating segment or is a combination of two or more operating segments.

Conclusions - The key characteristic of modern business is its versatility. Indeed, the times when companies specialized in one type of activity receded into the past, receiving all financial results only thanks to it. Today, business structures are moving away from the path of mono-business and are moving to a format for distributing their efforts to various segments, developing activity in which they get financial results. Since this practice began to spread to the markets of all countries, for international types of cooperation it became necessary to develop additional international standards of financial reporting that would regulate such issues. This is how the IFRS 8 standard IFRS 8 emerged, which is an important management tool that replaced the expired IAS 14 "Segment Reporting" [19].

In the context of global trends for a diverse business, such a tool as IFRS IFRS 8 solves several problems at once when preparing financial statements:

- firstly, this standard allows to present the business of the organization not only in the context of the activity segments themselves, but also with details on the goods / services / regions / combinations of the indicated factors;

- secondly, the standard serves a deeper understanding of the structural and managerial features of the organization that influence the financial results;

- thirdly, IFRS 8 discloses additions to the general financial data of an organization in parallel with the reconciliation of segmental data with general reporting data [20].

All of the above information in the process of disclosure form the most complete layer of data about the company, making financial statements as reliable and useful to the user as possible.

Thus, the banking system is one of the main factors affecting the ability of the state to pursue an independent and effective economic policy and modernization of the economy [21].

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ҰЙЫМДАРДЫҢ ҚАРЖЫЛЫҚ ЕСЕПТІЛІГІНДЕ СЕГМЕНТТЕР БОЙЫНША АҚПАРАТТЫ ҚАЛЫПТАСТЫРУ ЖӘНЕ АШУ МӘСЕЛЕЛЕРІ (ХҚЕС 8)

Аннотация. Зерттеудің өзектілігі сегменттік есептілік ережелерін өзгертілетін экономикалық қызметтерге және пайдаланушылардың талаптарына бейімдеу бағытында түбегейлі қайта қарауға байланысты, осы жаңа ережелердің тиімділігін талдау, оларды тәжірибеде қолдану қиындықтарын анықтау және оларды жақсарту жолдарын қарастыру қажеттілігі туындады.

Сегменттік есептілік саласындағы ғылыми зерттеулерге қарамастан қазіргі уақытта экономиканың флагмандарына жатпайтын және дамыған басқарушылық есепке ие емес компанияларға операциялық сегменттер бойынша есептілікті ақпараттық қамтамасыз ету міндетін тиімді шешуге мүмкіндік беретін сегменттік есептілікті дайындау үшін қажетті ақпаратты қалыптастыру әдістемесі жоқ. Осыған байланысты мақалада ұйымның қаржылық есептілігінде ақпаратты қалыптастыру және ашу мәселелері қарастырылды, өйткені қаржылық және экономикалық деректер ұйым бизнесінің сыртқы және ішкі шарттары жүйесімен жиынтығында фирманың жалпы нәтижесіне қызметтің әрбір түрінің үлесін талдауға және әрбір сегменттің жұмыс істеуін нақты бағалауға мүмкіндік береді.

Түйін сөздер:сегменттік есептілік, сегмент, қызметті әртараптандыру, тәуекел, қаржылық есептіліктің халықаралық стандарттары, қаржылық есептілік.

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ПРОБЛЕМЫ ФОРМИРОВАНИЯ И РАСКРЫТИЯ ИНФОРМАЦИИ ПО СЕГМЕНТАМ В ФИНАНСОВОЙ ОТЧЕТНОСТИ ОРГАНИЗАЦИЙ (МСФО 8)

Аннотация. Актуальность исследования заключается в том, что в связи с кардинальным пересмотром правил сегментной отчетности в направлении их адаптации к изменяющимся экономическим условиям и требованиям пользователей, возникла необходимость анализа эффективности этих новых правил, выявления трудностей в их применении на практике и путей их улучшения.

Несмотря на научные исследования в области сегментной отчетности в настоящее время отсутствует методика формирования информации, необходимая для подготовки сегментной отчетности, позволяющая компаниям, не относящимся к флагманам экономики и не обладающим развитым управленческим учетом, эффективно решить задачу информационного обеспечения отчетности по операционным сегментам. В связи с этим в статье рассмотрены проблемы формирования и раскрытия информации в финансовой отчетности организаций, так как финансовые и экономические данные в совокупности с системой внешних и внутренних условий бизнеса организации позволяют проанализировать вклад каждого вида деятельности в общий результат фирмы и предметно оценить функционирование каждого сегмента.

Ключевые слова: сегментная отчетность, сегмент, диверсификация деятельности, риск, международные стандарты финансовой отчетности, финансовая отчетность.

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INNOVATIVE ECONOMY AS A FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL TERRITORIES OF KAZAKHSTAN

Abstract. The rural economy of Kazakhstan experienced a structural crisis caused by a break in the inter-industry ties necessary for balanced and sustainable development, which was accompanied by an imbalance between the production of important types of products and their needs. The key task of the state policy of Kazakhstan is the revival of the countryside, the solution of which is carried out on the basis of improving the development policy of rural territories, searching for new ideas and directions for the qualitative development of the countryside. Along with this, there are factors hindering the achievement of sustainable development of rural territories, among which there is a persistent low labor productivity and insufficient level of economic efficiency of production activities.

Keywords: strategic management, enterprise, investment, technology, innovation, innovation, innovation management.

INTRODUCTION

The country has accumulated sufficient experience in reforming the rural economy and achieved positive results, characterized by an increase in the growth rate of agricultural production, investment aimed at updating, modernizing fixed assets and introducing innovations, as well as the development of social, transport, engineering infrastructure of the village and the growth of the level rural life.

In order to realize the competitive advantages of rural areas, it seems appropriate to further develop and improve the sectorial structure of the rural economy. This requires a qualitatively different approach to doing business in order to increase the level in the field of material production, ensuring the release of demanded products. Improving the competitive environment in terms of the qualitative characteristics of manufactured goods is considered a priority, since it is the high level of competition that stimulates the demand for innovations, which are a real factor contributing to the improvement of the structure of production and the development of an innovative economy.

MAIN PART

For this, it is necessary to use elements of competitiveness, to develop a more advanced system of economic incentives that contribute to the growth of business activity, cooperation, enlargement of economic entities aimed at organizing production of a higher technological level based on innovation and production of products that meet quality and price parameters, as well as needs and the wishes of the population.

For the full and effective functioning of rural areas, the presence of the following main conditions is mandatory:

• the availability of land, water and human resources;
• favorable environmental and climatic conditions;
• the existence in this territory of agricultural enterprises with the necessary production potential (material, technical, financial and other resources);

• appropriate engineering communications;
• the availability of appropriate facilities for social services;
• proximity of points for transport communications;
• source of electricity, gas supply and others.

The main directions of improving the functioning of the labor market in rural areas are:

• the development of agricultural production and the revival of its social sphere in all promising rural settlements;
• intensification of the system of processing, transportation, storage and marketing of agricultural products, service sectors of agricultural units;
• support for peasant (farmer) households and other forms of small business in rural areas.

An integral part of the organizational and economic mechanism for improving the efficiency of rural territories is the strengthening of decentralization of managerial state functions at the expense of local self-government.

Therefore, at the legislative level, the following conditions for local self-government are determined: the formation at the level of the village, village, village, city of regional significance, thereby ensuring the implementation of the basic principle of optimal population settlement - compact living; legal protection, i.e. local self-government is created solely on the initiative of the residents themselves and act on the basis of the charter; the definition of functions and powers is transferred to local self-government, which largely eliminates the possibility of duplication in management.

In the future, the most relevant, in our opinion, directions of development of social infrastructure and improvement of social security of the rural population are:

• coverage of a wide range of people with the services of accumulative pension funds;
• control over the completeness and timeliness of the transfer by enterprises of mandatory pension contributions withheld from employee income to accumulative pension funds, which reduces the capitalization of these funds;
• providing workers with adequate retirement income through their compulsory and voluntary pension contributions to funded pension funds;
• increasing the level of per capita total income of the rural population due to the transition to hourly wages for workers in all sectors of the economy.

There is a need to develop a concept for sustainable development of rural areas of Kazakhstan.

The following areas of improvement of services for residents living in rural areas are proposed:

• in the field of healthcare: improving the accessibility and quality of primary medical and social assistance by promoting the development and strengthening of the network of medical institutions in rural areas, providing means of transport and communication for urgent and urgent calls to develop the institute of a general practitioner, and creating conditions for consolidation in rural locality of graduates of higher and secondary special educational institutions;
• in the field of social services: improving the accessibility and quality of social and socio-medical services by promoting the development of social service institutions and the creation of mobile social services;
• in the field of education: increasing the availability of quality education in rural areas, the restructuring of rural schools, the development of information technology, including Internet access;
• in the field of telecommunication networks and communications: providing the population and social institutions with telephone communications and other information services; maintaining a network of post offices and rural areas, including cash management services;
• in the field of transport: access to bus and rail services;
• in the field of commercial services: the possibility of acquiring goods and services at the place of residence;
• in the housing sector: the formation of organizational and credit and financial mechanisms for the acquisition and construction of housing, including a mechanism for mortgage lending;
• in the field of culture: accessibility and expansion of the structure of services of rural cultural-leisure institutions and libraries;
• in the field of rural advisory services: full access of the rural population to consultations on technical, technological, organizational, economic, legal and other issues.

The raw material orientation dominates in the agricultural sector of the republic, which is a fundamental barrier to indefinitely long economic growth and creates a dependence of the industry on world prices.

World experience shows that agricultural production functions in integration with processing enterprises. A similar scheme in the agricultural sector of Kazakhstan is not sufficiently developed, therefore, in our opinion, it seems advisable to actively implement a cluster approach, in which the level of economic efficiency of production will increase significantly.

The real state of the economy of the republic shows positive achievements based on a strategically sound economic policy aimed at diversifying the national economic system and giving economic development an innovative, sustainable and socially oriented character.

To improve the structure of the economy, it is necessary to use the following key approaches:

• the formation and high-quality functioning of institutions to promote and support the activities of economic entities, the harmonization of investment policies, the creation of favorable and reliable capital growth points conducive to the active attraction of investments, the suppression of the negative influence of government bodies on the business climate, the reduction of administrative barriers and the maintenance of market competition;

• implementation of government policy related to improving the structure of the economy on the basis of special economic incentives in the form of financial preferences and tax incentives aimed at increasing investment and business activity.

One of the important conditions for the transition of rural territories to the path of sustainable development is the development of rural economy growth models based on the maximum use of available reserves and resources for increasing labor productivity.

Rural territories as an integral part of a single national economy can also be considered as independent entities with a certain resource potential, economic, demographic, infrastructural and other conditions. The multidimensional nature of rural regions has a number of its own characteristics that affect the process of managing regional development. The analysis of various indicators of the state and development of the region’s economy is aimed at determining the objective development trends, on the basis of which the regional development strategy and tactics are formed.

Regional policy, due to large regional differences in terms of social security, is aimed at resolving issues of social tension and is an integral part of the country's socio-economic development strategy.

In developed countries, there are many options for improving the competitiveness of the region, based on an innovative economy, an important area of which is government support for the generation of innovative developments and their diffusion. When implementing diffusion of innovations, we consider it necessary to take into account the product life cycle, since it is not economically feasible to introduce a technological line for the production of goods with a short-term life cycle. This is due to the fact that during the period of time spent on the acquisition, installation, commissioning and production of such goods, moral aging occurs. Given the above, it follows that the diffusion of innovation has the feasibility and economic effect in the case of a long-term life cycle of an innovative product.

For the development of innovative systems, it is important to use the following approaches:

• Providing equally state support to public and private companies and firms that commercialize innovations;

• the use of a selective method of financial support for the development of industries and industries characterized by the introduction of a cluster approach, the active development of scientific and technical projects and the production of competitive products that are in demand both on the domestic and foreign markets. As a result of the support of such growth points, a multiplier effect is created that contributes to the development of related industries;

• production based on acquired patents and technologies;

• sustainable integration of the innovation system of higher education institutions with business structures in order to develop a national innovation and economic system. In world practice, the main sources of generating scientific knowledge and innovation are universities with a powerful research platform.

In order to sustainable development of socio-economic subsystems of the national economy in modern conditions, the urgent task facing the countries of the world is to create the necessary prerequisites

for effective management. The development of rural territories should be considered as a socio-economic subsystem of strategic importance for the country in the context of ensuring food and territorial security.

During the transition period, rural areas have unresolved social and economic problems related to employment issues, primarily productive, improving the quality and standard of living, development of transport and social infrastructures. A significant number of rural settlements cannot independently solve these problems. The transition to the sustainable development of rural territories requires the creation of conditions by state institutions for the formation of relations between subjects of the agro-industrial complex, investment and innovative infrastructures of the rural economy, contributing to the dynamic development of various types of economic activity. The implementation of this direction must be carried out through the active development of credit and financial institutions, technology parks in the agricultural sector, business incubators, integration of production and science.The development of the innovative economy of rural settlements based on the use of science will ensure an increase in labor productivity, an increase in added value, a reduction in the cost of energy, raw materials, materials, and labor. The implementation of business processes based on labor-saving technologies leads to the release of personnel and at the same time makes high demands on the qualification level of labor resources. In this regard, it is advisable to pay attention to areas focused on the development of human capital. For this, fundamental changes and a qualitative approach are needed in the national education system to improve the training level of rural school graduates, since human capital is the main resource that provides decisive competitive advantages for rural areas and, as an important factor in economic growth and the sustainability of social policy, is a significant component inter-territorial competition.

At the present stage, it is important to provide the national labor market with competitive personnel on the basis of their retraining at a higher level, which allows them to obtain new professions in demand. Due to the fact that labor-surplus regions mainly represent rural areas, the main direction of state bodies for social protection of the population is the development of personnel potential and assistance to the development of small business, since enterprises in this sphere are quite efficient.

Given the existing structure of the rural economy, characterized by low labor productivity, economic growth is possible, but this growth will not be sustainable. Therefore, it is necessary to achieve and maintain a certain rate of economic growth, which will meet the sustainability criterion. To achieve this goal, it is advisable to make the transition to a more intensive model of economic growth by attracting investment in technological processes and introducing innovations that provide for the reduction of energy and material consumption of production. Competition of rural territories for attracted investment capital creates an impetus to improve investment attractiveness. Given the above, as well as the natural, demographic potential and socio-economic conditions of rural areas, they can be conditionally divided into two groups: progressive, which will accumulate the flow of capital in the form of investments, and regressive, for which the availability of attracted capital will be significantly lower.

CONSOLUTION

A policy aimed at achieving long-term sustainable growth should include an analysis of the current state of the rural economy, identification of existing restrictions on economic growth and measures to reduce them, and also take into account the economic effect of the competitive advantages that determine the competitiveness of territories and change of investment approaches that provide for a shift of emphasis from commodity sector for technology transfer. Improving investment attractiveness, increasing business activity is a necessary element of economic diversification and an important factor in the competitiveness of rural areas, aimed at a higher level of development.

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ИННОВАЦИОННАЯ ЭКОНОМИКА КАК ФАКТОР УСТОЙЧИВОГО РАЗВИТИЯ СЕЛЬСКИХ ТЕРРИТОРИЙ КАЗАХСТАНА

Аннотация. Экономика сельских территорий Казахстана пережила структурный кризис, вызванный разрывом межотраслевых связей, необходимых для сбалансированного и устойчивого развития, который сопровождался дисбалансом между производством важных видов продукции и потребностями в них. Ключевой задачей государственной политики Казахстана является возрождение сельской местности, решение которой осуществляется на основе совершенствования политики развития сельских территорий, поиска новых идей и направлений качественного развития села. Наряду с этим, имеют место факторы, сдерживающие достижение устойчивого развития сельских территорий, среди которых сохраняющаяся низкая производительность труда и недостаточный уровень экономической эффективности производ-ственной деятельности.

Ключевые слова: стратегическое управление, предприятие, инвестиции, технология, инновация, инновационная деятельность, управление инновациями.

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ИННОВАЦИЯЛЫҚ ЭКОНОМИКА ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ АУЫЛ АУДАНЫНЫ ТҰРАҚТЫ ДАМУ ФАКТОРЫ РЕТІНДЕ

Аннотация. Қазақстанның ауылшаруашылық экономикасы теңгерімді және тұрақты даму үшін қажет салааралық байланыстардың үзілуінен туындаған құрылымдық дағдарысты бастан өткерді, бұл өнімнің маңызды түрлерін өндіру мен олардың қажеттіліктері арасындағы теңгерімсіздікпен қатар жүрді. Қазақстанның мемлекеттік саясатының негізгі міндеті - ауылдық жерлерді жандандыру, оның шешімі ауылдарды дамыту саясатын жетілдіру, ауылдың сапалы дамуы үшін жаңа идеялар мен бағыттарды іздеу негізінде жүзеге асырылады. Сонымен қатар, ауылдық аумақтардың тұрақты дамуына қол жеткізуге кедергі келтіретін факторлар бар, олардың арасында тұрақты еңбек өнімділігі және өндірістік қызметтің экономикалық тиімділігінің жеткіліксіз деңгейі бар.

Түйін сөздер: стратегиялық менеджмент, кәсіпорын, инвестициялар, технологиялар, инновациялар, инновациялар, инновациялық менеджмент.

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INNOVATIVE ECONOMY AS A FACTOR OF SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT OF KAZAKHSTAN

Abstract. The key to the formation of a new type of economy in Kazakhstan is large-scale investments in new technologies and the creation of conditions for the constant reproduction of knowledge and their implementation in new high-tech products and services. A large role in the development of the economy is played by information and communication technologies, which are the basis of the country's new infrastructure. They should develop at a faster pace than the level of economic development. The innovative activity of Kazakhstani enterprises is noticeable in industries that manufacture products with a low degree of processing. Noteworthy is innovative activity in industries where the domestic producer dominates.

Keywords: innovation, economics, sustainability, development, entrepreneurship, support.

INTRODUCTION

So, in agricultural regions, food suppliers, the largest percentage of innovative products in the total volume of industrial enterprises is noted. The enterprises of mechanical engineering and metalworking, light industry are forced to compete with the whole world. Over the past decades, many documents have been developed and adopted that reinforce the innovative path of development. Special structures have been created in the republic that finance innovative projects at the expense of state budget funds. The first steps have been taken to actively support the venture capital business. The created national innovation fund also includes the creation of venture funds in its tasks of institutional support of the innovation process. In order to expand the activities of small innovative enterprises in Kazakhstan, such forms as technology parks are used. In general, the Kazakhstani economy is moving towards a new economy. The problems of efficient use of scientific and technological potential are of strategic scope. Innovative processes in Kazakhstan are not so much market mechanisms as focused state policies; it is the state that can have a decisive influence on the formation of a national system of institutions that is adequate to the requirements of creating a new economy. Accelerated economic growth in developing countries, further industrialization and consumption growth, covering about a third of the world's population, increase the global demand for raw materials. Consequently, the main tendency of economic development for the coming long-term prospect is the outstripping demand for resources and, first of all, for raw materials.

MAIN PART

This process affects the state policy of all countries of the world, on the one hand, the desire to provide their own economies with the necessary volumes of raw materials, on the other hand, the active development and implementation of resource-saving technologies. Global raw materials markets are responding to ongoing processes by constantly increasing prices for both solid raw materials and energy.

The idea of innovations in efficient nature management as the basis of ecological and economic development and maintaining equilibrium in nature and quality living conditions follows from the definition of innovation given in international standards for statistics, science and technology: “innovation is the final result of investment activity that has been transformed into a new or improved a product on the market, and a new or improved technological process used in practice in practice, also a new approach to coaly services. " Currently, ongoing processes in the global economic space indicate an acute crisis of the

current development model. The construction of the mechanism of economically sustainable development in each state takes into account individual, inherent only to it regional environmental conditions, which are characterized by a number of interdependent problems, the main of which are: ecological problems in the management and organization of cost-effective efficient environmental management, while taking into account measures for the protection and reproduction of the environment natural environment;

• socio-economic, related to the quality of living standards and established traditions of the population, the commissioning of labor resources;

• the issue of improving the sectoral and territorial structure of state management, which meets the current rational needs of an innovative economy.

At the same time, the ecological and economic mechanism of environmental management and environmental protection in the Republic of Kazakhstan has not yet been sufficiently developed with regard to its relationship with the strategy of innovative development, therefore, the economic situation in the country does not meet the requirements of environmentally friendly and resource-saving development.

Share of the population with skills of using a personal computer, smartphone, tablet, laptop; standard programs.

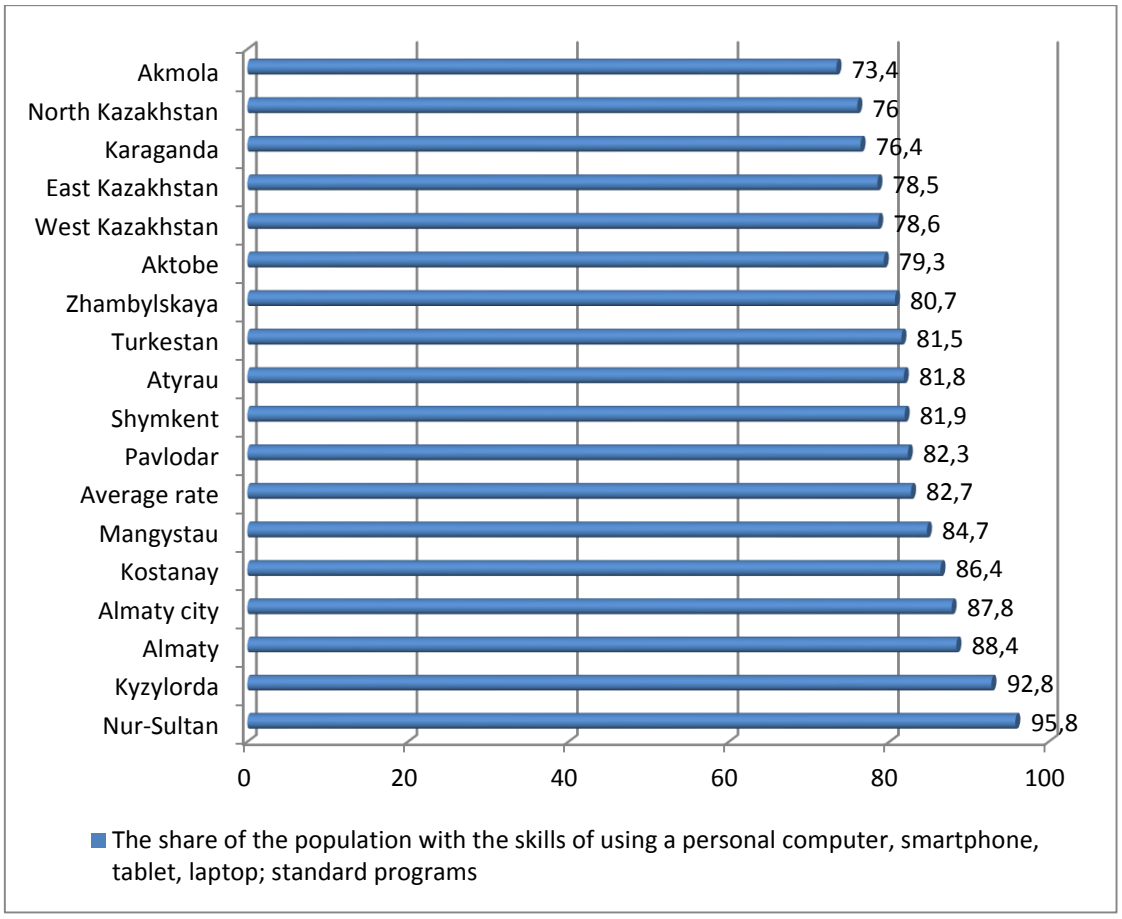

Figure 1 - Share of the population with skills of using a personal computer, smartphone, tablet, laptop; standard programs

Information security is quite high in Kazakhstan, since from 73.4 to 95.8 they have the skills to use a personal computer, smartphone, tablet, laptop; standard programs.

Investments in fixed assets - investments in order to obtain an economic, social or environmental effect by investors in case of new construction, expansion, as well as reconstruction and modernization of facilities that lead to an increase in the initial cost of the facility, as well as the purchase of machinery, equipment, vehicles, on the formation of the main herd, perennial plantations, etc.

Investments in fixed capital in Kazakhstan in millions of tenge are presented in Figure 1.

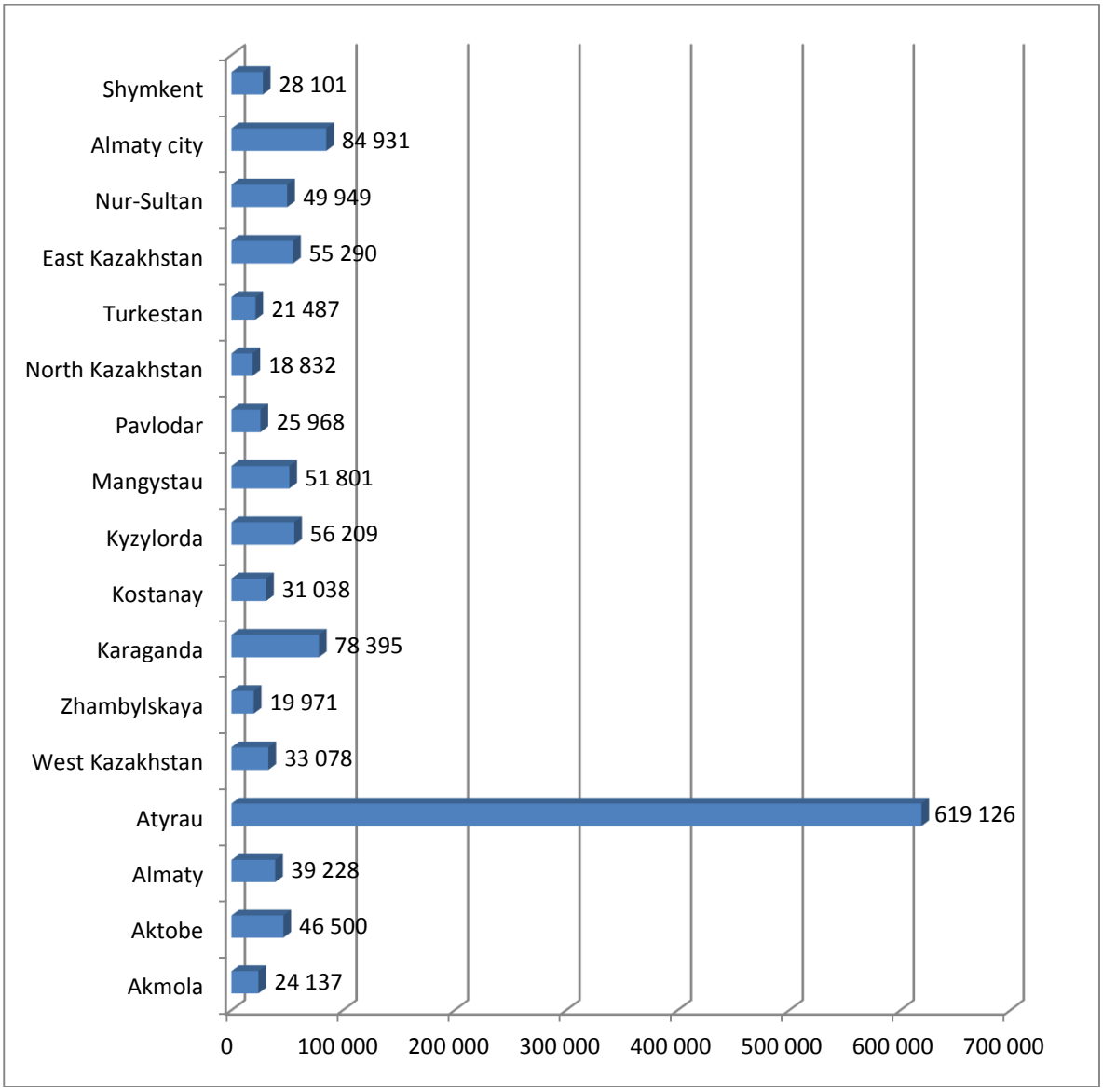

Figure 1 - Investments in fixed assets in Kazakhstan for 2018

Atyrau region accounts for investments in fixed assets - 619126 million tenge, then Almaty city 84,931 million tenge, and Karaganda region 78395 million tenge.

In January 2018, the volume of investments in fixed assets amounted to 636.9 billion tenge, which is 65.4% more than in January 2017.

Increased fixed investment compared

since January 2017, it was noted in 11 regions of the republic. At the same time, the largest increase in investments was observed in South Kazakhstan (2.6 times) and Atyrau (2.3 times) regions.

In January 2018, the volume of work on the construction and overhaul of buildings and structures amounted to 314.7 billion tenge.

Investments in agriculture, forestry and fisheries in January of this year decreased by 2.1% compared to the previous year and amounted to 9.9 billion tenge.

Despite the fact that a lot of scientific research has been accumulated and there is a scientific backlog both in the field of efficient environmental management and ecology, and in the field of building the mechanism of the economy of innovative development, it should be noted that they have never been considered in close relationship. The reason is that the problem of establishing an effective mechanism of economical nature management in the context of innovative development is an urgent theoretical and methodological problem that needs to be addressed immediately.

Among the most important areas of the Green Bridge Partnership Program is to increase the eco-efficiency of the use of natural goods and investments in environmental services.

“Green economy” today is one of the priority tools for ensuring sustainable development of the country. The transition to a green economy can help achieve the goal of Kazakhstan becoming one of the 30 most developed countries in the world.

The availability and effectiveness of green technologies is still a key aspect of the global transition to a resource-efficient, resource-saving green economy. In particular, the improvement of obsolete technologies and their replacement with modern sustainable alternatives can significantly improve human health, affect the economical spending of funds, create jobs and, of course, have a positive impact on the state of the environment.

The main most important tasks for the transition to a "green non-resource-based economy" facing us are:

• improving the well-being of the population and the quality of the environment through cost-effective ways to mitigate pressure on the environment;

• improving national security, including for transboundary water resources;

• improving the rationality of the use of resources (water, land, biological, etc.) and their management;

• modernization of existing and construction of new infrastructure.

Thus, Kazakhstan, with its enormous natural resources, favorable geographical position and economic growth opportunities, is faced with the question of innovative development of environmental management economies. Given the fact that the country is focused on oil and coal energy, the most important direction for the development of the republic is the innovative development of the economy of environmental management and the prospects for the transition of Kazakhstan to a green economy.

Its main mechanisms are:

• systemic restructuring of the economy, including the introduction of resource-saving and low-waste technologies, as well as the development of modernized means of environmental protection to maintain the sustainability of ecosystems;

• the formation of an environmentally conscious society of the noosphere type, consisting of environmentally minded individuals, and the achievement of harmonious interaction between man and nature;

• reducing the intensity of use of natural resources, greening the economic mechanism of economic management, limiting the human impact on ecosystems, regulating the quality of the environment taking into account regional economic conditions by introducing preferential taxation;

• expanding the area of specially protected territories and strengthening their environmental status in order to achieve ecologically balanced development and maintain natural homeostasis of natural ecosystems as a result of intensification of environmental protection activities.

The set of elements of the ecological and economic mechanism for regulating the economy and ecology should be supplemented by a system of rationing of pollutants in the environment, taking into account environmental restrictions and aimed at economic stimulation of environmental activities.

Thus, the innovative path of social - ecological - economic development of the state includes:

• innovative ideas in technology (resource-saving and low-waste technologies);

• innovations in the management and organization of nature management in the region, taking into account the interests of the adjoining territories, as well as improving socio-economic relations in the division of principles of management, responsibility in the use of common natural ecosystems and natural resources;

• improving financial (resource) support systems for environmental protection and environmental education, educating the population and, on this basis, improving the ecological and technological culture, observing technological and industrial infrastructure;

• development of environmental business and environmental entrepreneurship, designed to significantly increase the efficiency of environmental management through the implementation of its reserves;

• restoration of agricultural land contaminated with chemicals due to the long-term use of mineral fertilizers and pesticides.

CONSOLUTION

Consequently, the establishment of a unified environmentally-oriented management system and the widespread use of financial and economic mechanisms for sustainable development require the introduction of differential rental taxation, special taxation rules for certain types of industries, levying fines and pollution charges, tax incentives for investments in fixed assets for environmental purposes, auction sale of rights pollution that is harmful to the environment in production and consumption processes.

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ИННОВАЦИЯЛЫҚ ЭКОНОМИКА ҚАЗАҚСТАННЫҢ ТҰРАҚТЫ ӘЛЕУМЕТТІК-ЭКОНОМИКАЛЫҚ ДАМУЫНЫҢ ФАКТОРЫ

Аннотация. Қазақстан экономикасының жаңа түрін қалыптастырудың кілті жаңа технологияларға ауқымды инвестициялар салу және білімді үнемі жаңартып отыру үшін жағдайлар жасау және оларды жаңа жоғары технологиялық өнімдер мен қызметтерге енгізу болып табылады. Экономиканың дамуында елдің жаңа инфрақұрылымының негізін құрайтын ақпараттық-коммуникациялық технологиялар үлкен рөл атқарады. Олар экономикалық даму деңгейіне қарағанда тезірек қарқынмен дамуы керек. Қазақстандық кәсіпорындардың инновациялық қызметі өңдеудің төмен деңгейімен өнім шығаратын салаларда байқалады. Бір қызығы, отандық өндіруші басым болатын салалардағы инновациялық қызмет.

Түйін сөздер: инновация, экономика, тұрақтылық, даму, кәсіпкерлік, қолдау.

УДК 338.001.36.

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ИННОВАЦИОННАЯ ЭКОНОМИКА КАК ФАКТОР УСТОЙЧИВОГО СОЦИАЛЬНО-ЭКОНОМИЧЕСКОГО РАЗВИТИЯ КАЗАХСТАНА

Аннотация. Ключом к формированию экономики нового типа в Казахстане являются масштабные инвестиции в новые технологии и создание условий для постоянного воспроизводства знаний и воплощения их в новые высокотехнологичные продукты и услуги. Большую роль в развитии экономики играют информационные коммуникационные технологии, являющиеся основой новой инфраструктуры страны. Они должны развиваться опережающими темпами по сравнению с уровнем развития экономики. Инновационная активность казахстанских предприятий заметна в отраслях, производящих продукцию с низкой степенью переработки. Обращает на себя внимание инновационная активность в отраслях, где доминирует отечественный производитель.

Ключевыеслова: инновации, экономика, устойчивость, развитие, предпринимательство, поддержка.

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MULTICULTURAL VOCABULARY IN MASS MEDIA IN THE REPUBLIC OF KAZAKHSTAN

Abstract. In conditions of multicultural reality, when people from different linguistic and cultural communities come into contact, the mutual influence and interpenetration of cultures leads to the acculturation of members of societies, connecting in their minds different cultures, focused on another, predisposed to dialogue with him. Language training, combined with familiarization with cultural and social values, can and should serve as a powerful means of understanding between peoples. The idea of multicultural education involves the prevention of misunderstanding arising from the communication of different nationalities. Multicultural education is the basis for combining multicultural ethnic experience, the coexistence of national values and the individual's right to national-cultural self-expression, the development of which must be instilled in the education system and the media.

Keywords: polyculture, vocabulary, linguistics, communication, media.

INTRODUCTION

Ethnicity is one of the interesting phenomena for science and society. It is still not very clear even for researchers; it has been actualized in the last century to a considerable degree artificially. And the media is also an important factor contributing to this update. As practice shows, the media certainly affect the interethnic interaction of large masses and small groups of the population, the tolerant or conflicting orientation, the intensity and forms of this interaction. Modern social scientists cannot but notice and study the mechanisms of this influence.

MAIN PART

Tolerance in media coverage of ethnicity is one of the important tasks of any democratically inclined multi-ethnic society, and studying the mechanisms of disseminating the principles of tolerance in the public mind is an important scientific problem. In modern society, it is the media that perform the function of one of the main mechanisms of influence on the formation of a tolerant or conflicting mass ethnic consciousness, on its quick mobilization, and ultimately on the regulation of interethnic relations. Therefore, right now, at the beginning of the new century, when reality gives researchers too many both positive and negative examples for analyzing the processes of interethnic interaction with the participation of the media, the study of this topic is more than ever relevant.

The German scientist W. Mitter in his studies claims that "multicultural education can be considered as interpersonal relationships, that is, as a network of educational processes (including their organization and results), characterized by the coexistence of children (and adults), originating from different generations and environments.

The effectiveness of the process of multicultural education by means of a foreign language is determined by the observance of the principles reflected in the following table.

Table 1 - the Main content of the principles of multicultural education

Principles	The main content of the principles
Theprincipleofdidactic	It is found in the selection of material for educational purposes; the need to determine the value meaning and significance of the selected material; in determining the appropriateness of using this material, taking into account the age and intellectual potential of students.
culturalconformity	It is found that it is necessary to analyze authentic or partially authentic materials from the point of view of the possibility of their potential use in modeling the cultural space on the principle of an expanding circle (from ethnic subcultures to world culture); in constructing a didactic model based on a contrastive-comparative study of cultures and civilizations from the point of view of historical analysis; the use of cultural material about the native country.
The principle of dialogue of cultures and civilizations	It is found in the use of a series of gradually becoming more complicated tasks, among which tasks aimed at collecting, interpreting and generalizing cultural information are distinguished; in the development of multicultural competence, which helps to orientate in communicative norms, in the selection of acceptable forms of interaction with people in the context of intercultural communication.

Multicultural education ideas influence the goals of teaching a foreign language. The integrative goal is the formation of communicative competence, ability and willingness to carry out foreign-language interpersonal and intercultural communication with native speakers with standard situations.

In conditions of multicultural reality, when people from different linguistic and cultural communities come into contact, the mutual influence and interpenetration of cultures leads to the acculturation of members of societies, connecting in their minds different cultures, focused on another, predisposed to dialogue with him. Language training, coupled with an introduction to cultural and social values, can and should serve as a powerful means of understanding among peoples.

And it is a teacher of a foreign language who is able to contribute here to the formation of tolerance in children, since the child encounters a new culture for him in a foreign language, alien to his ideas. A foreign language is a tool that should provide unhindered communication, the exchange of ideas.

Multicultural education focuses on several pedagogical principles: education of human dignity and high moral qualities; education for the coexistence of social groups of different races, religions, ethnic groups; education of tolerance, readiness for mutual cooperation. In the modern world, multicultural upbringing and education are indispensable components of supra-ethnic civilizational and cultural communities. In the conditions of modern civilizations, two mutually exclusive fates of individual peoples are possible. The first suggests that leading ethnic groups, like a bulldozer, will crush the original culture and education of small ethnic groups.

The second involves a constructive interethnic dialogue in which upbringing and education play a significant role. Among the functions of multicultural education can be attributed: the formation of ideas about the diversity of cultures and their relationship; awareness of the importance of cultural diversity for personal fulfillment; fostering a positive attitude towards cultural differences; development of competencies of interaction of carriers of different cultures based on tolerance and mutual understanding. Multicultural education pursues three groups of goals, which can be described with the concepts of "pluralism", "equality", "unification": respect and preservation of cultural diversity; support for equal rights to education and upbringing; formation and development in the spirit of national, political, economic, spiritual values. This is both the acquisition of knowledge and appropriate upbringing, “the transfer of more accurate and perfect information while respecting minority groups, overcoming prejudices and promoting tolerance, improving the academic achievements of minority students, promoting the ideals of democracy and pluralism” [3, p. 24].

Таким образом, содержание поликультурного воспитания строится вокруг следующих ориентиров: социокультурной идентификации личности; освоения системы понятий и представлений о поликультурной среде; воспитания положительного отношения к культурному окружению; развития навыков социального общения.

An effective means of forming multicultural value orientations is the use of authentic materials, elements of national culture and personal communicative experience in the process of training professional intercultural communication. The emphasis of future translators on the use of language in certain social and cultural situations is important. Thus, knowledge of the norms of behavior, values, rules of communication is necessary not only to select the correct speech register, but also to understand the

context of language culture. However, the analysis of curricula and teaching aids for language universities indicates that, in practical terms, the vast majority of them aremonocultural and are directed exclusively to the standards of studying specialized disciplines in terms of mastering linguodidactic norms and rules. The cultural variability of the thematic content, its value content did not find a systemic embodiment in the content of foreign language education in many language educational institutions, although the traditional approach to studying the culture of the countries of the language being studied has recently been revised. This significantly narrows the implementation of the principle of dialogue of cultures in teaching foreign languages and limits the possibility of developing the personality of students with planetary thinking.

Therefore, despite the available research, we have to admit that the issue of self-recognition by translation students as subjects with a multigroup cultural background has not been studied. The characteristics of multicultural value orientation as a theoretical construct, the account of which will play a paramount role in modeling the process of foreign language teaching, are not highlighted. The content and organization of the foundations of multicultural language education, which influences the development of multicultural value thinking, are under discussion and experimental testing, but the development of methods for teaching a foreign language and the country's culture at different levels does not take into account the peculiarities of multicultural value orientations for future translators. Within the framework of the foreign language communicative competence of students, the axiological foundations of language education that contribute to the successful professional development of future specialists have not been fully defined.

Based on the features of modern forms of thinking and activity, the very meaning of education should be understood in a new way. At its center should be the formation of a “person of culture”, a person who is able not only to be included in the available forms of activity and thinking, but to reformulate their very foundations, to combine various cultural meanings. This approach requires a change in both the forms of organization of the educational process and teaching methods, and the very content of education ”[2, p. 15]. According to the conceptual provisions of the “school of dialogue of cultures,” the process of forming multicultural value orientations in language learning should be organized in such a way that the cognitive, affective and conative components of a multicultural personality are effectively developed and an understanding of its essence is provided. Under the conditions of professional language training, to solve such problems, linguistic students were offered problem situations aimed at identifying themselves as multicultural subjects in their native environment, understanding that group affiliation varies depending on the context of communication and interaction.

An equally important aspect of the activity on the formation of multicultural value orientations of future translators is familiarization with nationally labeled language units, their mastery on concrete examples of the correlation of language and society, language and culture, language and history, understanding of the context of translated lexical units, the ability to give them linguistic and regional studies comment. Knowledge of the cultural specifics of using a foreign language, interpretation of cultural facts, highlighting the necessary information, in particular nationally-colored vocabulary, contribute to the successful development of professionally significant qualities and the formation of a sociocultural image as a whole.

One of the tasks of implementing the principles of political correctness is to search for new words and expressions instead of those that are unpleasant for representatives of social minorities, hurt their feelings and infringe on human rights. Communicative tactlessness or gross straightforwardness characterizes many names of people, indicating their race, ethnicity and gender, as well as age, state of health, appearance.

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ПОЛИКУЛЬТУРНАЯ ЛЕКСИКА В СРЕДСТВАХ МАССОВОЙ ИНФОРМАЦИИ РЕСПУБЛИКИ КАЗАХСТАН

Аннотация. В условиях поликультурной реальности, когда контактируют люди, принадлежащие к разным лингвокультурным общностям, взаимовлияние и взаимопроникновение культур ведет к аккультурации членов социумов, соединяющих в своем сознании разные культуры, ориентированных на

другого, предрасположенного к диалогу с ним. Обучение языку, соединенное с ознакомлением с культурными и социальными ценностями, может и должно служить мощным средством взаимопонимания между народами. Идея поликультурного образования предполагает предотвращение непонимания, возникающее при общении разных национальностей. Поликультурное образование — это основа объединения многокультурного этнического опыта, сосуществование общенациональных ценностей и права личности на национально-культурное самовыражение, развитие которой необходимо прививать в системе образования и СМИ.

Ключевые слова: поликультура,лексика, лингвистика, общение, СМИ.

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Манаш Қозыбаеватындағы Солтүстік Қазақстан мемлекеттік университеті

ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ БҰҚАРАЛЫҚ АҚПАРАТ ҚҰРАЛДАРЫНДАҒЫ МУЛЬТИМӘДЕНИ ЛЕКСИКА

Аннотация. Мультимәдени шындық жағдайында әртүрлі лингвистикалық және мәдени бірлестіктерде надамдар бір-бірімен байланысқа түскен кезде, мәдениеттердің өзара әсеретуі мен өзара енуі қоғамдастықтардың саналарына түрлі мәдениеттерді қосып, басқаларға бағдарланған, онымен сұхбаттасуға бейім қоғам мүшелерін тартуға әкеледі. Тілдік дайындық мәдени және әлеуметтік құндылықтармен танысумен қатар, халықтар арасындағы түсіністіктің қуатты құралы бола алады және болуы керек. Мульти мәдени білім беру идеясы әртүрлі ұлттардың қарым-қатынасынан туындайтын түсінбеушіліктің алдын алуды қамтиды. Мультимәдени білім көп мәдениетті этникалық тәжірибені, ұлттық құндылықтар мен жеке тұлғаның ұлттық-мәдени өзін-өзі көрсетуге құқығын үйлестірудің негізі болып табылады, оны дамыту білім беру жүйесі мен бұқаралық ақпарат құралдарында дамытылуы керек.

Түйін сөздер: поликультура, лексика, тілбілімі, байланыс, БАҚ.

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SPATIO-TEMPORAL ANALYSIS OF THE GEOSYSTEMS OF THE TENIZ-KORGALZHYN DEPRESSION BASED ON THE DATA DECIPHERED FROM LANDSAT AND SENTINELSATELLITE IMAGES

Abstract. Studies of the geosystems of the Teniz-Korgalzhyn depression were carried out. The spatial and temporal patterns of the structure, functioning, and dynamics of the development of the landscape components of the territory under study are determined on the basis of computer-aided decoding of multizone space images. With the use of the functionality of modern instrumental GIS and decoding algorithms, the indicators of productivity of geosystems and the anthropogenic transformation are determined. Significant differences in the anthropogenic factor have been established, which have local rather than ubiquitous effects on the dynamics of geosystems against the background of significant changes in the ratio of moisture and productivity. In the last chapter, conclusions are made about the need to control anthropogenic influence and to ensure the rational use of resources of the territory as a factor of sustainable development.

1. Introduction

The territory of the Teniz-Korgalzhyn depression selected for the study, including the Teniz-Korgalzhyn lakes system, according to [1, p. 135-136] is a part of the Tenizsky mega-system, which is represented by the Teniz-Nura macro-geographic system, which unites territories confined to the basins of the Nura, Kulanotpes, Kon and other small rivers that flow into Lake Teniz. The basin area is 105.1 km^2. The watersheds of this macrosystem are located in the northeast along the Niyaz lowlands, Air, in the south along the Besshoky, Aygyrzhal lowlands of the island and in the low mountains of the Sarysu-Teniz anticlinorium. In the Teniz-Nura macrogeosystem, the Upper-Nura, Middle-Nura and Lower-Nura sub-systems, as well as the Kulanotpes-Konskaya, Kipshak-Kerei subgeosystems, were identified**.**

The territory of our study is occupied by the Middle-Nura and Lower-Nura sub-systems.

The Middle-Nura sub-system is represented by the geosystems of the basins of the right bank inflows - Ashagandy, Zhailmin, Ulkenkunduzdy, and the left bank inflows - Essen and Sherubainury.

The right-bank geosystem functions in conditions of a hilly-rolling small-hill area and a denudation-hilly plain of sumerly dry steppe soil and vegetation. The left bank is characterized by a more drained, dry-steppe biota, forming on the lake-alluvial Kalpaksor and Tassuat plains.

The natural complexes of the Middle-Nura sub-system are represented by paragenetic complexes of floodplains and floodplain terraces. The valley geosystems are formed on three terraces above the floodplains, cut by logs and composed of alluvial sand and pebble deposits, as well as covered with loams of heavy and medium mechanical composition.

The dominant meadow-steppe sparse vegetation is formed on meadow-chestnut soils; chestnut grasses are characteristic of upland grasses, and to the south light chestnut-colored grasses are typical.

The development of geosystems forming in the recharge zones of the Samarkand, Intumak, Samara reservoirs and water releases through the Irtysh-Karaganda canal, occurs under the influence of technogenic factors that change the conditions of their natural self-regulation. Especially high technogenic loads of the geosystem is in the dilution zones of the wastewater of the Temirtau ore-dressing plant. Excess of maximum permissible concentration in rivers by polluting ingredients is on average: for mercury and copper - 4 MPC, oil products - 10 MPC, phenols-9 MPC, ammonium nitrogen - 15 MPC, nitrites up to 16 MPC.

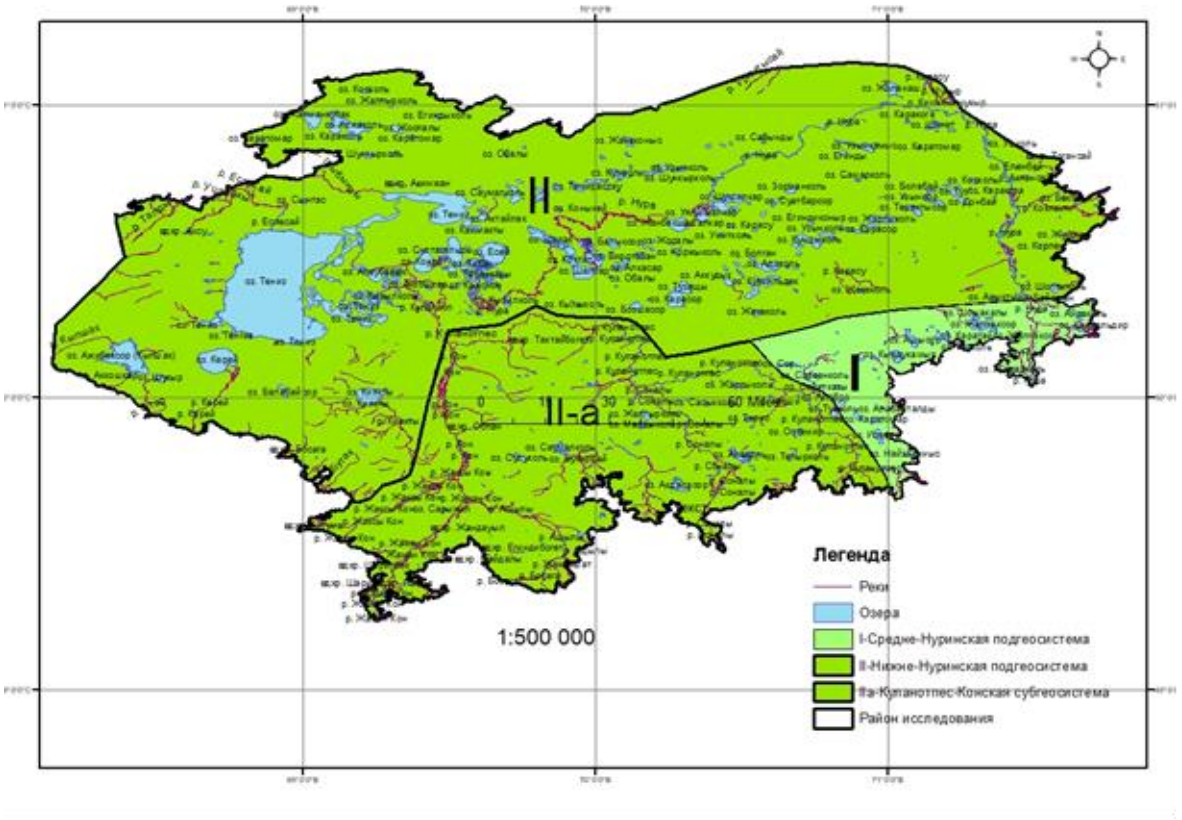

Figure 1 Geosystem Map

Legend	
	Research area
	Rivers
	Lakes
	I- Sredne-Nurinsk sub-system
	II- Lower Nurinsk sub-system
	IIa- Kulanotpes-Konskaya subgeosystem.

Aquatic geosystems also contain a high percentage of mercury salts, cadmium and other pollutants. The capacity of technogenic silts is 2-3.5 m. The content of mercury in them reaches 560 mg / kg (with background - 0.08 mg / kg). Much of the mercury is in active form available for biota uptake. This explains the increase in mercury in the surface runoff during the period of high water flooding, in the case of discharges of water from reservoirs and drainage systems. At the same time, mercury comes from bottom sediments and is a source of secondary technogenic pollution of the environment [2].

In general, as a result of the long-term influence of the factors of technogenesis, the natural potential of the Middle-Nura sub-system is insignificant, many geosystems have impaired processes of self-regulation, and the transformational patterns of biota are characterized by clear signs of desertification. The significant territories used by the mining industry require phytomelioration and other reclamation works [1].

The Lower-Nura sub-systems occupy the territory within the Teniz-Korgalzhyn depression, and the tributaries Ulkenkunduzdy are down the confluence with the Nura River. This is a lake-alluvial drainless basin with moderately dry steppe conditions. Upper devonian metamorphic rocks, covered by a thick neogene-quaternary sediment take part in the lithogenesis of geosystems.

Numerous lake-flow systems, closed depressions, alkaline lakes are widespread. The lakeside geosystems operate in conditions of wetlands and salt marshes. The channel of the river Nura passes through the Besshalkar group of lakes: Shiimalkar, Zhandyshalkar, Uyalyshalkar, Byrtaban, Sholak and

others. Further to the east, freshwater lake Kurgalzhyn is connected with the drain of Lake Teniz by a system of reaches and Asaubalyk lakes.

Lake Teniz is the final zone of accumulation of suspended particles brought from the Nura, Kulanotpeas, Kon and other small rivers. The salt lake Teniz is connected to the freshwater lake Korgalzhyn by a system of lakes and tributaries - Isei, Sultankeldy, Kokai, Tabankazy, Big and Small Karakol [1].

The structure of aquatic geosystems is complicated by stretches, shallow waters, bays.

The geosystems developing in the recharge zone of these lakes are unstable in relation to the hydrogeological regime and the flow of water to the channels. At present, geosystems that have lost their natural potential due to lowering of groundwater levels, decreasing water flow in rivers and increasing mineralization, are in an unstable condition.

The geosystems of the first lake above-flood terrace are more dynamic due to their greater moisture content and proximity of groundwater. Sandy coastal walls are deflated. The geosystems of the second and third above-flood terrace are more stable in terms of space and time and have a more stable mechanism of self-regulation.

The soil grounds of the dominant juicy-solyanka vegetation of high terraces forming on meadow solonetz are composed of fine-grained, loamy-sandy and silt sediments up to 10 m thick. The degree of intensity and nature of the functioning of geosystems depend on the water-salt balance of these lake-flowing systems. The coupled processes of the hydrochemical and hydrogeological regimes are closely interrelated with the anthropogenic halophytization of the biota, reducing its productivity. In recent years, factors of technogenesis have begun to play a dominant role in the overall mass energy exchange [3].

The dominant associations are fescue-feather-tyrsovye with dark chestnut solonetz soils. Significant expanses of the lowlands are occupied by sedge and reed beds.

On paragenetic complexes of the feeding zone of lakes composed of sandy-clay tolerances, wheatgrass, campfire, ostretsovy salt meadows on meadow solonetz are developed. Mosaic and complex geosystems of a lower order also determine small sand mounds.

The floodplains, as well as the geosystems of the runoff dispersion zones in the Teniz-Korgalzhyn lake-flow system, have a significant diversity of biota and high productivity in the Republic of Kazakhstan. To maintain the ecological balance of these geosystems and to ensure the necessary watering of wetlands, a scientifically-based assessment of their state, structure and functioning dynamics is required.

The purpose of the research is a spatial-temporal analysis of the structure and dynamics of the geosystems of the Teniz-Korgalzhyn basin based on the use of computer methods for thematic interpretation of satellite imagery materials.

The estimated parameters of terrestrial natural geosystems include the steepness of the slopes, the maximum collection area, the horizontal curvature, the maximum curvature, the illumination; for aquatic geosystems (river and lake) - the content of organic carbon, humidity, the reaction of the soil environment, hydrolytic acidity, saturation with bases, the content of mobile iron, particle size distribution; for anthropogenically transformed geosystems (arable land, fallow lands, downed pastures) - spectral brightness characteristics of vegetation, detected from multi-zone images, stocks of elevated phytomass, calculated through the NDVI index.

2. Materials and methods.

As a methodological basis, a geosystem approach has been adopted, which allows to establish the distribution of natural complexes of various ranks.

The riverbed and the adjacent territory, from which the channel collects surface and underground drains, in the landscape plan forms a complex natural system, which F N Milkov called the basin paragenetic system [4]. A characteristic feature is the orderliness of its constituent elements. This is especially well illustrated by the example of a water stream moving from the upper reaches to the mouth of the river, the direction of solid runoff, initially moving from the highest points of the watershed into the river valley, and then together with the channel flow to the mouth. Such a nature of the movement of matter gives the river basin a dynamic unity, both in terms of the longitude and transversion. This feature allowed to consider the river basin as a single erosion complex. The basin is an integral natural-economic geosystem, as it is an arena of interaction between nature and society, where natural, economic and socio-

demographic processes are interrelated, therefore, in solving the problems of territorial planning, it is rational to use the principles of the geosystem-basin concept. Integrating properties of water flow allow us to consider the basin as an integral systemic formation not only from the perspectives of hydrology, geomorphology, landscape geochemistry, but also as a geosystem from the standpoint of integrated physical geography. The main natural resources (mineral, water, land, biological) in the landscape are spatially associated in various combinations. This determines the need to search for optimal scenarios for environmental management that form the prospects for effective territorial development. The previous environmental paradigm often serves as an obstacle to the actual implementation of environmental protection measures in practice and needs to be transformed. In this regard, the majority of physicists and geographers (V. B. Sochava [5], V. N. Solntsev [6], V. S. Mikheev [7], K. M. Janaleeva [8], L. M. Korytny [9] and others) approve of the promise of a functionally holistic approach to the differentiation of the natural environment and the geosystem-basin approach as its leading component. The basin approach to the calculation and analysis of substance balances is in fact the basis of landscape geochemistry. Its founder, B. B. Polynov considered geochemical landscapes as areas of the earth's surface, dynamically connected by streams (primarily water). The predominant "closure" of the salt balance, as well as the balance of water and solid, within the river basin has been proven. Such an approach is of particular importance in the analysis of technogenic flows of matter - it is a question of geoecological research in the broad sense of the word. It is water bodies that usually become the final links of the "chain" of pollution: not only substances discharged directly into water bodies, but also those initially existing in the atmosphere, in the soil, and in solid waste fall here. In the geographic system, all components are equal and all relationships between them are to be studied. V.B. Sochavaya was the first to formulate the concept of geosystems as natural formations, to some extent altered by anthropogenic factors. The concept of "geosystem" covers the entire hierarchical series of natural geographic unities from a geographical envelope to its elementary structural units. Geosystem is the unity of the process and the result, the genesis and modern organization, functioning and structure, as well as the state at each point in time [10]. According to G.M. Dzhanaleyeva, geosystems of the river basin of intracontinental basins are paragenetic natural territorial complexes united by the unity of vertical and horizontal currents of matter and energy, formed under the conditions of one lithogenic basis and a single direction of geographic flow [8].

According to L M Korytnyi, almost all land is a collection of basins, which is the main rationale for the widespread use of the basin concept [9].

The basin approach, however, is considered not only from the point of view of geomorphology. Scientists who study the geochemistry of the landscape and operate the term "salt-collecting basin" are interested in river basins. The basin approach using the calculation and analysis of the balance state of matter underlies the geochemistry of the landscape. The founder is B B Polynov [10], who considered geochemical landscapes as areas of the earth's surface connected by geochemical flows. Of particular importance is this approach when analyzing man-made flows of matter in geo-environmental studies. Water bodies usually become the final links of the "chain" of pollution: substances that are discharged into water bodies but are found in the atmosphere, in soils, and in solid waste fall here. However, all representatives of different directions in the basin approach are united by the recognition of the river basin as a complete geosystem.

The geosystem-basin approach to the study of the differentiation of matter in the basins of surface runoff implies the interconnection and interdependence of substance migration in the adjacent geosystems. Plots of the same local microgeosystem turn out to be on different sides of the watersheds, which usually serve as a kind of geochemical screen for the obstruction of water, most airborne and mechanical migrants.

The concept of "geosystem" covers the entire hierarchical series of natural geographic unities from a geographical envelope to its elementary structural units. A geosystem is the unity of the process and result, the genesis and modern organization, functioning and structure, as well as the state at each moment in time.

A geosystem is a part of a territory characterized by a uniform relief, one type or subtype of soil, and a set of plant communities with a general species composition and productivity, a similar response to natural and anthropogenic influences, and resistance to them [11].

To determine the boundaries of geosystems and to study their dynamics, we used scenes of coatings with Landsat and Sentinel images. Pictures were selected summer, spring and autumn season with the lowest possible clouds. In a complex with images, large-scale topographic maps of the region were used (1: 500,000 - 1: 200,000). Meanwhile, there is a certain specificity of working with this data.

So, for example, Landsat TM images are presented in series of different years, from 1982 to 2018. But between them there is a certain difference in the structure of the data itself.

Landsat 5 has a channel structure - VIS (3), NIR (1), SWIR (2), TIR (1); Landsat 7 - panchromatic, multispectral: VIS (3), NIR (1), SWIR (2), TIR (1) with a plan resolution of 15 m for the panchromatic channel and 30 m for the multispectral zone; Landsat 8 - panchromatic, multispectral: VNIR (6), SWIR (2), TIR (2) with a resolution of 15 m for the panchromatic channel, 30 m for the near and middle zone of the spectrum and 100 m for the thermal zone.

To highlight the boundaries and classify the components of geosystems, all the original remote sensing data was converted into mosaic coatings developed in the ENVI 5.0 program with a spatial resolution of 30 m. (1982 - 2013).

For collecting and processing a modern data slice (2014-2018) in studies Remote sensing systems from Sentinel satellites of series 1, 2 were used.

The first Sentinel-1A radar satellite was first launched into orbit on April 3, 2014 by the European Space Agency (European Space Agency, ESA). He became the first in the satellite constellation of the global monitoring of the environment and safety Copernicus. Sentinel-1A is developed by Thales Alenia Space. It has C-SAR synthesized aperture radar equipment (developed by Astrium), which provides all-weather and round-the-clock delivery of satellite images.

Sentinel-2A, 2B satellites of the second series are equipped with an optical-electronic multispectral sensor for surveying with a resolution of 10 to 60 m in the visible, near-infrared (VNIR) and short-wave infrared (SWIR) zones of the spectrum, which guarantees the display of differences in vegetation, including number and temporary changes, and also minimizes the impact on the quality of shooting the atmosphere. In their class, their capabilities correspond to Landsat-7 and SPOT-5 images.

In the process of thematic processing of images, calculations of theindices were MNDWI and NDVIapplied with the construction of index maps for the entire territory of the TeBott-Korgalzhyn system. NDWI is an indicator of the moisture content of soil and leaves of plants [12]. To calculate the index, the spectral brightness values in the green (Green) and near-infrared (NIR) spectral ranges are used:

$$NDWI = (Green - NIR) / (Green + NIR),$$

where Green is the reflection in the green region, NIR is the reflection in the near infrared region of the spectrum.

NDVI (Normalized Difference Vegetation Index) is an indicator of photosynthetically active biomass on the Earth's surface. To calculate it, the spectral brightness values are used in the red and near infrared spectral regions:

$$NDVI = (NIR - Red) / (NIR + Red),$$

where NIR is the reflection in the near infrared region, Red is the reflection in the red region of the spectrum.

The calculations of the indices made it possible to obtain a series of derived images describing the degree of moisture content of geosystems as one of the agroclimatic indicators, and the intensity of vegetation as an indicator of the state (see Fig. 1, 2). A visual and representative analysis of the images allowed us to establish a general trend of the increasing influence of moisture, moreover, uneven, and with fluctuations in individual periods. For example, in 1992, there was an increase in moisture content not only in floodplain plains, but also in denudation plains with shrub-wormwood-grass vegetation, as well as in diluvial-proluvial plains with shrub-wormwood-tyrs vegetation on chestnut soils, in lakeside alluvial plains with hairy meadows of Azhreka, wormwood, and fescue-wormwood groups on saline and meadow saline lands with dark chestnut soils. After a few 20 years, there was a slight decrease in moisture content, which naturally affected the landscapes. So, for example, by 2018, we observe the concentration of

moisture mainly in floodplain and lake-alluvial plains with wormwood, feather-grass and meadows on dark-chestnut soils with saline soils (Fig. 3).

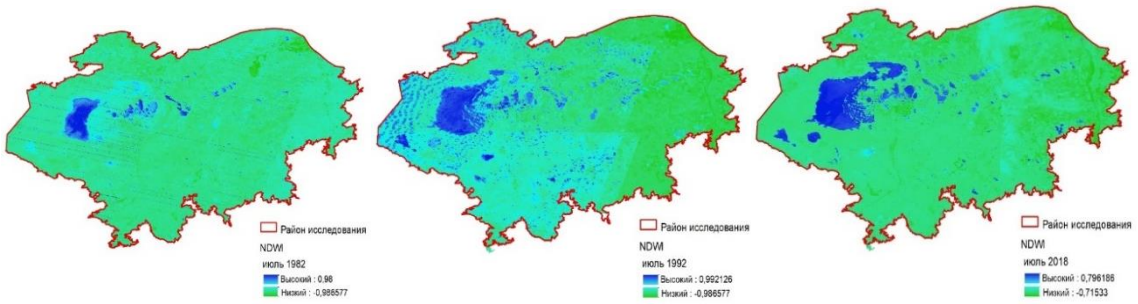

Figure 2 -Moisture content of vegetation, calculated fromvalues
NDWI: 1982, 1992, 2018

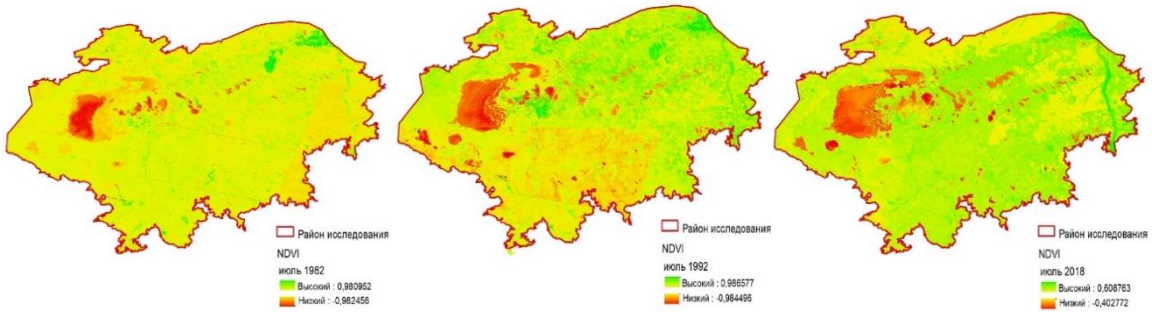

Figure 3 - Vegetation intensity dynamics of vegetation, calculated from NDVI values: 1982, 1992, 2018

The values of the NDVI index are quite strongly correlated with the distribution of NDWI, however there are some differences. The meridional zones of average degree of moisture (this can be seen in the eastern part of the territory) practically do not manifest themselves on NDVI maps. NDVI index values here are either average or higher. Hence, we can assume that the productivity of geosystems here depends not only on the nature of wetting, but also on other factors, such as anthropogenic influence, the growth of the natural / biological load on ecosystems, the change in the microclimate in a less favorable direction, etc.

3. Results

In the course of the research we obtained: a generalized map of geosystems of the Teniz-Korgalzhyn depression; Based on the digital terrain model SRTM, as well as on the basis of the interpretation and study of the space-time changes of the Teniz-Korgalzhyn lake-flow system, a new landscape map has been constructed.

In the classification of geosystems, three 3 orders were identified: 1) terrestrial natural, 2) terrestrial anthropogenically transformed and 3) aquatic.

Natural geosystems include areas in which the anthropogenic impact has not reached significant sizes and they are only slightly altered by human activity. At the same time, a part of terrestrial geosystems, which have lost their natural soil and vegetation cover, is considered as terrestrial anthropogenically transformed, or rather, natural-anthropogenic geosystems. To the aquatic geosystems we assign the geosystems of the water surfaces of numerous lakes and large rivers.

In the study of the Teniz-Korgalzhyn depression, two sub-systems are distinguished: the Middle-Nura sub-system and the Lower-Nura sub-system, whose development is timed to the Nura river flow within the basin, where space-time connections dominate from the source to the mouth.

Based on the SRTM survey materials, a digital model of the territory was created, which made it possible to isolate the prevailing types of landscapes in a complex with soil conditions, vegetation and geological and geomorphological conditions, assess their condition and degree of resistance to anthropogenic impact.

So the prevailing landscapes are the denudation plains with a shrub and wormwood vegetation with the participation of dark-chestnut soils, etc. The main forms of relief include flat and low-slope, flat geosystems dominate in the territory, but are also characterized by low-altitude Geosystems and sand massifs.

In general, it is fair to say that the patterns of distribution of geosystems of a region are mainly determined by interrelated factors: climatic conditions and the geological and geomorphological structure of the territory. It is the ratio of these factors that causes a significant variety and contrast of habitats. However, as follows from the analysis of different-time shots, while maintaining all the prevailing landforms and its morphometric properties, over the past few decades, other factors have changed significantly - climate, soil, increased anthropogenic influence.

4. Discussion

Based on the integration of classical geographic research methods with remote sensing methods and the GIS tool base, new data were obtained on the state, structure and dynamics of the functioning of the Middle-Nurinsk and Nizhne-Nurinsk sub-systems of the Teniz-Korgalzhyn depression.

A 1: 200 000 scale soil map was updated for the study area, and a new geosystem map at 1: 200 000 and 1: 500 000 scales was compiled in ArcGIS. The structure of the legend on the presented maps is based on the classification divisions of geosystems of various ranks. So, on the basis of the geosystem map, many aspects of differentiation and areal relationships between various sub-systems are identified. Thus, the detailed geosystem structure of the region is determined. It is worth noting the important role of information obtained from the interpretation of multi-zone satellite imagery in the form of structural components of the natural environment, classified and recognized in images of different spatial and radiometric resolution.

In addition to the distinguished structure of geosystems, indicator indicators, the so-called soil-vegetation indices (NDWI, MNDWI, NDVI), are the basis for calculating productivity. Many side factors affect their numerical values - species composition of vegetation, closeness, condition, slope exposure and surface tilt angles, soil color under sparse vegetation, etc. For example, according to Rouse et al., 1973 and Kriegler et al., 1969 If the density of vegetation cover is more than 70%, the index is moderately sensitive to changes in the soil background [13,14]. To avoid such situations, which weaken the reliability and information capabilities of remote sensing data, remote surveys are best carried out along selected key areas and routes that best cover the diversity of the study area.

5. Conclusion

Conducted studies have shown the feasibility of using, along with the classical methods of physical-geographical research, innovative methods of remote examination of the state of the environment using GIS tools and computer-aided interpretation algorithms.

The established spatial-temporal changes in the state and structure of the geosystems of the Teniz-Korgalzhyn depression make it possible to single out the following as key factors: climatic conditions, geological and geomorphological structure, and anthropogenic influence. The latter has a direct impact on the anthropogenic transformation of geosystems, which is confirmed by a decrease in the productivity of landscapes in the floodplain part and the most densely populated areas. At the same time, it is fair to say that this does not fit into the dynamics of the dynamics. For example, a time analysis of July images from 1982 to 2018 shows a whole inverse pattern — that is, increase in vegetative activity. Perhaps this is a consequence of the improvement of the microclimate of the territory as a whole, although it does not exclude the increased anthropogenic influence in local foci. The presented methodology can be recommended for mapping and monitoring land use, monitoring changes in vegetation, water resources.

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ПРОСТРАНСТВЕННО-ВРЕМЕННОЙ АНАЛИЗ ГЕОСИСТЕМ ТЕНИЗ-КОРГАЛЖЫНСКОЙ ВПАДИНЫ НА ОСНОВЕ ДАННЫХ, РАСШИФРОВАННЫЙ ПО СНИМКАМ LANDSAT И SENTINELSATELL

Аннотация. Были проведены исследования геосистем Тениз-Коргалжынской впадины. Пространственно-временные закономерности структуры, функционирования и динамики развития ландшафтных компонентов исследуемой территории определяются на основе компьютерного декодирования многозонных космических снимков.

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LANDSAT ЖӘНЕ SENTINELSATELL КЕСКІНДЕРІНЕН АЛЫНҒАН МӘЛІМЕТТЕР НЕГІЗІНДЕ ТЕҢІЗ-ҚОРҒАЛЖЫН ОЙСЫНЫҢ ГЕОЖҮЙЕЛЕРІН КЕҢІСТІК-УАҚЫТТЫҚ ТАЛДАУ

Аннотация. Реферат Зерттеу жұмыстары Теңіз-Қорғалжын депрессиясының геожүйелерінде жүргізілді. Зерттелетін аймақтың ландшафт компоненттерінің құрылымының, жұмысының және даму динамикасының кеңістіктік-уақыттық заңдылықтары көп аймақтық спутниктік суреттерді компьютерлік декодтау негізінде анықталған.

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SUSTAINABLE DEVELOPMENT OF SINGLE-INDUSTRY TOWNS AS A FACTOR OF ECONOMIC STABILIZATION

Abstract. The article highlights the issues of increasing the efficiency of socio-economic development of single-industry towns of strategic importance. Modern economic systems are built on the principles of territorial distribution and concentration, with a special economic role is assigned not only to metropolitan areas, large and medium-sized cities, but also small urban areas with adjacent territories. In the practice of the economy of the Republic of Kazakhstan, many of the small cities have a single-industry economic structure over a long period of time. The authors of the study took the Aksumonotown as a basis.The industry of such cities is characterized by a low level of technological development, development of small and medium-sized businesses, and demographic attraction. As a result, the economic systems of small cities and adjacent territorial districts demonstrate low competitiveness. At the same time, world practice shows and demonstrates examples of successful solution of the socio-economic problems of small cities and territories.

The article presents a solution to the problem of controlled impact on the development of the economy of a single-industry city at the expense of small and medium-sized businesses through the use of an economic model that includes a number of interrelated organizational elements.

Keywords: sustainable development, socio-economic development, single-industry towns, economic diversification.

Introduction

Modern economic systems are built on the principles of territorial distribution and concentration, with a special economic role is given not only to megacities, large and medium-sized cities, but also small urban areas with adjacent territories. The structure of the economy of small towns and surrounding areas often does not meet the modern advanced requirements of the market economy. In practice, the economy of the Republic of Kazakhstan, many of the small towns for a long period of time have a single-industry economic structure. The industry of such cities is characterized by a low level of technological development, development of small and medium-sized businesses, demographic attraction. As a result, the economic systems of small towns and adjacent territorial districts demonstrate low competitiveness.

At the same time, the world practice shows and demonstrates examples of successful solution of social and economic problems of small towns and territories. This applies primarily to cities that have powerful sources of local budgets, good industrial potential, focused on the export of competitive products, the so-called "single-industry towns". Single-industry towns are cities in which 20% or more of industrial production and the working-age population are concentrated in one or more city-forming enterprises.

Today in Kazakhstan, the list of single-industry towns includes 27 cities with a population of 1.53 million people, or 16.8 % of the urban population. Of these, 16 cities are the administrative centers of the

respective districts, 11 cities are not the centers of the districts (Stepnogorsk, Tekeli, Serebryansk, Kurchatov, Shakhtinsk, Saran, Karazhal, Lisakovsk, Arkalyk, Aksu, Zhanaozen).

The main difficulties of single-industry towns are associated with a low degree of diversification of the economy, the prospects for the development of the city-forming enterprise, the high dependence of employment and the budget of cities on the activities of the city-forming enterprise.

Models of management of small towns, emerging in practice, require continuous improvement in connection with the constant changes in the external environment. In modern conditions, it is necessary to develop new management approaches aimed at restoring the abilities of small towns and adjacent territorial districts to independent development and improving the quality of life of the population.

The main part of the study

The program of development of single-industry towns for 2012-2020 is aimed at sustainable socio-economic development of single-industry towns in the medium and long term. The program has 4 main directions:

- optimization of single-industry towns depending on the production capacity of stable operating enterprises;
- diversification of the economy and the development of small and medium-sized businesses to ensure optimal employment structure of single-industry towns;
- increasing the mobility of labor resources of single-industry towns, encouraging voluntary relocation to settlements with high potential for socio-economic development and economic growth centers;
- development of social and engineering infrastructure of single-industry towns based on the optimal population.

In accordance with table 1, a list of single-industry towns of Pavlodar region is presented.

Table 1 – List of single-industry towns in Pavlodar region

Name	Status	Number of population	Specialization	The potential for economic development
Ekibastuz	a single-industry town	149,1	Miningandmanufacturing	high
Pavlodar	a single-industry towns	67,9		high

The city of Aksu is an industrially developed region of Pavlodar region. Aksu is located 50 km South of Pavlodar on the left Bank of the Irtysh. The territory of the city of Aksu and its rural districts as a whole is 8013,5 sq. m., bordered by Aktogay district in the North, Bayanaul, May, Lebyazhinsky - in the South, Pavlodar – in the East, with the rural area of Ekibastuz - in the West.

In Aksu district in the territory 8013,5sq km, is home 67909 people, the population density is 8.4 people per 1 sq km areas.

The industry of the city of Aksu and its rural districts occupies a leading position in the system of functioning and development of the industry of Pavlodar region. The dynamics of industrial production and the share of industry in the city of Aksu and Aksu rural district in the context of territorial economic entities are presented in accordance with figure 1.

The share of the industry of the city of Aksu taking into account the adjacent rural districts in the territorial scale of Pavlodar region at the present stage is 29,38%. Within the strategic period (five years), this indicator increased by 10,13%. The dynamics of the share of industry in the city of Aksu in the territorial scale of the region is positive.

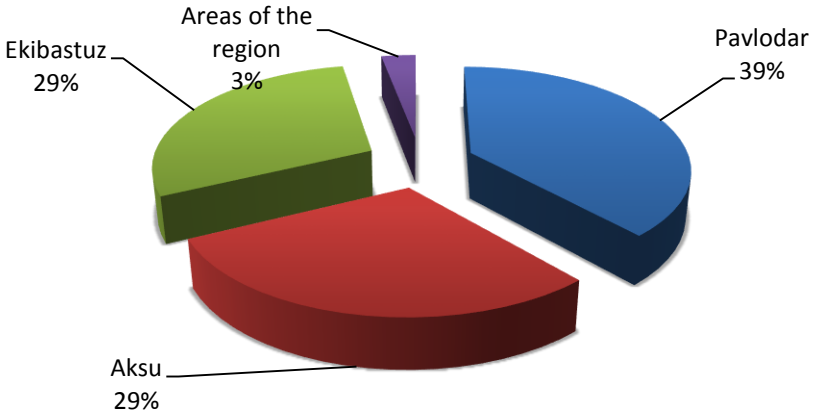

Figure 1 – the Structure of industrial production in the context of territorial economic entities of Pavlodar region

The volume of industrial production from 2013 to 2017 increased from 256983 million tenge to 522505 million tenge, while the pace of simple industry varied in the range from 10.59 – 34,87 %, which is reflected in table 2.

The minimum growth rate of industrial production took place in 2015 and was 0,4%.

Table 2 – Dynamics of growth rates of industrial production of the city of Aksu and Aksu rural zone

Nameofindicators	Years				
	2013	2014	2015	2016	2017
Industrialoutput, milliontenge	256983	284199	285336	387419	522505
Nominalgrowthrate, %	-	10,59	0,40	35,78	34,87

The growth rate of industrial production can be classified into two types – nominal and real. The real growth rates of industrial production take into account inflation processes and trends in the devaluation of the national currency.

The dynamics of real growth rates of industrial output of the city of Aksu and Aksu rural zone, taking into account the inflation processes and the devaluation of the national currency is presented in accordance with table 3.

Table 3 – Dynamics of real growth rates of industrial output of the city of Aksu and Aksu rural zone, taking into account inflation and devaluation of the national currency

Nameofindicators	Years				
	2013	2014	2015	2016	2017
Industrialoutput, milliontenge	256983	284199	285336	387419	522505
The exchange rate of tenge against the us dollar, tenge per dollar.	154,01	181,81	273,51	333,97	333,54
Industrialoutput, $ million USA	1668,61	1563,16	1043,24	1160,04	1566,54
Realgrowthrate, %	-	-6,32	-33,26	11,20	35,04

47 industrial enterprises are involved in the creation of industrial products in the city of Aksu and Aksu rural zone at the present stage. In comparison with 2013, according to figure 2, their number decreased by 3 units.

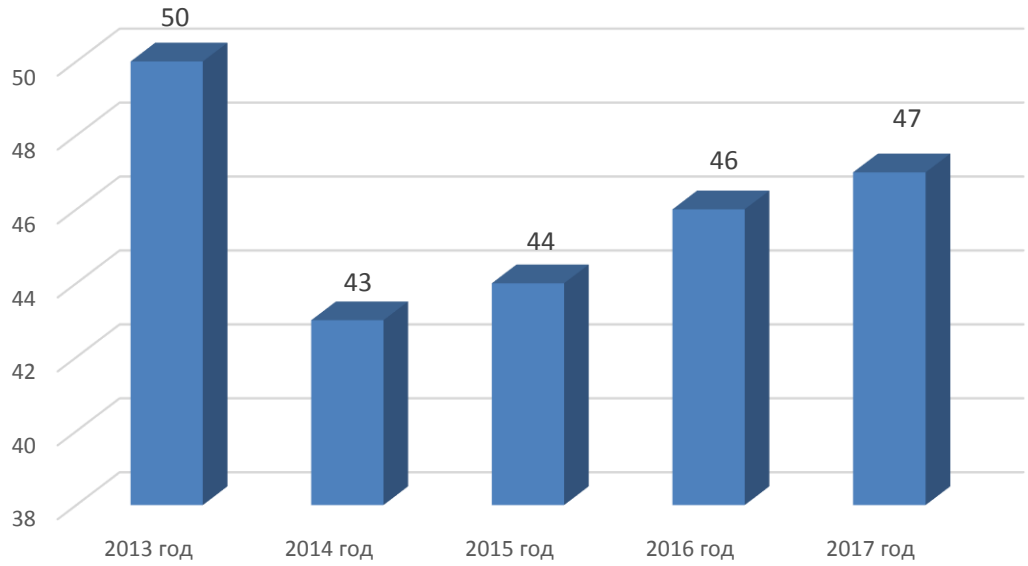

Figure 2 – Dynamics of industrial enterprises in the city of Aksu and Aksu rural zone

The study of quantitative and qualitative aspects of industry, in accordance with table 4 and shows that the main share of industrial production falls on the manufacturing industry, the share of which is 83.7%. The manufacturing industry is subject to positive dynamics.

Table 4 –Dynamics of industrial production by types of economic activity in the city of Aksu and Aksu rural zonemillion tenge

Names of indicators	Years			
	2014	2015	2016	2017
Industry, total	284198,80	285336,12	387418,62	522504,57
Miningandquarrying	1373,60	1323,20	1466,21	1511,31
Manufacturingindustry, total	230781,96	222382,38	314123,16	437438,45
- foodproduction	1454,90	2021,39	1906,05	3753,27
- lightindustry	200,54	148,89	159,21	153,65
-manufactureofwoodenproducts	5,79	1,59	0,00	0,96
- manufacture of chemicals and chemical products	17,04	29,36	54,57	49,58
- production of rubber and plastic products	703,80	228,52	427,61	466,55
- production of other non-metallic mineral products	200,82	193,96	139,07	279,40
- ferrousmetallurgy	228096,53	218170,66	310477,05	430284,22
- manufacture of finished metal products, except machinery and equipment	0,10	0,00	0,00	8,26
- repair and installation of machinery and equipment	62,09	1553,36	927,10	2381,45
- furnitureproduction	5,43	4,48	3,23	17,16
Electricity, gas, steam and air conditioning:	51208,37	60624,38	70517,18	82425,32
Water supply,Sewerage system, waste collection and distribution control	834,87	1006,17	1312,08	1129,48

The energy sector is also developing dynamically in the structure of the industry. The share of this industry in the structure of industrial production is 15.78%.

Less than one percent of the structure of the manufacturing industry is occupied by the volume of food production, which indicates a very mediocre functioning and development of the agro-industrial complex.

Small and medium-sized businesses in the city of Aksu and Aksu rural zone operates on the following priorities:

- development of the consumer and market sectors of the economy;
- development of agriculture, processing industries in the agricultural sector.

In the field of small and medium-sized businesses there is a disparity, directly between small and medium-sized enterprises.

According to tables 5 and 6, the number of small enterprises greatly outweighs the number of medium-sized enterprises.

It should be noted that the dynamics of small and medium-sized businesses is cyclical. In the strategic time period, the number of small and medium-sized businesses has been subject to decline.

Table 5 – Dynamics of existing medium-sized businessesnumber of units

Names of indicators	Years				
	2014	2015	2016	2017	2018
Number of medium-sized enterprises in Aksu district	7	6	4	4	5

Table 6 – Dynamics of existing small businesses in Aksu district

Names of indicators	Years				
	2014	2015	2016	2017	2018
Legalentities (LLP, JSC)	182	215	190	213	253
Individualentrepreneur	2459	2448	2479	2109	2150
Farms/ peasant agriculture	209	209	216	197	215
Total	2850	2872	2885	2519	2618

Innovative development of the city of Aksu and Aksu rural zone is aimed at promoting the implementation of state strategic programs of industrial and innovative development.

The current state of innovative development of production and economic sphere can be characterized by the following trends:

- dynamics of innovation-active leading industrial enterprises;
- level (degree) of innovative activity of leading industrial enterprises;
- dynamics of investment in innovation (quantitative and qualitative aspects);
- the structure of investment in innovation.

In the city of Aksu, in the strategic time period, an innovative potential was formed, in which, in accordance with figure 3, about 40 industrial enterprises are involved, while from 32 to 34 enterprises are steadily working in innovative areas of production and economic activity.

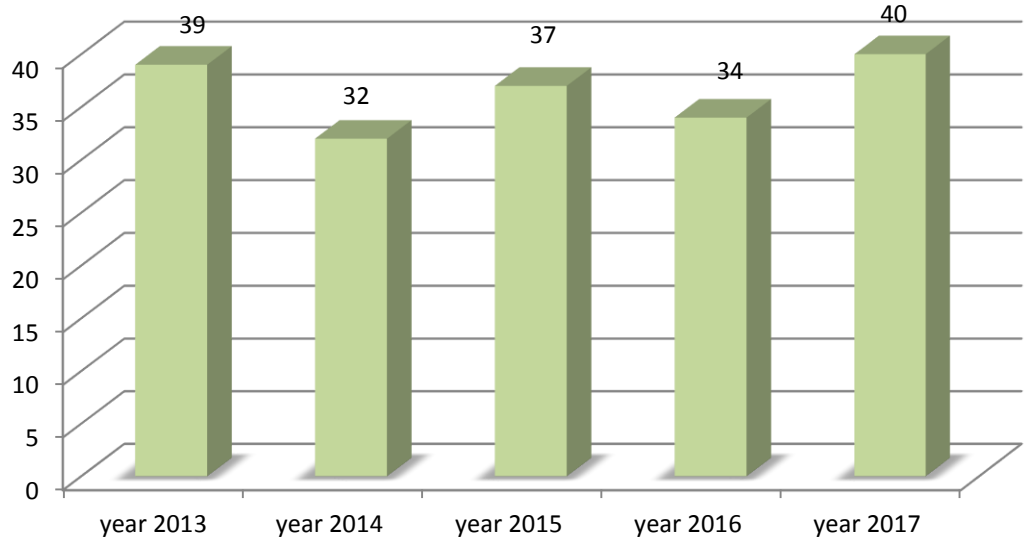

Figure 3 – Dynamics of innovation-active leading industrial enterprises in the city of Aksu and Aksu rural zone

The level of innovation activity of industrial enterprises is largely higher than the average level of the Republic and in accordance with figure 7, as of 2017 is at the level of 25%. The minimum level of innovation activity was in 2016.

Table 7 – Dynamics of investments in innovations in the system of functioning of the industrial economy of the city of Aksu and Aksu rural zone

milliontenge

Names of indicators	Years				
	2013	2014	2015	2016	2017
Productinnovation	225,8	0	-	6 476,5	9528,3
Processinnovation	4 888,7	3 774,8	-	4 521,0	1315,6
Marketinginnovation	0	0	-	102,8	0,4
Organizationalinnovation	0	0	-	70,0	105,7
Total	5114,5	3774,8	-	11170,3	10950

Research and analysis of innovative development of industrial and economic spheres show that the most innovative activity is inherent in the leading industrial enterprises. There is practically no data on innovative activity of enterprises in the sphere of small and medium-sized businesses. There are also significant reserves for the development of process innovations, which play a crucial role in improving the competitiveness of enterprises.

In accordance with figure 4, the total aggregate share of investments in the commodity sector of the economy as of 2017 amounted to 61,79%. The total share of domestic investments in fixed assets amounted to 85,7%.

Table 4 – Dynamics of investments in fixed capital in the system of functioning of the economy of the city of Aksu and Aksu rural zone million tenge

Names of indicators	Years				
	2013	2014	2015	2016	2017
Domestic investments in fixed capital (raw materials sector of the economy)	26007	20469	33213	30973	48703
External investments in fixed capital (raw materials sector of the economy)	2852	3810	2264	5132	6773
Domestic investments in fixed capital (non-resource sector of the economy)	17013	12612	17412	16940	28234
External investments in fixed capital (non-resource sector of the economy)	2852	3790	2264	5132	6064
Total	48724	40681	55153	58177	89774

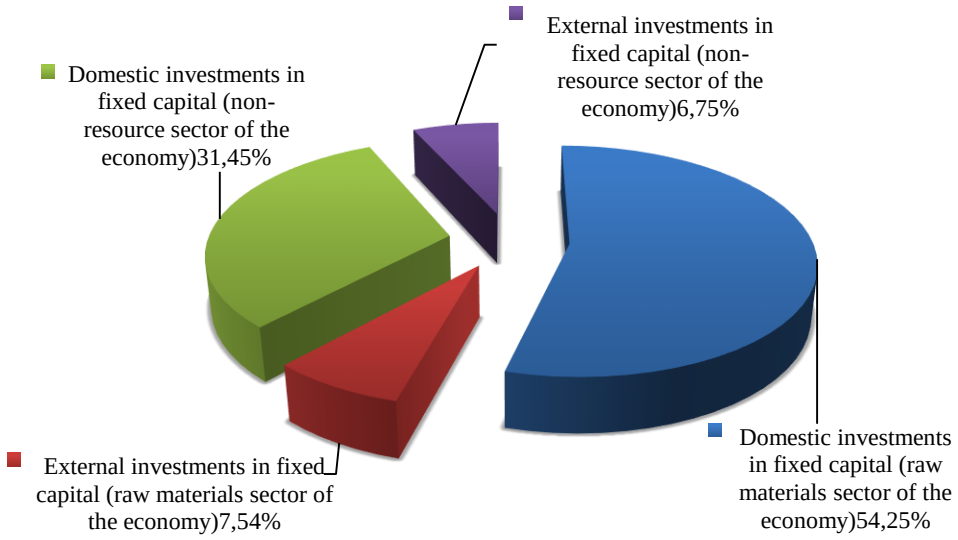

Figure 4 – Fixed capital investment structure in the economic system of Aksu city and Aksu rural zone

The main reserves for the development of investment activities are:

- creation and expansion of opportunities to attract foreign investment in the dynamic development of the non-resource sector of the economy with a priority on small and medium businesses;
- creation and expansion of opportunities to increase investments not only in fixed capital, but in the organization of production, HR-resources.

Conclusion

For creation, improvement and development of infrastructure support of industrial and innovative activity of the enterprises of the region, the corresponding economic model including a number of interconnected organizational elements.

In the system of functioning and development of production and economic potential, the following infrastructure elements that are absent at the present stage can be practically applied:

- science and technology Park (laboratory branch assignment);
- the volunteer recruitment centre of human resources (Regional HR-center);
- engineering center;
- contract production in industry areas;
- consulting center;
- business incubator;
- logistics center-HUB.

In modern conditions of market economy, in the city of Aksu there is no effectively functioning branch scientific and technological Park (Technopark). The Technopark created in Pavlodar region has a declarative character and does not justify its essence taking into account the quantity and quality of fixed assets, working capital and HR-resources.

The creation of a real-functioning Technopark in the city of Aksu, with direct partnerships in the "production – science – education" system, would increase the level of innovative activity of industrial enterprises and the competitiveness of regional economies.

The activities of the science and technology Park will be aimed at the intensification of innovative processes in such industries as:

- petrochemistry;
- metallurgy;
- engineering;
- alternative ("green") energy;
- processing of agricultural products in agriculture.

The Technoparkis considered as a territorial property complex, which combines research laboratories equipped with high-tech equipment, experimental production facilities of the industry, business centers, exhibition grounds, educational institutions, as well as service facilities (means of transport logistics, access roads, mini-residential areas, security system).

The main, leading main production Fund (capital) of the science and technology Park should be modern specialized high-tech laboratories for all types of research and development work. The Technopark should be of a public nature and all business entities can be its residents.

Over the past three years, the industry of Aksu district has reached sustainable development (real growth rates increased from 0.4% to 35%). Industry is represented to the maximum extent by large enterprises, production and economic activity of which is very little integrated and correlated with the development of the market sector, the sector of small and medium-sized businesses, agriculture, social sphere, the sphere of development of HR-resources. As a result, the social sphere, business environment, investment climate, infrastructure development, taking into account the SWOT analysis, are mediocre satisfactory condition and need systemic reform and development in the areas presented in this research work.

In the near future, the implementation of measures for the development of the economic system of the Aksu district will significantly improve the business environment and bring it to sustainable trends of progressive functioning.

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МОНОҚАЛАЛАРДЫ ТҰРАҚТЫ ДАМЫТУ, ЭКОНОМИКАНЫ ТҰРАҚТАНДЫРУ ФАКТОРЫ РЕТІНДЕ

Аннотация. Мақалада стратегиялық маңызы бар моноқалалардың әлеуметтік-экономикалық даму тиімділігін арттыру мәселелері баяндалған. Қазіргі экономикалық жүйелер аумақтық бөлу және шоғырлану қағидаттарына негізделеді, ерекше экономикалық рөл тек метрополитендерге, ірі және орта қалаларға ғана емес, сонымен қатар іргелес аумақтары бар шағын қалалық аудандарға да беріледі. Қазақстан Республикасы экономикасының тәжірибесінде көптеген шағын қалалар ұзақ уақыт бойына моноқалалық экономикалық құрылымға ие болды. Зерттеу авторлары Ақсу моноқаласын негізге алды.Мұндай қалалардың индустриясы технологиялық дамудың төмен деңгейімен, шағын және орта бизнестің дамуымен, демографиялық тартымдылығымен сипатталады. Нәтижесінде шағын қалалар мен іргелес аумақтық аудандардың экономикалық жүйелері бәсекеге қабілеттіліктің төмендігін көрсетеді. Сонымен бірге, әлемдік тәжірибе шағын қалалар мен аумақтардың әлеуметтік-экономикалық мәселелерін сәтті шешудің мысалдарын көрсетеді және көрсетеді.Мақалада бірқатар өзара байланысты ұйымдастыру элементтерін қамтитын экономикалық модельді қолдану арқылы шағын және орта бизнес есебінен моноқаланың экономикасының дамуына бақыланатын әсер ету мәселесінің шешімі ұсынылған.

Түйін сөздер: тұрақты даму, әлеуметтік-экономикалық даму, моноқалалар, экономиканы әртараптандыру.

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УСТОЙЧИВОЕ РАЗВИТИЕ МОНОГОРОДОВ, КАК ФАКТОР СТАБИЛИЗАЦИИ ЭКОНОМИКИ

Аннотация. В статье освещены вопросы повышения эффективности социально-экономического развития моногородов стратегического значения. Современные экономические системы выстраиваются на принципах территориального размещения и сосредоточения, при этом особая экономическая роль отводится не только мегаполисам, крупным и средним городам, но и малым городским массивам с прилегающими территориями. В практике экономики Республики Казахстан, многие из малых городов на протяжении длительного периода времени имеют моноотраслевую экономическую структуру. Авторы исследования взяли за основу моногород Аксу. Для промышленности таких городов характерен невысокий уровень технологического развития, развития малого и среднего бизнеса, демографического притяжения. Как следствие экономические системы малых городов и прилегающих к ним территориальныхокругов демонстрируют невысокую конкурентоспособность. Вместе с тем, мировая практика показывает и демонстрирует примеры успешного решения социально-экономических проблем малых городов и территорий. В представленной статье рассматривается решение задачи управляемого воздействия на развитие экономики моногорода за счёт малого и среднего предпринимательства путём использования экономической модели, включающая ряд взаимосвязанных организационных элементов.

Ключевые слова: устойчивое развитие, социально-экономическое развитие, моногорода, диверсификация экономики.

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ESSENCE, MODERN DEFINITION OF INTELLECTUAL PROPERTY AND THE PROCESSES OF ITS COMMERCIALIZATION

Abstract. This article discusses the classification of intellectual property institutions, and presents a range of intellectual property objects. The article presents also the nature of their use, analyzes the domestic and foreign researchers' scientific approaches to the problems of classifying intellectual property objects that we study. This article studies the domestic and foreign legislative framework of the definition we are studying to determine objects for commercialization.

Keywords: intellectual property, types of intellectual property, commercialization, objects of commercialization.

Currently the question of intellectual property in Kazakhstan is boiling down to the following: will Kazakhstan exist as a country with its own full-fledged intangible assets of intellectual property that create high value added and share in the national gross domestic product, as China and India successfully do, greatly increasing its capitalization, or its individual pieces will be subject to external control by the states where the market economy has already taken place (as is done in the most economical backward countries of Africa and Latin America).

In order to avoid the last option, it is not just necessary to create a completely new non-material economy from scratch "... first of all, it is necessary to ensure the development of such areas of the "economy of the future" as alternative energy, new materials, biomedicine, big data, Internet of things, artificial intelligence, blockchain and others. The place and role of the country in the global world will depend on them in the future"[1], where the right and intellectual property associated with the production of scientific and technological progress products will actively promote their commercialization.

Thus, successful results in the field of technology transfer (industrial property) can be achieved with the availability of appropriate resources, proper organization and the optimal combination of efforts to protect intellectual property rights in various sectors that promote the promotion and commercialization of intellectual property [2]. It is the country's intellectual potential that is the driving factor for the development of the economy [3].

In this article we will reveal the economic essence of the commercialization of intellectual property, and not a complete list of problems hindering the effectiveness of this process.

A definite opinion on the types and objects of intellectual property can be made by considering the Civil Code of the Republic of Kazakhstan (CCRK), intellectual property laws, as well as confidentiality agreements (agreements) or transfer of know-how rights, licensing agreements, etc. The fundamental law for all legal policy and development of the main parts of the legal system is the Constitution of the Republic of Kazakhstan. Article 20 of the Constitution of the Republic of Kazakhstan guarantees freedom of creativity. This laconic phrase creates a legal basis for the development of a large block of complex regulatory acts - legislation on intellectual property [4].

Unfortunately, the Constitution of the Republic of Kazakhstan dated August 30, 1995 does not contain the very concepts of "intellectual property", "intellectual property objects", since in the legal aspect it allows to expand the conceptual apparatus with respect to intellectual property objects, in the case of legal registration of other objects in the category being studied, previously not identified as the object under study.

For comparison - Article 44 in the Constitution of the Russian Federation, December 12, 1993, devoted to the freedom of literary, artistic, scientific, technical and other types of creativity, contains the provision that "intellectual property is protected by law [5].

Despite the rapid development of legislation in the field of intellectual activity, it should be noted that Kazakhstani legislation currently lacks a clear definition of the concept of "intellectual property", while such a term (as well as terms equated to it, denoting the same set of rights, for example, the term "exclusive right") is used in the Constitution of the Republic of Kazakhstan, in the Civil Code of the Republic of Kazakhstan, and in a number of republican laws.

In international and domestic regulatory and legal acts of the Republic of Kazakhstan there are similar interpretations of this term, differing primarily in the scope of the rights covered.

In accordance with paragraph 8 of the Article 2 of the above World Intellectual Property Organization (WIPO) Convention "intellectual property" includes rights relating to: literary, artistic and scientific works; performing activity of artists, sound recordings, radio and television programs; inventions in all areas of human activity; scientific discoveries; industrial designs; trademarks, service marks, brand names and commercial designations; protection against unfair competition, as well as all other rights relating to intellectual activity in the industrial, scientific, literary, artistic fields [6].

Kazakhstan's national legislation also contains norms from which the concept of the objects in question can be understood. First of all, this is the Civil Code of the Republic of Kazakhstan (CC RK), the Law "On Copyright and Related Rights, June 10, 1996. To some extent, the articles 961 - 970 of the Special Part of the Civil Code of the Republic of Kazakhstan are devoted to defining the essence of the concept of intellectual property.

Article 961 of the Special Part in the Civil Code of the Republic of Kazakhstan established that the objects of intellectual property rights include: results of intellectual creative activity; civil turnover participants' means of individualization, goods, works and service.

In turn, the results of intellectual creative activity include: works of science, literature and art; performance, soundtracks and broadcasts; broadcast organization; inventions, utility models, industrial designs; selection achievements; integrated circuit topologies; undisclosed information, including trade secrets ("know – how"); other results of intellectual creative activity in cases stipulated by the Civil Code of the Republic of Kazakhstan or other legislative acts [7].

The means of individualization of participants in civilian circulation, goods, works, or services include: brand names; trademarks (service marks); appellations of goods origin (indication of origin); other means of participants' individualization in civil turnover, goods and services in cases provided for by the Code and legislative acts.

As can be seen from the comparison of the text of Article 961 in the Civil Code of the Republic of Kazakhstan and the WIPO Convention, the absolute majority of the objects listed in its text, coincide with those stated in the mentioned Convention, with the exception of the protection of unfair competition [8].

The analyzed article is very important for a correct understanding of what is the object of intellectual property, although it does not contain a specific definition of such an object in its text. The study of the essence of intellectual property implies its objective characteristic. Theoretically, this problem is not sufficiently developed, as evidenced by the abundance of points of view on the classification of intellectual property objects that do not provide an unambiguous understanding of the objects under study, demonstrating a large range of characteristics from various sides.

The text of the Article 961 in the Civil Code of the Republic of Kazakhstan develops the position of WIPO. Not just a list of objects is given, but their system and classification is given. As can be seen from the review of the article, there are two groups of intellectual property objects determined by their composition: the results of intellectual creative activity and the means of participants' individualization in civilian circulation, goods, works and services.

A further review of the composition of the two selected groups shows that the list of objects for each of these groups is not complete. This allows us to take into account the prospects of scientific and technological development and to cover with legal regulation a new, previously unknown achievement of science, technology, but after the adoption of it the norms in the Civil Code of the Republic of Kazakhstan or other legislative act. That is why Internet domains that are quite common today, pictograms (schematic images containing reference information), innovation proposals, discoveries, etc., are not protected by the

legislation of the Republic of Kazakhstan, since they are not mentioned as objects of intellectual property in them.

A review of two groups of intellectual property rights shows again how diverse objects are included in this broad concept.

All objects listed in this article can be divided into independent institutions - copyright and neighboring law; industrial property law (patent law); the right to means of individualization (the right to a trademark); the right to breeding achievements; the right to topology of integrated circuits [9].

Objects of copyright, according to the Article 7 of the Law of the Republic of Kazakhstan "On Copyright and Related Rights" are: literary works (literary - artistic, scientific, educational, journalistic, etc.); dramatic and musical dramatic works; screenplays; works of choreography and pantomime; musical works with and without text; other works.

According to Art. 985 of the Civil Code of the Republic of Kazakhstan, related rights apply to productions, performances, phonograms, programs of organizations, broadcasting and cable broadcasting.

The main special law regulating this statement is the Law of the Republic of Kazakhstan No. 6-1 "On Copyright and Related Rights" dated June 10, 1996.

Inventions, utility models, industrial designs; selection achievements; integrated circuit topologies; service marks and appellations of origin; undisclosed information refers to the Institute of Industrial Property Law.

The term "object of industrial property" is not used in the Civil Code of the Republic of Kazakhstan, but it is used, in particular, in the text of the Patent Law of the Republic of Kazakhstan. He came to the Civil Law of the Republic of Kazakhstan from international legal relations regarding intellectual property, where he is actively used in connection with the participation of almost all countries of the world, including Kazakhstan, in the Paris Convention for the Protection of Industrial Property of March 20, 1883.

In turn, industrial property rights distinguish independent institutions: the institute of patent law, which includes issues of legal regulation of inventions, utility models; industrial designs; the institute for means of participants' individualization in civil turnover, goods and services, covering the legal regulation of company names, trademarks, service marks and appellations of goods origin.

The main special laws regulating the issues of emergence, use and protection of rights to specified objects are the Patent Law of the Republic of Kazakhstan dated July 16, 1999, the Law on Trademarks, Service Marks and Appellations of Goods Origin of July 26, 1999.

They stand apart, forming a separate group of so-called "atypical objects of intellectual property" in the literature, Breeding achievements; integrated circuit topologies; undisclosed information, including production secrets (know-how). Special laws that develop the norms in the Civil Code of Kazakhstan on these objects are the Law on Protection of Breeding Achievements of July 13, 1999, the Law on Protection of Topologies of Integrated Circuits of June 29, 2001. Repeated attempts to adopt a law on trade secrets or the main issues of the legal regime of undisclosed information, including secrets of production, know-how, etc., were not crowned with success.

Definitions that reveal the essence of the intellectual property items listed in this article are contained in other articles of the Civil Code of the Republic of Kazakhstan, as well as in special laws on certain types of intellectual property items. So, Art. 2 in the Law on Copyright discloses the concept of objects of copyright and related rights - works, performances, phonograms, transmissions of the organization of air and cable broadcasting. Article 991 in the Civil Code of the Republic of Kazakhstan and Articles 7,8 in the Patent Law defines the invention, utility model and industrial design. In Art. 1006 in the Civil Code and Art. 2 in the Law on Breeding Achievements the concept of breeding achievements is given. Section 1 of the Topology Act defines the topology of an integrated circuit. In the Art. 38 in the Civil Code the concept of brand name is disclosed, and in the Art. 1024 of the Civil Code and in the Art. 1 of the Law on Trademarks is the definitions of a trademark, service mark and appellation of goods origin disclosed.

There is no definitions of undisclosed information in the legislation. The idea of it can be obtained from the interpretation of Articles 126, 1017 - 1019 in the Civil Code of the Republic of Kazakhstan.

As can be seen from the text analysis the Art. 961 in the Civil Code of the Republic of Kazakhstan belongs to the category of the most important "system-determining" articles of the entire sub-institute of civil law called "intellectual property law", as it contains a classification of all objects of intellectual property protected by law.

Thus, as follows from our previous review, a sufficiently developed legal framework for the regulation of intellectual property as a whole and its individual types exists in the republic. In addition, we note that it was the international agreements and acts mentioned in Appendix 1 that had a significant impact on the formation of domestic legislation on intellectual property.

Although our study revealed that there is no specific definition of intellectual property in the extensive list of official regulatory and legislative documents related to intellectual property. As already revealed, one way or another, they are defined through the category of rights.

In the above classification of intellectual property institutions, attention is paid primarily to institutional and legal aspects. The legal criterion for the classification of intellectual property narrows their range, removes many of the results of intellectual activity from the list [10]. For the purposes of modern economic analysis, in addition to the legal regime, it is necessary to take into account other characteristic features of intellectual property objects and institutions.

The spectrum of intellectual property object (IPO), as well as the nature of their creation and use is very diverse. Differing from each other, IOPs at the same time have a number of common features that allow grouping them according to one or another criteria. The identification of such criteria and the classification of the relations of intellectual property in accordance with them makes it possible to further clearly define the concept of intellectual property.

Considering all existing approaches in full does not seem appropriate for us. Based on the topic, the research will consider those scientific approaches that may be of practical importance for understanding the features of commercialization, that is, the involvement of intellectual property in economic circulation within the industrial-innovative sphere.

Among the domestic researchers who study the classification of intellectual property objects, the approach of Kenzheguzin M.B., Dnishev F.M., Alzhanova F.G. is interesting. In their monographs these researchers justify the need to introduce the status of state intellectual property in relation to objects created on the basis of funding from state budget funds.

We consider it expedient to introduce such a status of intellectual property. The rationale for this may be the relationship of the category of "intellectual property" with the category of "property" defined in the first section. Based on this, we propose to consider the form of ownership in the Republic of Kazakhstan.

. The Civil Code of the Republic of Kazakhstan defines the legal space for private, state and mixed forms of ownership.

In paragraph 1 of the Art. 6 of the Constitution of the Republic of Kazakhstan state and private property are separately distinguished: "In the Republic of Kazakhstan, state and private property are recognized and equally protected" [11]. We also noted about the relationship of "property" as a generic category and "intellectual property", as its species, which preserves the basic properties of the first (generic), therefore, intellectual property can act in the form of private, public property. According to Nigmatullina L.G. within intellectual private property, one can distinguish intellectual individual-private property (of one author) and intellectual collective property — private property (groups of authors) [12].

Some authors believe that intellectual property can be distinguished depending on the nature of cognitive, creative activity. Objects of industrial property are mainly the results of scientific and technical creativity, objects of copyright results of literary - artistic and scientific creativity, objects of related rights - the results of performing activities, production secrets relate to any type of activity. This classification indicates that the author actually proceeds from the principles of legal protection.

In the dissertation of Tatieva M.M., who relied on scientific research of Khan V. A., it was proposed to allocate only those types of intellectual property that are directly involved in the production process and call them scientific intellectual property. It gives a definition: "... scientific intellectual property - ownership of the results of scientific research, experimental design and experimental technological works" [13]. Other types of intellectual property are related to the regulation of social legislation. In his research Tatieva M.M. proposed a systematic structure of intellectual property. In accordance with its classification, intellectual property consists of industrial property, copyright, know - how (secrets) and scientific discoveries.

A similar classification can be determined by reviewing the scientific works of G. Barysheva. In her opinion, it seems promising to consider three types of property from the point of view of the analysis of intellectual property: intellectual property, scientific intellectual property, industrial property [14].

Advantages of classifications of Tatieva M.M. and Barysheva G.A. is the expansion of the range of intellectual property, the inclusion of scientific discoveries and other theoretical knowledge.

However, it is necessary to take into account that, according to Bromberg G.V. among the objects of intellectual property, scientific discoveries should not appear, since the cognitive results, like any analytical knowledge, being an intellectual product, are not intellectual goods and do not give any monopoly rights. However, this category among the objects of intellectual property is mentioned. Apparently, this is indicated by the recognition of the significance of large-scale scientific results on which the inventions are based. On the other hand, the example of the USSR could have an effect here, where discoveries were registered by the patent office (Committee for Inventions and Discoveries) and given diplomas, which, however, were only a moral incentive and a form of recognition of a scientist from the society [15].

Considering further the topic of our research, let us turn to the definition of intellectual property based on the importance of commercialization of intellectual property in the innovation process. Due to the fact that the commercialization of intellectual property is part of the innovation process, we considered the classification of intellectual property proposed by N. Urazbayeva. In accordance with the degree of implementation of the innovation function of intellectual property objects in his monograph N. Urazbayeva. highlights: objects of intellectual property directly used as innovations, objects of intellectual property indirectly used as innovations, objects of intellectual property not used as innovations.

"Intellectual property objects used as innovations (mainly industrial property objects embodied in a specific material shell, which are used in their owner's own production; partly copyright and related rights objects (music, art and other works that are used, for example in their own entertainment industry owners).

Objects of intellectual property indirectly used as innovations (mainly industrial property objects that are used as innovations after the legal procedure for transferring rights to use them to other business entities; partly objects of copyright and related rights that are used after the rights to use them are exercised other objects (for example, music screensavers for computers, etc.) "[16].

Nigmatullina L.G. suggests "classifying intellectual property according to the specifics of acquiring a tangible form of expressing new knowledge into: spiritual (literary and artistic activity results); scientific (the results of fundamental scientific creativity); industrial (results of applied scientific and technical creativity); commercial (the results of intellectual activity that promote the promotion of the product to the consumer, for example, means of individualization). The proposed classification allows to determine the degree of susceptibility of intellectual property to commercialization. Thus, the spiritual and scientific results of intellectual activity, being in the public domain, are the least of all, and industrial and commercial are more susceptible to commercialization "[17].

Based on scientific approaches of Urazbayeva N.A., Tatieva M.M., Barysheva G.A. and Nigmatullina GB, we will try to further develop the classification of intellectual property based on the dissemination of the results of innovative entrepreneurship. We propose to classify intellectual property by the degree of commercialization of:

- objects of intellectual property subject to commercialization (patents for inventions, certificates for industrial designs and utility models; means of individualization);
- objects of intellectual property indirectly subject to commercialization (trademarks, service marks and commercial names, if they are not part of technology transfer transactions; results of applied scientific and technical creativity).

The above classifications determine the susceptibility of intellectual property to commercialization in the framework of the innovative development of Kazakhstan. For our study, the proposed classification criteria help reveal the essence of the commercialization of intellectual property.

Summarizing the definitions of intellectual property that exist in the economic literature, we propose the following interpretation. Intellectual property is a system of attribution relations that develop between economic agents in the process of distribution, exchange and consumption of specific products of intellectual labor as objects of the innovation sphere.

As part of our study, it should also be noted that not all the results of intellectual labor are institutionally (subjectively) recognized as objects of intellectual property. Many of them, due to the fact that they do not correspond to the title of intellectual property, are used in the regime of general accessibility, that is, all economic subjects are endowed with equal opportunities and rights in relation not

only to ownership, but also to use these intellectual property results. Unlimited resource denies the possibility of extracting additional (compared to competitors) benefits from its use, and the absence of some signs, for example, rarity, does not allow this kind of intellectual activity to act as a commodity, that is, be subject to commercialization. These include the results of fundamental scientific research, which are represented by various types of scientific products: reports, articles, monographs, research reports, etc., where ideas, hypotheses, scientific propositions, discoveries, etc. take on material form.

The influence of criteria restricting a legal monopoly (in the form of a patent or other protection document) established by law is so significant that, according to some experts, no more than 10% of scientific developments can be commercialized, and the rest is scientific knowledge of the outside world, understanding of problems person and society, etc.

However, in our opinion, the unprotected results of intellectual activity that are objectively the intellectual property of the authors-creators (or other owners) of an intellectual product, under certain conditions, do not lose their product properties and, accordingly, can also be involved in the market turnover. In addition, the results of intellectual activity are not immediately institutionalized, that is, subjectively, recognized as objects of intellectual property. They pass a long way of patent examination (lasting two years or more), which is not always and not for all the results of intellectual activity ends with the issuance of a corresponding protection document confirming the title of ownership. In this period, in our opinion, it is also possible to use economic results of intellectual activity, for example, in the mode of know-how.

It should be borne in mind that in practice often not all intellectual products that meet the eligibility criteria are patented in order to preserve for a time an absolute monopoly in this field of activity.

So, without exception, the results of intellectual activity, regardless of their institutional (subjective) recognition as objects of intellectual property, under market conditions can become objects of commercialization, which is reflected in Figure 1. This structure represents an attempt to combine economic and legal aspects of the intellectual property classification.

Real property right continues to be ensured not by its formal consolidation, but by the relations that develop between the actors of economic life [18].

Thus, relying on the research of the intellectual property objects nature existing in economics [19], it can be argued that intellectual property objects are the results of the social subjects interrelation entering into certain economic relations. The sphere of creation and use of intellectual products can be characterized by a plurality of subjects, which determines their various interrelations.

Our proposed classification of intellectual property does not exhaust the whole diversity of intellectual property, in our opinion, it contains the criteria that further contribute to the disclosure of the essence of the commercialization of intellectual property.

Scientific works of Kenzheguzin, M.B., Dnisheva, F.M., Alzhanova, F.G., Bromberg, G.V., Urazbayeva, N.A., Tatieva, M.M., Barysheva, G.A., Nigmatullina, G.B., Sharanova N.A., the current regulatory and legal framework of the Republic of Kazakhstan in relation to intellectual property objects shows that there are significant differences in the composition and characteristics of intellectual property objects.

Intellectual property is a system of attribution relations that develop between economic agents in the process of distribution, exchange and consumption of specific products of intellectual labor as objects of the innovation sphere.

The objects of intellectual property in the Republic of Kazakhstan can be divided into independent institutions - copyright and related law; industrial property law (patent law); the right to means of individualization (the right to a trademark); the right to breeding achievements; right to topology of integrated circuits.

The spectrum of intellectual property objects (IPO), as well as the nature of their creation and use is very diverse. Differing from each other, IPOs at the same time have a number of common features that allow grouping them according to one or another criteria. The identification of such criteria and the classification of the relations of intellectual property in accordance with them makes it possible to further clearly define the concept of intellectual property.

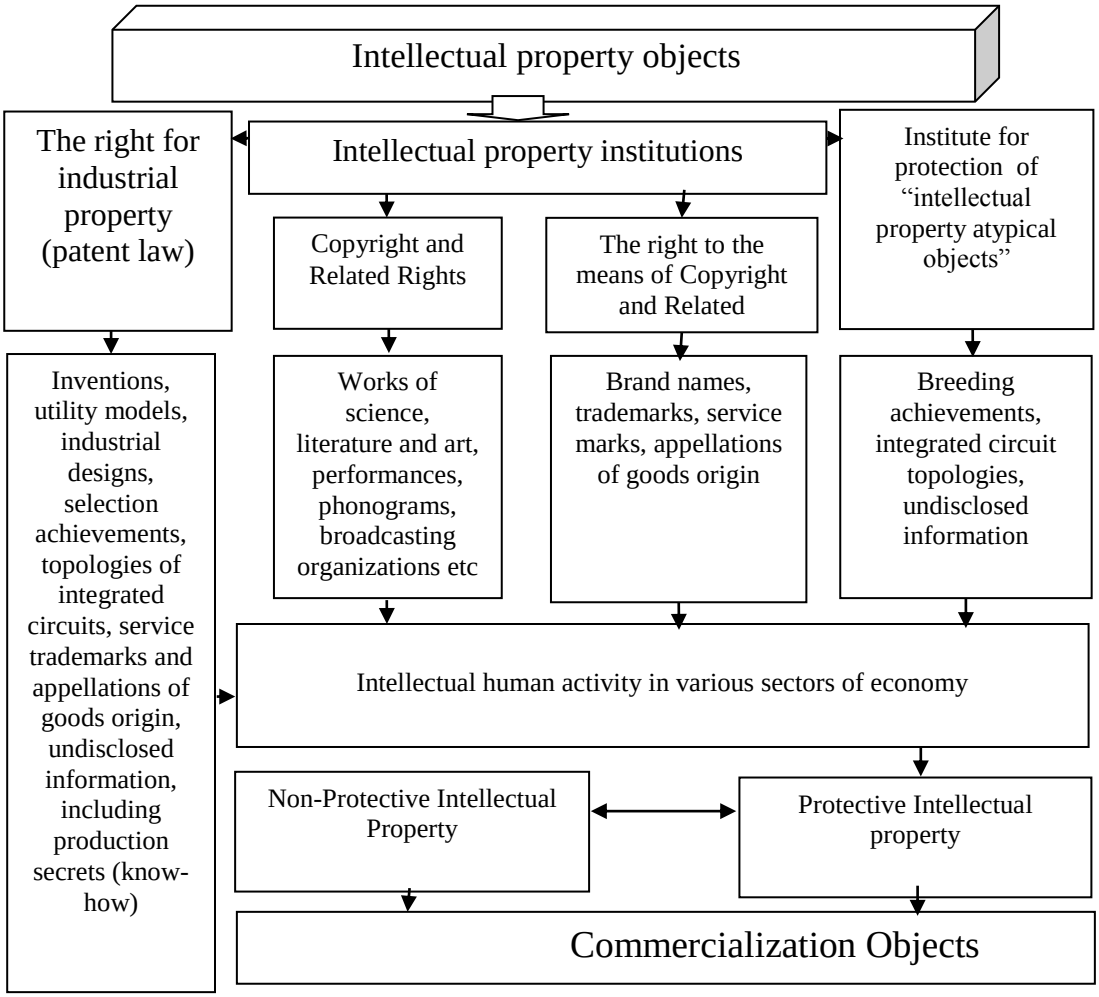

Figure 1 - Intellectual Property Structure

The system in the formation of intellectual property objects is absent, which negatively affects not only the practice of their use in the activities of individuals and legal entities, including in business valuation, but also in understanding possible protection. In this regard, we have proposed an integrated list of intellectual property that can be focused on high-tech markets and is subject to commercialization.

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ЗИЯТКЕРЛІК МЕНШІКТІҢ МӘНІ, ҚАЗІРГІ АНЫҚТАМАСЫ ЖӘНЕ ОНЫ КОММЕРЦИЯЛАНДЫРУ ПРОЦЕСТЕРІ

Аннотация. Мақалада зияткерлік меншік институттарының жіктелуі қарастырылады, зияткерлік меншік объектілерінің спектрі келтірілген, оларды пайдалану сипаты берілген, зияткерлік меншік объектілерін жіктеу мәселелерінің отандық және шетелдік зерттеушілердің ғылыми тәсілдері талданды, коммерциялан-дыру объектілерін анықтау мақсатында біз зерттеген дефинцияның отандық және шетелдік заңнамалық базасы зерттелді.

Түйін сөздер: зияткерлік меншік, зияткерлік меншік объектілерінің түрлері, коммерция-ландыру, коммерцияландыру объектілері

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СУЩНОСТЬ, СОВРЕМЕННОЕ ОПРЕДЕЛЕНИЕ ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ И ПРОЦЕССЫ ЕЕ КОММЕРЦИАЛИЗАЦИИ

Аннотация. В статье рассматриваются классификация институтов интеллектуальной собственности, приведен спектр объектов интеллектуальной собственности, представлен характер их использования, проанализированы научные подходы отечественных и зарубежных исследователей изучаемой нами проблематики классификации объектов интеллектуальной собственности, изучена отечественная и зарубежная законодательная база исследуемой нами дефиниции в целях определения объектов коммерциализации.

Ключевые слова: интеллектуальная собственность, виды объектов интеллектуальной собственности, коммерциализация, объекты коммерциализации.

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AGROTOURISM AND ITS USE IN KAZAKHSTAN CONDITIONS: INTERNATIONAL EXPERIENCE

Abstract. The article discusses the importance and economic importance of agricultural tourism in agriculture, the effectiveness of raising the prestige of rural settlements.

Keywords: agritourism, agriculture.

The tourism industry is one of the largest and fastest growing industries in the world. According to the World Tourism Organization (UNWTO) in 2014 tourism accounts for 9% of world GDP (taking into account direct and indirect effects), and 6% of world exports of goods and services.

About 100.9 million people are employed in this area, and every 11th job in the world is created in the tourism sector.

Tourism, influencing such related industries as telecommunications and transport, construction, trade, agriculture and others, contributes to the socio-economic development of the regions.

Kazakhstan, having a rich tourist and recreational potential, is characterized by an insufficient level of development of agritourism and tourism in general.

Agricultural tourism has been developed in many countries due to the decline in the economic importance of agriculture. The outflow of residents from the countryside to the city made the governments of different countries think about ways to increase the attractiveness of rural areas for living and working. One of the most effective ways to increase the prestige of rural settlements was agrarian tourism.

Agritourism is geographically tied to certain territories, therefore, the development of theoretical and methodological foundations for its development is associated with the development of the concept of "agritourism" in accordance with regional conditions and socio-economic background. In this regard, it is obvious that the concept of "agritourism" can vary significantly in different countries depending on the approaches of specialists to this type of activity.

Based on the existing set of definitions, agritourism can be considered from a geodemographic point of view, where agritourism is tourism outside the cities to an area with a low population density. And from a recreational point of view (organizing the production of a tourist product), this is a set of diverse services, starting with living in a rural house, nature-oriented types of leisure.

France is deservedly considered as the leader of agritourism in Western Europe. Every year, more than 7 million tourists visit France, preferring holidays in the countryside [1]. The main sectors of agrotourism specialization in France are wine and gastronomic tourism. In the coastal zone agritourism is optimally combined with beach tourism.

A distinctive feature of agritourism in France is a wide variety of leisure activities offered to tourists. Active state support for agritourism in France aims to preserve and develop living in rural areas, which occupy a significant share of the country's total area.

In accordance with the methodology adopted in the country, only holidays in settlements with a population of less than two thousand people, occupying about 80% of the total territory, are considered as the agro-tourism.

Italy is a worthy competitor for France in the field of agritourism. Despite the higher cost of services compared to France, the number of tourists choosing rural holidays in Italy annually is at least 2 million. The main means of accommodation for agritourists in Italy are agricola and masseri. Also a feature of agritourism in Italy is the legally regulated obligation of the farms accepting tourists not to stop agricultural production.

In Germany, there are about 10,000 agritourism enterprises that are members of regional and federal associations and rural tourism associations. This policy is based on both economic factors and the desire to maximize support for the cultural identity of the countryside. Also, for these reasons, agritourism in Germany often directly adjoins as event tourism. Folk festivals, fairs, folklore festivals and many other events are becoming a traditional component of rural recreation.

In England, over 25 thousand small enterprises work in agritourism, providing employment for about 400 thousand people [2]. Here, as in Germany, there is a predominant orientation towards the cohabitation of tourists and owners of agritourism farms. In England, serious attention is paid to environmental education, so agritourism farms often equip special areas for young pets, allowing children to take care of them.

Spain is very popular among foreign agritourists, their number annually amounts to more than one million people, exceeding the number of domestic tourists. In Spain, rural hotels located on large estates, farms (granfinca), and historical estates (fincahistórica) are the most common forms of accommodation for agritourists.

Experts include into the so-called "second wave" of the development of agritourism countries in which, along with economic (the desire to support the agricultural industry) and socio-psychological reasons (increasing the attractiveness of rural tourists in the minds), environmental factors associated with the need to reduce the load on the natural environment and cultural and historical centers, traditionally attracting large flows of tourists. It is customary to classify Cyprus, Greece, the USA, etc. into this group of countries. The main feature of the development of agritourism in these countries was that, based on the experience of the leading countries in this area, there was initially a high level of centralization of the solution to this problem at the level of state structures.

A typical example of this approach to the development of agritourism is Cyprus. In accordance with the aim, a comprehensive analysis of possible new directions of tourism development was carried out, the result of which was the state program for the development of agritourism in the country. In 1995, a Cyprus agritourism company was established. Currently, more than 60 registered agritourism farms offer a good rest in the countryside [3].

The "third wave" of agritourism development usually includes the countries of Eastern Europe, which later joined the EU and became the successors of its experience in this field. In addition to state support, the development of agritourism in these countries was facilitated by substantial financial assistance from the European Union.

Kazakhstan, having a rich tourist and recreational potential, is characterized by an insufficient level of development of agritourism and tourism in general. Its share in GDP (only accommodation and food services are calculated) is about 0.9%. The growth in demand for domestic and inbound tourism in Kazakhstan was observed in the period from 2000 to 2007, in 2017 the increase in the number of visitors compared to 2010 was 65.5%. The total number of all foreign residents who entered Kazakhstan in 2016 amounted to 6,509.4 thousand people, which is 1.2% more than in 2015. Most foreign residents came from three neighboring countries: the Republic of Uzbekistan (37.8%), the Russian Federation (24.4%) and the Kyrgyz Republic (20.7%). The main reasons for the visit were private visits (75.4%), while business trips amounted to (16.2%), for tourism purposes – less than 1%. [4].

In 2017 to Kazakhstan 5,279 trips were made and most of them were for business and professional purposes, tourism purposes also remained in a stagnant position. However, the number of citizens of the Republic of Kazakhstan who went abroad in 2017 amounted to 9,755.6 thousand people, which is 15.8% less than in 2016 and 54.1% more than trips made to Kazakhstan. Our citizens spend 1.6 billion USD for international travel, including tourism, business and other trips, while under the same article non-residents provided services worth about 1.5 billion USD. [5].

Thus, over the years, the country's balance of payments under the item "Travel" has been negative and amounts to about 109.3 million US dollars.

Kazakhstan remains a "tourist donor" for countries such as the Republic of Turkey, the People's Republic of China, the United Arab Emirates, and the Kingdom of Thailand, where the tourism industry is developing intensively, creating new jobs, improving the balance of payments structure, and increasing population welfare.

The demand of Kazakhstan tourists for outbound tourism represents a loss of business share for tourist destinations and accommodation facilities in Kazakhstan. Therefore it is natural to assume that with the qualitative development of tourism in the republic, a certain number of domestic tourists vacationing now abroad will prefer Kazakhstan tourist destinations, spending on tourism within the country.

The above trends are long-term and, as the practice of implementing the State Concepts on the development of the industry, based on these trends shows, until it is successful. However, there are methods for developing the industry that are more promising and cost-effective, and most importantly low-budget, short-term and having all the prerequisites for successful economic development. State support for tourism is a prerequisite for sustainable development of the industry.

International experience shows that an active state policy aimed at creating conditions for the development of tourism infrastructure, attracting private investors, creating a regulatory framework that provides favorable economic conditions for the activities of tourism industry entities, allows the tourism industry to take an important place in the socio-economic development of the country.

In accordance with the "Concept for the Development of the Tourism Industry of the Republic of Kazakhstan until 2023", agritourism is a relatively new and promising area, involving the formation and provision of comprehensive services for visitors, accommodation, meals, sightseeing services, leisure and sporting events, fishing and hunting, the acquisition of knowledge and skills, as well as the possibility of engaging in active tourism in rural areas [6].

Attractive features of agritourism are clean air, homely atmosphere, untouched nature, natural products, silence and unhurried life. This is a powerful tool for protecting the environment, contributing to the involvement of the local population, for which a careful attitude to nature will become economically viable. In the field of agritourism, according to the Concept, the following measures will be taken: the conceptual apparatus of agritourism activity has been introduced, including the concepts of rural tourism ("agritourism"), the popularization and promotion of "agritourism", the development of agritourism facilities in the countryside: guest houses, specialized private hotels in the form of stylized "agritourism villages", "fishing and hunting villages", etc.

However, the Concept is silent about the need to introduce more specific and effective measures for the development of agritourism. Moreover, there is no analysis of this direction in tourism, conditions and prerequisites for development are not defined, actions to popularize agritourism are not disclosed, and experience that has already been implemented in some areas of Kazakhstan is not taken into account.

Thus, in 2004 KTA launched four pilot projects funded by the Eurasia Foundation in four regions: Lepsinsk, Zhabagly, Katon-Karagai and Ridder. In these regions, eco-sites were created (villages where residents receive guests according to the concept of agritourism). In the East Kazakhstan region, the project "Golden Altai – wealth for the development of the region" was implemented, aimed at the development of agritourism in the Kazakhstani Altai, with financial support from the European Union. The goal of the project is to initiate and start the process of creating a market for tourism services by local residents and interested partner organizations. The project is being implemented in villages located on the territory of the Katon-Karagai National Park and in the environs of the West Altai Reserve. As a part of the Road Map for Development of Tourism Industry of the East Kazakhstan Region for 2015-2017, 14 projects were implemented, 11 of them in rural areas, which allowed to increase the number of people employed in this area. The most ambitious and large-scale agritourism projects in the East Kazakhstan region are the projects of the "Ubinskiye Napevy" ethnic festival and the Nomad art and symposium. About 400 guests came to the festival not only from Kazakhstan, but also from Belarus and Russia [7].

In 2018-2019, they continue agro and ethno-tourism trips to the Russian village with a study of the history of the Old Believers and to the Kazakh village in the family of hereditary golden eagles to familiarize tourists with the life of nomads, conducted by the travel agency of Valeriya Topolnyak.

Motivation for the development of agritourism in Kazakhstan is associated with:

- deterioration of the ecological and psychological situation in large cities;
- the desire to relax in ecologically favorable territories;

- the revival of interest in the elements of traditional folk culture: examples of folk architecture, cuisine, crafts, folklore; the growing interest in visiting the rural outback as an element of nostalgia for peasant collegiality; search for new sources to improve the financial situation of rural residents;

- the desire to expand the scope of communication;

-fierce competition in traditional areas of rural investment;

-search for new areas and objects of investment.

The task of agritourism is to give an impetus to the development of individual rural settlements, increase the income level of their residents, stop the migration flow from village to city by creating additional jobs, reducing social tension in the village by organizing a new specific sector of the local economy. According to official statistics, almost half of the population of Kazakhstan lives in rural areas, and the poverty level of villagers exceeds the urban level by more than 3 times.

In this regard, the creation of a large number of tourist facilities, not large in size, with well-organized agriculture (crop production, animal husbandry) and personal subsidiary farming of the owners of guest houses, as well as equipped tourist infrastructure with strict observance of international sanitary and hygienic standards and safety measures is required for tourists on vacation. The economic benefit for rural areas from the development of agritourism lies in the possibility of involving people older than working age in the tourism business (this category makeы up 31% in the structure of the rural population). In agrotourism, small farms should be primarily interested, since the service in the cost structure has a higher share of value added.

In connection with the foregoing, we proposed the basic concepts of the development of agritourism in Kazakhstan.

Table 1 – The main concepts of agritourism development in Kazakhstan

Agritourism development	Description	Tool
Organization of agritourism based on small family hotel industry, estates.	Private micro-hotels on the basis of the existing rural housing, agricultural and special facilities	Farm. Apiary. Fishing industry. Sports Complex. Camping and others.
Construction of large and medium private agrotourism facilities	Specialized private hotels, centers	Cultural and Ethnographic Center. Stylized agritourism village
Creation of agricultural parks in farms and agricultural cooperatives	Demonstration of national agricultural production	Agroforestry Park

Source: complied by the authors

Thus, world practice convincingly demonstrates the growing importance of agritourism both in the system of the tourism industry and the economy as a whole. The rapid growth of this sector of the tourism industry, which according to research is up to 6% per year, is provided by the following factors:

- agritourism acts as an effective tool for agricultural restructuring in the conditions of overproduction of agricultural products and increasing competition by transferring part of the agricultural business from the production sector to the service sector;
- agrotourism contributes to leveling the differences in living standards of rural and urban populations, overcoming poverty;
- thanks to agritourism, new opportunities appear for preserving cultural identity, maintaining and developing national traditions and ways of life;
- agrotourism meets the needs of a significant part of modern tourists who have environmental values, seeking to leave the urban space of the city for the duration of their holidays and to join the nature and origins of the national culture of both their country and other states.

Along with countries, having a positive experience in agritourism, many countries appear that are actively absorbing this experience and have already significant achievements in this type of activity. Such countries include India, China, Georgia, Belarus, Ukraine, Lithuania, Latvia, Estonia, Russia and many

other countries. In many foreign countries, agritourism is a fairly mature tourist destination that has gone through certain stages of development and formation, and therefore has valuable experience that is necessary for the development of agritourism in Kazakhstan.

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АГРОТУРИЗМ И ЕГО ИСПОЛЬЗОВАНИЕ В КАЗАХСТАНСКИХ УСЛОВИЯХ: МЕЖДУНАРОДНЫЙ ОПЫТ

Аннотация. В статье рассматриваются значимость и экономическая значимость аграрного туризма в сельском хозяйстве, эффективность повышения престижа сельских населенных пунктов.
Ключевые слова: агротуризм, сельское хозяйство.

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АГРОТУРИЗМ ЖӘНЕ ОНЫ ҚАЗАҚСТАНДА ПАЙДАЛАНУ: ХАЛЫҚАРАЛЫҚ ТӘЖІРИБЕ

Аннотация: Мақалада ауыл шаруашылығындағы аграрлық туризмнің маңыздылығы мен экономикалық маңызы, ауылдық елді мекендердің беделін көтеру тиімділігі қарастырылады.
Түйін сөздер: агротуризм, ауыл шаруашылығы.

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ROLE OF FINANCIAL MANAGEMENT IN ENTERPRISE MANAGEMENT

Abstract. This article discusses the process of managing the financial activities of an enterprise, which is based on a specific mechanism and represents a combination of the main elements of influence on the process of developing and implementing management decisions. An effective financial management mechanism allows to realize the goals and objectives it faces fully, contributes to the effective implementation of the functions and principles of enterprise financial management.

Keywords: financial management; management decisions; financial mechanism; financial activities of the enterprise.

In the modern economy, financial flows are the main object of management in any enterprise, because each economic decision is directly or indirectly associated with cash flows. Therefore, most managers, one way or another, have to interact with financial services in the implementation of their functional tasks.

Because finance is a specific area of economic relations associated with the formation, distribution (redistribution) and use of cash funds. At present, financial resource management is one of the main and priority tasks facing any enterprise. The priority of this direction in the system of enterprise management goals is determined by the fact that finance is the only type of resources that can change directly and with the smallest time interval in any other: means and objects of labor, work power, etc. Rationality, expediency and effectiveness of such a transformation in many respects establish the economic well-being of the enterprise, as well as of all entities interested in its functioning: owners, employees, contractors, state as well as society in whole.

The main role of financial resources in a market economy determines the need to allocate their management functions in an independent sphere of activity - financial management.

In order to disclose this concept - “financial management in national companies” first it is necessary to determine what is financial management in general, and what are national companies.

Over the past fifty years, significant changes have taken place in the terminology “financial management”. In the early years of development, it was considered as a subsection, a kind of branch of accounting. A significant part of the initial developments was essentially descriptive, and the arguments were based more on unsystematic observations. Over time, financial theories have been significantly influenced by economic theories, and evidence, in relation to specific issues, has become more rigorous and analytical. Indeed, the influence of economic theory is such that modern financial management is often regarded as a separate area of applied economics

Economic theories on the efficient allocation of limited resources have been adopted and developed into decision-making tools for managers. In the practical activities of companies, the factor of time and risks associated with the decision-making process was usually applied. For example, an investment decision should take into account both the length of the period during which the project is carried out and the degree of risk associated with this investment. This led to the fact that financial management is described as an economy taking into account time and risk factors [1].

Economic theories have also helped to understand the value of financial markets and institutions for business. Capital markets play a vital role in uniting borrowers and lenders, in the ability to choose the type of investment that best suits the risk requirements of investors, in assessing the effectiveness of a company using prices set for its shares [2]. The modern theory of financial management is based on the assumption that the main goal of a business is to maximize the welfare of its owners (shareholders). Peter Etrill defines financial management as a tool designed to help managers manage a company. Thus, the main tasks that financial management solves are the following:

- financial planning, which includes the development of financial forecasts and plans (for example, cash flow statements and profit and loss statements) that allow managers to assess the viability of the proposed method of action.

- assessment of investment projects, including directly evaluating projects and evaluating the comparative advantages of alternative proposals and assessing the risk associated with specific investment projects.

- financing decisions requiring a specific funding need and evaluating possible sources of finance. Not all funding needs are met from external sources; a part of the funds a company can produce internally from profit. Consequently, the proportion in which the enterprise reinvests the profit, rather than distributing it in the form of dividends, is an important decision.

- operations in the capital market, available funds can be found in the capital market, and therefore, it is necessary to understand how these markets work. The analysis includes an assessment of how financial resources can be raised from the capital market, how securities are valued, and what is the likelihood of one or another market reaction to the proposed investment and financing plans

- financial control, which is carried out at the stage of implementation of plans, so that managers can know that things are going according to plan. This may be monitoring and control of investment projects, control of stocks, debtors, creditors, liquidity [3].

t turns out that the currently widely used concept of "financial management" has been found to have numerous interpretations. But in general, experts agree on one thing - that financial management is the management of relations for the formation and use of monetary resources. It is in this understanding that financial management is considered in the works of such famous authors as I.T. Balabanov, I.N. Gerchikova, V.V. Kovalyov, L.P. Pavlova, R.S. Sayfulin, E.S. Stoyanova, A.D. Sheremet.

In practice, financial management is designed to resolve the contradiction that arises between the objectives of the economic activity of the enterprise and financial opportunities. Also, that financial management is the management of financial resources and financial activities of an economic entity, focused on the implementation of its strategic and current goals.

Financial management - as financial management of business entities, planning, financial analysis, as well as finding and distributing capital. It covers all major areas of finance and extends to all segments of the financial market. Financial management is also a type of management activity. It is a system of influence of the subject of financial management (financial manager) on its object in order to improve the latter. In addition, financial management is a form of entrepreneurship. Financial management is implemented in its inherent functions and has a pronounced specificity - cash flow management, so its functions are determined by the tasks of enterprise finance. Financial management in the simplest way can be defined as the art of managing financial flows [4].

Thus, as a conclusion, I would like to highlight my concept that financial management is the science of managing the finances of an enterprise, which is aimed at the effective achievement of its strategic and tactical goals. That is, it has been tasked to solve problems both in the current period in an operational manner and to implement effective financial resources management in the long term.

The study of the theoretical aspects of financial management and the systematization of the views of various authors allows us to formulate a definition in which the financial management system in national companies is understood as financial management, in which there are two main goals: the formation of resources and the optimization of financial flows with the choice of the most effective options. Financial activities, as part of the economic activities of enterprises, include all monetary relations associated with the production and sale of products, reproduction of fixed and circulating assets, and the receipt and use of income. The state of the enterprise's finances influences the provision of national and regional monetary funds with financial resources. Thus, financial management is the management of financial operations,

cash flows, designed to ensure the attraction, receipt of the necessary financial resources in the right time periods and their rational use in accordance with the goals, programs, plans, and real needs.

Financial management, along with production, investment, innovation and organizational, is an integral part of the general management of the enterprise. Therefore, the goals of financial management are subordinate to the general goals of enterprise management.

The main goal of financial management is to increase the welfare of the owners of the enterprise. We consider the management of the assets of an enterprise with a joint ownership form, having the most complex capital structure, increasing the well-being of its owners is nothing more than increasing the well-being of shareholders, which can be achieved by: the amount of earnings per share at present; period of profit; degree of risk of termination of profit payment; the effectiveness of dividend policy [5].

The main tasks of financial management include:

1) ensuring the formation of funds in an amount sufficient to cover the needs of the enterprise;
2) ensuring the efficient use of invested funds;
3) optimization of cash turnover and settlement policy of the enterprise;
4) profit maximization at an acceptable level of risk, taking into account the current taxation policy;
5) ensuring a stable financial position of the enterprise.

The fulfillment of all the above tasks is reduced to ensuring the most efficient cash flow between the enterprise and the financial markets. Financial management realizes its main goal and main tasks through the implementation of certain functions, which are systematized in Figure 1

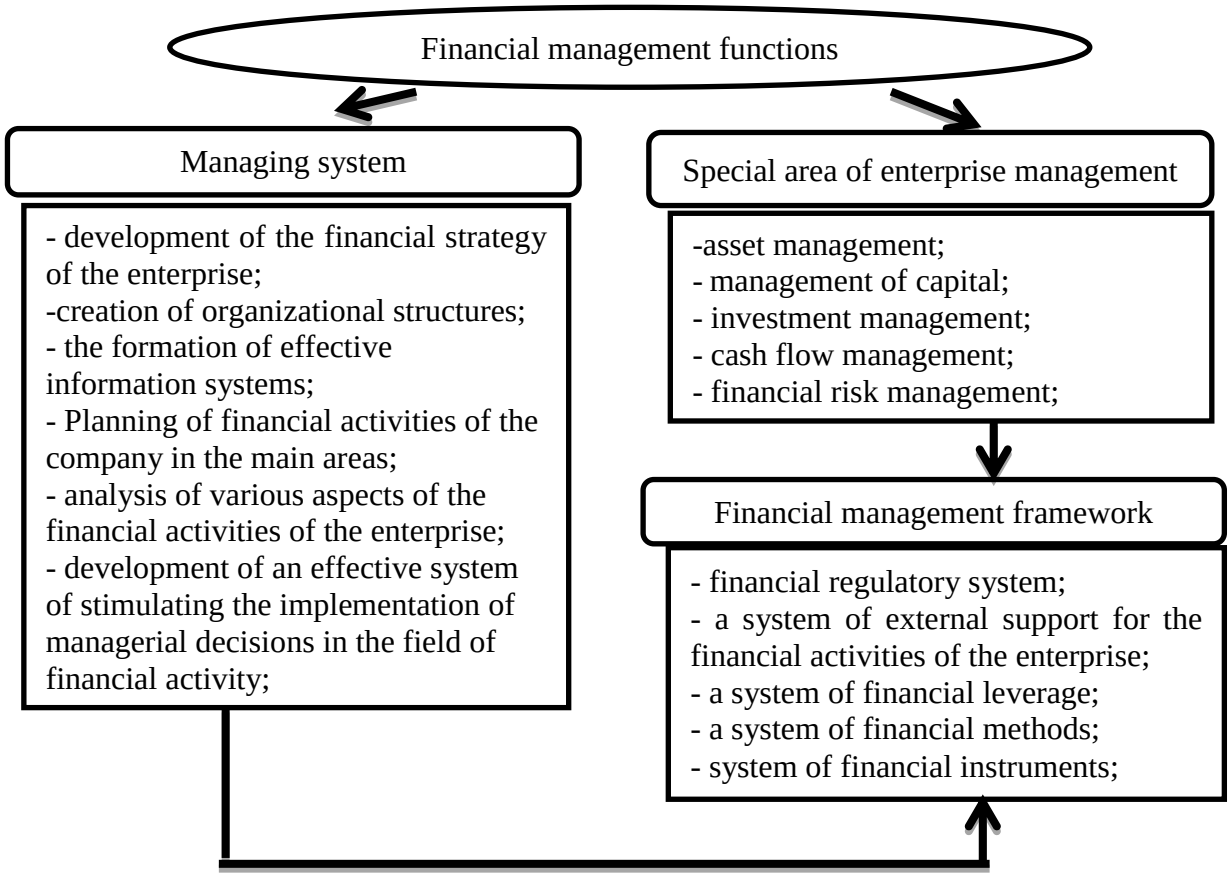

Figure 1 - Scheme of financial management functions [5]

The process of managing the financial activities of enterprises, highlighted in Figure 1, is based on a specific mechanism. The financial management mechanism is a combination of the main elements of the impact on the development and implementation of management decisions in the field of financial activity of an enterprise, the structure of which includes five systems. The financial management system consists of interconnected elements: organizational structure, personnel, methods, tools, information support,

hardware. According to economists, financial management or the financial management system of an enterprise covers a system of principles, methods, forms and techniques for regulating the market mechanism in the field of finance in order to increase the competitiveness of an enterprise. The components of financial management (goal, objectives, decisions, functions, principles, methods, objects, entities) are generally aimed at the real state of enterprise finance. In the study, the generally accepted principles of financial management at enterprises are supplemented by supporting principles (Figure 2).

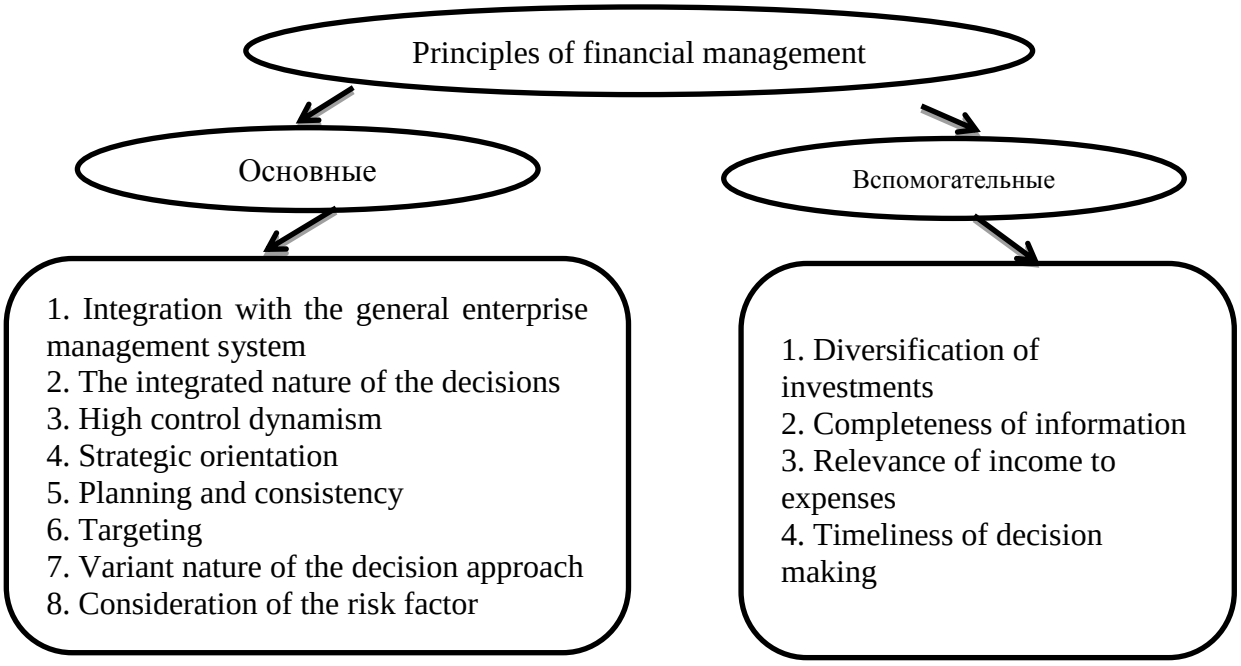

Figure 2 - Principles of financial management of enterprises [6]

The principles of financial management that we systematized, in conjunction with other constituent elements, reveal the content of financial management as a science of managing processes in the monetary sphere and an enterprise financial management system. From our position, effective financial management, organized taking into account the above principles, allows you to create the necessary resource potential for high growth rates of the operating activities of the enterprise, ensure constant growth of equity, significantly increase its competitive position in the commodity and financial markets, and stabilize economic development in a strategic perspective [6].

The presentation of the theoretical aspects of financial management, where the principles are highlighted as the main component in the characterization of the concept of "financial management", allows us to further considering of all the complex aspects of enterprises` financial management. The current state of financial management at enterprises in Kazakhstan, taking into account the time factor, requires improving management methods in order to achieve management quality.

A generalization of the experience of domestic enterprises in financial management allows us to conclude that at the present stage of entrepreneurship development, there is a transition from solving simple problems (planning, analysis, assessing financial stability) to more complicated and complex ones (budgeting, capital management, development of financial and economic strategies, etc.). Financial management always has a target orientation, which affects all types of activities of the subject, introduces a new system of values into the economy of the enterprise, changes its priorities and development trends.

Theoretical studies of the financial mechanism in financial management must always be accompanied by knowledge of the real situation, the specific industry of the enterprise. The magnitude of financial flows, the nature of the formation of payments always depend on the specifics of the enterprises

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РОЛЬ ФИНАНСОВОГО МЕНЕДЖМЕНТА В УПРАВЛЕНИИ ПРЕДПРИЯТИЕМ

Аннотация. В статье рассматривается процесс управления финансовой деятельностью предприятия, который базируется на определенном механизме и представляет собой совокупность основных элементов воздействия на процесс разработки и реализации управленческих решений. Эффективный механизм финансового менеджмента позволяет в полном объеме реализовать стоящие перед ним цели и задачи, способствует результативному осуществлению функций и принципов финансового менеджмента предприятий.

Ключевые слова: финансовый менеджмент; управленческие решения; финансовый механизм; финансовая деятельность предприятия.

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КӘСІПКЕРЛІК БАСҚАРУДЫН ҚАРЖЫ БАСҚАРУ РӨЛІ

Аннотация. Мақалада белгілі бір механизмге негізделген және басқарушылық шешімдерді әзірлеу және іске асыру процесіне әсер ететін негізгі элементтердің жиынтығын білдіретін кәсіпорынның қаржылық қызметін басқару процесі қарастырылады. Қаржылық басқарудың тиімді механизмі алдына қойылған мақсаттар мен міндеттерді толық жүзеге асыруға мүмкіндік береді, кәсіпорынның қаржылық менеджментінің функциялары мен принциптерін тиімді іске асыруға ықпал етеді.

Түйін сөздер: қаржылық менеджмент; басқару шешімдері; қаржылық механизм; кәсіпорынның қаржылық қызметі.

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DEVELOPMENT OF FORMING MECHANISMS OF EFFECTIVE HUMAN RESOURCES DEVELOPMENT POLICY IN THE REGIONAL ECONOMY (ON THE EXAMPLE OF THE PAVLODAR REGION)

Abstract. The article considers the current economic situation in the field of human resources development of the leading industrial region of the Republic of Kazakhstan – Pavlodar region. Special attention is focused on quantitative and qualitative indicative indicators of the state of human resources in the dynamics.In the course of the research, on the basis of statistical and analytical analysis, the main conceptual problems of the development of the human resources potential of the region, including labor potential and human capital, are identified.The detailed systematization of the problems of human resources development in the region by quantitative and qualitative components has also been made. The following were identified as the leading priorities in the formation of mechanisms for an effective human resources development policy: implementation of measures to enhance the role of industrial production in the development of human resources, through the instruments of social responsibility, allocation of grants for training and retraining of personnel; establishment of a regional corporate university; intensification of investment in increasing the level of demographic attraction of the region.

Keywords: human resources, labor resources, human capital, region, economic mechanisms, economic policy.

Introduction

The solution of current and future tasks of any society is connected, first of all, with the determining role of the human factor. To meet the needs of society, the dynamic development of productive forces requires three types of key resources:

- natural resources (raw materials and supplies);
- capital (buildings, structures, machinery and equipment, technologies, patents, licenses, know-how);
- humanresources [1].

All other things being equal, human resources are of particular key and strategic importance along withall types of resources.

In modern scientific economic thought, there are several relatively identical approaches to the definition of the term "human resources":

- Human resources are a set of qualities and characteristics that characterize a person's ability to perform a certain type of activity;
- Human resources - represent a set of different qualities of people that determine their ability to work in the production of material and spiritual goods, and are a generalizing indicator of the development of social production;
- Human resources – a set of quantitative and qualitative parameters of the total population, studied, investigated within any territory [2, 3].

As an object of management, human resources are simultaneously producers and consumers of material and spiritual goods.

The peculiarity of human resource management in the system of regional economy is the need to take into account the interests of the individual, organization, region and society, to ensure their organic

combination. The subject of human resources management-the state-develops a set of socio-economic and organizational and legal measures aimed at their effective formation, distribution, redistribution and use [4].

The function of human resources management, along with the state, is carried out by non-state bodies.

The subject of human resources management also includes trade unions and associations, business structures, labor collectives.

The subject of human resources management is the system of socio-economic relations, emerging in the field of regulation of the processes of reproduction and development of human resources.

The mechanism of human resources management is a set of relations, forms and methods of influence on their formation, distribution, use and compensation [4].

Human resources management is the main content of human resources policy. It is directed:

- the formation of high-quality human resources and meeting the needs of social production in qualified personnel;
- to ensure effective employment of the able-bodied population and its optimal distribution among industries and regions of the country;
- rational use of personnel of enterprises, organizations and institutions [4].

Methods.

Pavlodar region is one of the leading industrial and socio-cultural regions of the Republic of Kazakhstan. The region is located in the north-East of Kazakhstan.

Research and analysis of trends in the formation and development of human resources in the functioning of the economy of Pavlodar region, it is important to carry out in the following areas:

- quantificationofhumanresources;
- qualitative assessment of human resources.

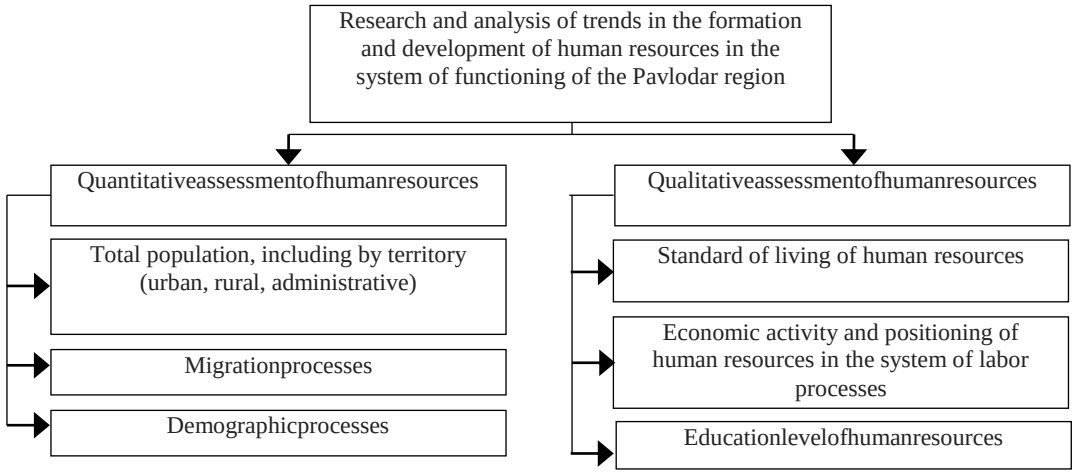
The quantitative assessment of human resources involves research and analysis of the following indicative indicators:

- total population, including by territories (urban, rural, administrative);
- migration processes;
- demographic processes.

The qualitative assessment of human resources involves research and analysis of the following indicative indicators:

- the standard of living of human resources;
- economic activity and positioning of human resources in the system of labor processes;
- the level of education of human resources.

In general, the main directions of research and analysis of trends in the formation and development of human resources in the system of functioning of the Pavlodar region are presented in accordance with figure 1.



Note–Compiled by the authors

Figure 1 – Main directions of research and analysis of trends in the formation and development of human resources in the system of functioning of the Pavlodar region

At the present stage, as of the end of 2018, beginning of 2019, the number of human resources in Pavlodar region is estimated at 754.85 thousand people, while their maximum share, in accordance with table 1, falls on urban areas. The human resources of rural areas make up less than one third of the total population.

The share of human resources of Pavlodar region within the national scale of the country does not exceed 4.2%.

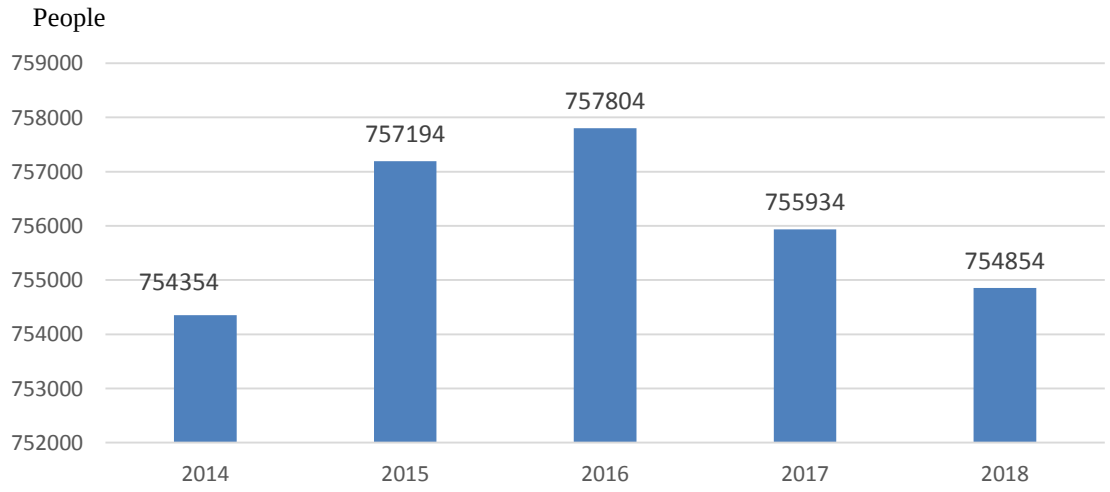
Table 1 – Dynamics of human resources in Pavlodar region

Indicatorname	Years			
	2015	2016	2017	2018
Population, includingpeople:	755 793	758 594	757014	754 854
- urbanpopulation	529 959	534 532	534 667	533 477
- ruralpopulation	225 834	224 062	222347	221 377
Share of population in the republic, %	4,3	4,3	4,2	4,2

Note–Compiled from the source [5]

In recent years, from 2014 to 2018, the number of human resources, as shown in Figure 2, has been subject to fluctuating dynamics.

It should be noted that the dynamics of human resources in the Pavlodar region is uneven in the context of administrative areas. Thus, for example, studies show that there is an increase in the number of human resources mainly in urban administrative areas, the city of Pavlodar, Ekibastuz and Aksu. On the other hand, there is a steady decline in the number of human resources in the rural areas. In Pavlodar region for the last five years there has been no district where the number of human resources has been growing steadily, which indicates the current trends of stagnation of the rural economy.



Note–Compiled from the source [5]

Figure 2 – Dynamics of the number (quantity) of human resources
in the Pavlodar region in the context of the temporary strategic period

Table 2 – Dynamics of human resources migration in the Pavlodar region

man.

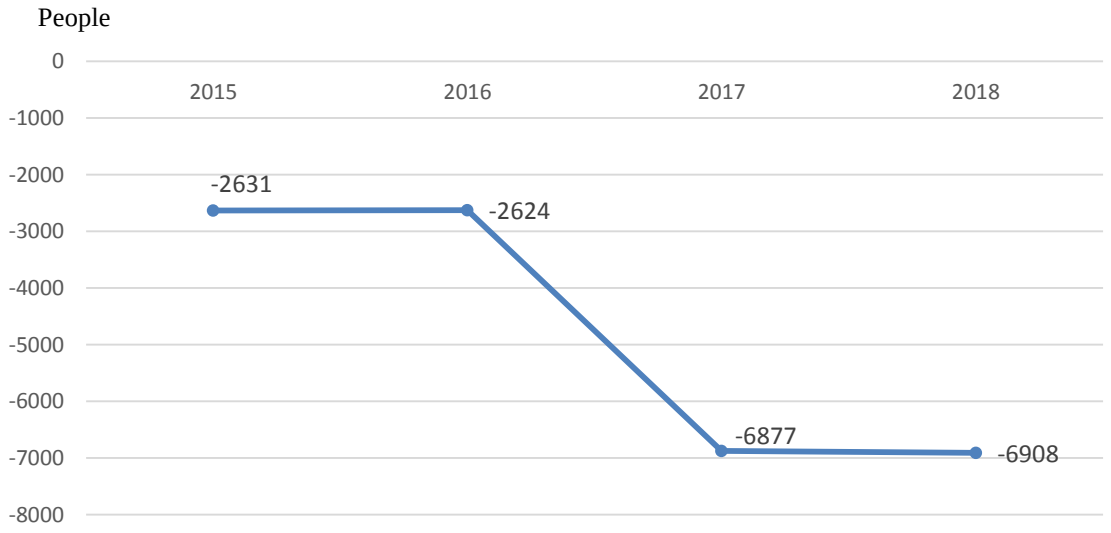
Indicator name	Years			
	2015	2016	2017	2018
Arrived	16 729	19 476	22 666	28 970
Retired	19 360	22 100	29 543	35 878
Migrationbalance(+, -)	-2 631	-2624	-6 877	-6 908

Note–Compiled from the source [5]

The quantitative indicators of human resources are directly affected by migration and internal demographic processes.

According to Table 2, in general, there is a negative balance of migration processes in the Pavlodar region.

In recent years, there has not been a single fact of a positive balance of migration processes. The dynamics of the balance of migration processes is shown in figure 3.



Note–Compiled from the source [5]

Figure 3 – Dynamics of migration balance in Pavlodar region

In modern practice, attention is paid to migration processes not only in the regional aspect, but also at the macroeconomic levels [6].

In the context of quantitative demographic indicators, in Pavlodar region, in accordance with table 3, there are trends of declining fertility, the number of births, the natural increase in the number of human resources.

Quantitative trends in the development of human resources of Pavlodar region are accompanied by qualitative trends, one of which is the standard of living of the population.

Table 3–Demographic indicators of human resources movement in Pavlodar region

people

Indicator name	Years			
	2015	2016	2017	2018
Numberofbirths	13 041	12 771	12 613	12 025
Numberofdeaths	7 531	7 346	7 316	7 277
Naturalincrease (decrease)	5 510	5 425	5 297	4 748
Birthrateper 1000 people	17,29	16,87	16,64	15,91

Note–Compiled from the source [5]

The quality of life of the population can be studied by such indicative parameters as:

- average monthly salary;
- per capita nominal cash income;
- the value of the minimum subsistence minimum;
- lifeexpectancy.

According to official statistics, in accordance with table 4, in Pavlodar region there is a continuous trend of growth of the nominal average monthly wage. At the same time, the per capita nominal income of the population is also growing.

Table 4–Dynamics of living standards of human resources

Indicator name	Years				
	2014	2015	2016	2017	2018
Nominal average monthly salary, tenge	102 310	108 630	122 633	131 709	136 889
Per capita nominal income of the population, tenge	64 026	66 488	78 408	84 865	93 578
The cost of living on average per capita, tenge	17 474	17 654	19 492	21 676	24 434

Note–Compiled from the source [5, 7]

The average life expectancy of human resources in Pavlodar region is relatively low and in accordance with table 5, is:

- 72,1 years-average for the entire population;
- 67,4 years - for men;
- 76,4 years - for women.

A particularly significant qualitative aspect of the life of human resources, are the processes of their participation in the functioning of the economy of the region – participation in the production and distribution of wealth, services.

Participation of human resources in economic processes can be characterized by such indicative indicators as:

- total workforce;
- level of economic activity of labor resources;
- structuring of labor resources by gender, age and administrative-territorial.

Table 5–Average life expectancy of human resources in Pavlodar region
numberofyears

Indicator name	Years			
	2015	2016	2017	2018
Entire population	70,59	71,40	71,72	72,10
Men	65,70	66,31	66,80	67,40
Women	75,15	76,17	76,29	76,42

Note–Compiled from the source [5]

The total number of labor resources, in accordance with table 6, as of 2017 is 416.3 thousand people. At the same time, the dynamics of the number of labor resources is subject to a downward trend.

Table 6 – Dynamics of labor resources in Pavlodar region

Indicator name	Years			
	2015	2016	2017	2018
Total human resources, man. Including:	441300	426200	421400	416300
- city	288500	287600	286300	284600
- ruralareas	136400	124300	121200	117100
Employed in the economy, people	420300	405100	401100	396400
Employees, people.	331400	331100	331700	331500
Self-employedpopulation, people.	88900	74000	69400	64900
Unemployed, people.	21000	21000	20300	19900
Unemploymentrate, %	4,8	4,9	4,8	4,8
Levelofeconomicactivity, %	58,50	56,29	55,61	55,07

Note–Compiled from the source [7]

The employment rate of the working population has a stable trend of 95.2%. At the same time, the unemployment rate has not exceeded 4.8% in recent years.

The maximum share of the working-age population, according to table 7, falls on the following sectors of the economy:

- industry, including mining and processing;
- wholesale and retail trade;
- education.

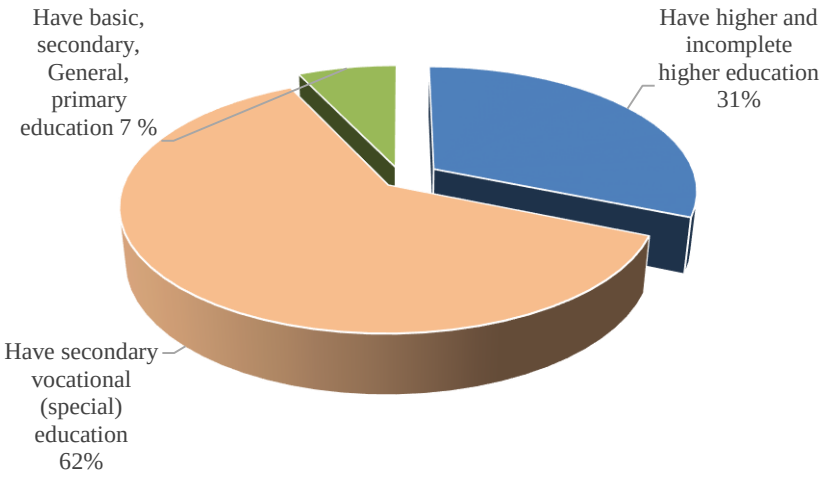
The average positions in the employment of human resources have such sectors of the economy as:

- agriculture;
- construction;
- transport and warehousing;
- health.

Table 7 – Dynamics of employment of labor resources by sectors of the economy

Indicator name	Years			
	2015	2016	2017	2018
Employees, man. Including:	331400	331100	331700	331500
- agriculture, forestryandfisheries	28100	29000	30200	29900
- miningindustry	96100	92900	94700	92800
- manufacturingindustry	57000	55800	57700	57500
- electricity, gas, steam and air conditioning	20800	18700	19100	17400
- watersupply	6400	6400	6000	5600
- construction	22900	22800	21000	19700
- wholesale and retail trade; car repair	37400	38600	37200	36200
- transportandwarehousing	22000	21100	20300	20200
- accommodationandcateringservices	4900	4400	4600	4900
- informationandcommunication	4900	5100	5000	5000
- financialandinsuranceactivities	5400	5400	5600	6200
- realestatetransactions	3700	4500	3900	6300
- professional, scientific and technical activities	4200	4800	4500	5300
- administrative and support services activities	8600	8900	9400	9600
- public administration and defence; compulsory social security	20400	20400	20400	20300
- education	41900	42100	43000	43000
- healthandsocialservices	18500	19500	19700	20000
- arts, entertainmentandrecreation	8700	8300	8700	8700
- provisionofotherservices	3500	3400	3500	3400

Note–Compiled from the source [7]



Note–Compiled from the source [7]

Figure 4 - Structure of human resources in Pavlodar region by level of education (as of the end of 2018, beginning of 2019)

In our opinion, the quality of human resources in the workforce has a relatively low position. As of the end of 2018, beginning of 2019, according to figure 4, of the total workforce, only 31% have higher and incomplete higher education. The largest share of labor resources – 62%, have secondary vocational (special education). The minimum share of labor resources is represented, having only secondary, primary education. Their share does not exceed 7%.

Also, studies show that in accordance with table 8, in recent years there has been a trend of decline in the number of labor resources with higher education and growth in the number of labor resources with secondary vocational (special) education.

Table 8 – Dynamics of the quality of labor resources (level of education)

Indicator name	Years			
	2015	2016	2017	2018
Totalworkforce, people. Including:	441300	426200	421400	416300
- have higher and incomplete higher education, people.	150800	114400	126500	130100
- have secondary vocational (special) education, people.	195400	268900	259600	256600
- have basic, secondary, general, primary education, people.	95100	42800	35300	29600

Note–Compiled from the source [7]

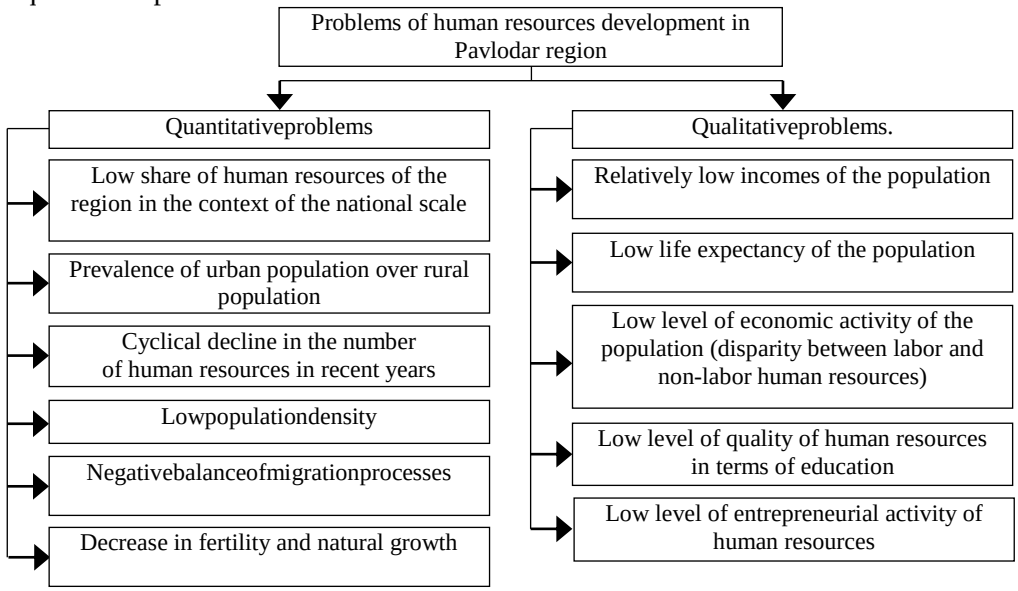
In a complex, researches and the analysis of tendencies of formation and development of human resources in system of functioning of the Pavlodar region show that the region has good personnel potential for dynamic intensive and innovative development of economy. Nevertheless, not all human resources are used to the maximum extent in the intensification of economic processes, as evidenced by the low level of economic activity of the population. A specific aspect is the employment of the population, while the leading factor of influence is the industrial specifics of the region, the largest share of human resources is employed in the sphere of industrial production.

In the trends of human resources development, there are significant reserves for abolishing their reduction, as well as improving the quality of education in hierarchical positions.

Research results.

The main problems of human resources development in the Pavlodar region can be systematized in two directions, according to Figure 5:

- quantitative problems;
- qualitative problems.



Note–Compiled by the authors

Figure 5–Problems of human resources development in Pavlodar region

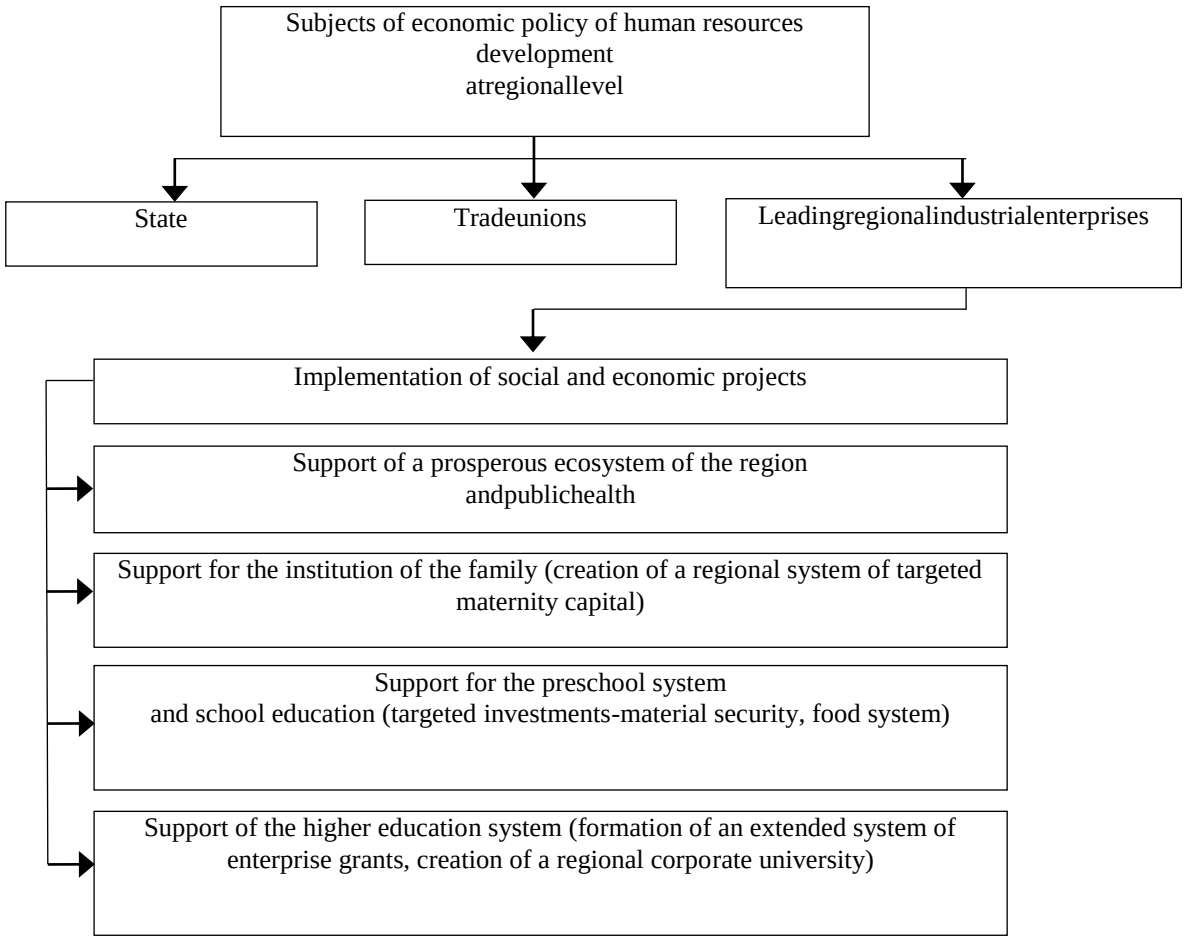
Priority directions of intensification of economic policy of development of human resources in the Pavlodar region, can serve as:

- implementation of measures to enhance the role of industrial production in the development of human resources through social responsibility tools, allocation of grants for training and retraining;
- establishment of a regional corporate university;
- intensification of investments in increasing the level of demographic attraction of the region.

The role of regional industrial enterprises in the design of economic policy of human resources development at the present stage remains very mediocre. Studies have shown that the main subjects of the economic policy of human resources management are the state and trade unions.

Nevertheless, the principles and laws of the market economy indicate that the main subjects of designing economic policy of human resources development, taking into account international experience, should be the leading subjects of business entrepreneurship, large industrial enterprises, through mechanisms of social and economic responsibility.

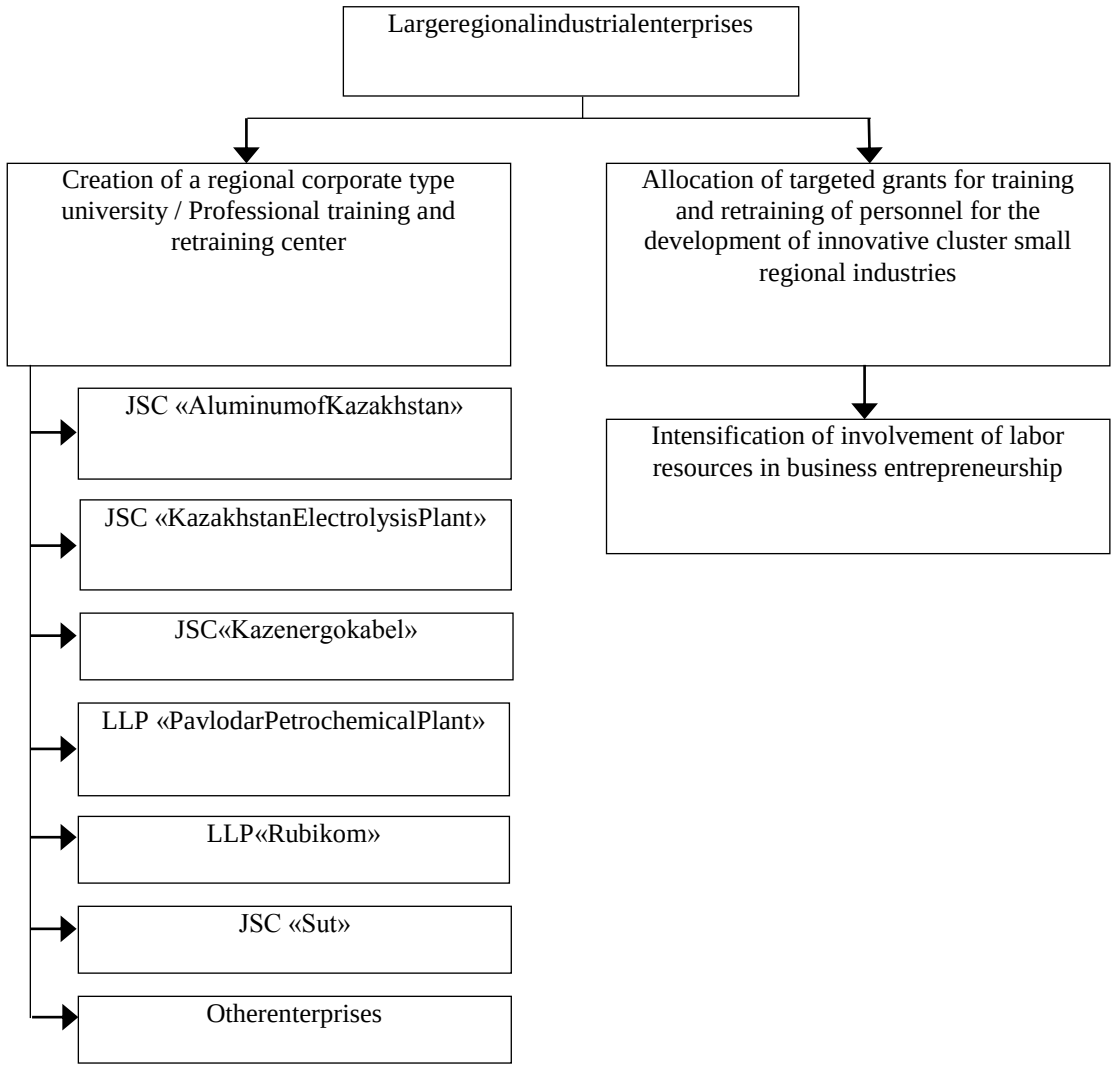
The role of industrial production in the development of human resources can be achieved through the implementation of design solutions, in accordance with figure 6.



Note–Compiled by the authors

Figure 6 - Proposed design solutions to enhance the role of industrial production in the intensification of economic policy on human resources development in the Pavlodar region

An important factor in the development of human resources in the region should be the mechanisms of point participation of large regional industrial enterprises in the development of higher and postgraduate education. The approximate mechanism of the role function of industrial enterprises in this aspect is presented in accordance with figure 7.



Note–Compiled by the authors

Figure 7 – Approximate mechanism of the role function of regional industrial enterprises in the implementation of economic policy on human resources development

Corporate University is a form of personnel training, in which the system of personnel training is designed by leading enterprises, firms, companies [8].

Training at corporate universities differs favorably from both academic education and the use of external training providers in that it has a very practical, targeted focus. They train employees in exactly what is necessary for their work and for the implementation of the strategic goals of the organization, instead of going through general theoretical or generalized practical training without taking into account the specifics of the organization, if it relates to the activities of the organization or the current situation in which it is located. This is the main advantage of such staff training [8].

Among the objectives of corporate universities are the development of necessary competences, implementation of organizational changes, maintenance of the company's competitiveness, recruitment and retention of valuable employees, development of corporate culture and translation of the company's values to the personnel, work on creation of a favorable psychological climate within the organization [8].

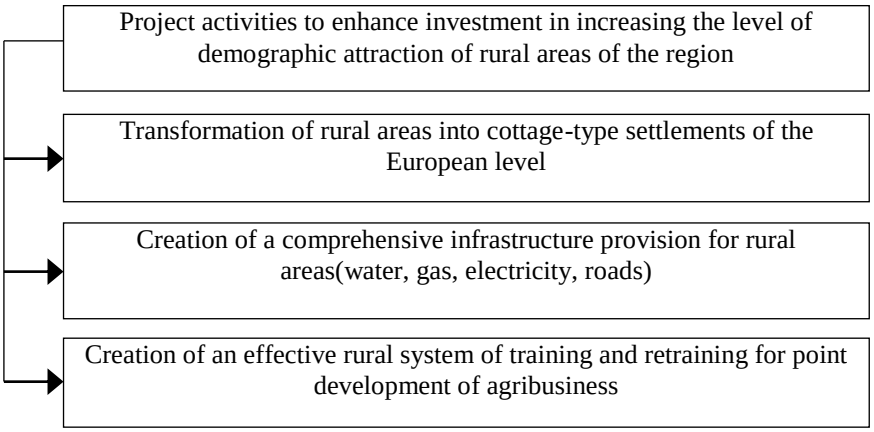
Also, for the development of human resources, in the regional aspect, industrial enterprises can create a system of grant financing of personnel training, which should imply:

- point training for specific types of production in accordance with the project set of knowledge, skills and competencies;

- development of a network of small innovative productions within an industrial zone of the region taking into account orientation to a high level of technological repartitions, cluster systems.

Studies have shown that in Pavlodar region there is a dominance of human resources within urban areas and there is stagnation of the population in rural areas.

In order to develop human resources in rural areas, it is necessary to implement organizational and economic measures to increase the level of their demographic attraction. In this case, the project activities presented in accordance with figure 8 can be implemented.



Note–Compiled by the authors

Figure 8– Project activities to enhance investment in increasing the level of demographic attraction of rural areas of the region

Table 9-Assessment of the economic effect aimed at improving the economic policy on human resources management in the economy of Pavlodar region

Name of organizational and economic measures	Baselineindicativeindicator	The projected target indicator / Economic effect
Support of the region's prosperous ecosystem and public health	The average life expectancy of the population in Pavlodar region is 72.1 years	Increasing the life of the population in Pavlodar region for 10 years and bringing it to the standard figure-80-81 years
Support for the family institution (creation of a regional system of target maternity capital)	Naturalpopulation growth-4 748 people	Increase in natural population growth by at least 5000 people. Bringing the level of natural growth to 9 000 – 10 000 man
Support of the higher education system (formation of an extended system of enterprise grants, creation of a regional corporate university)	The number of human resources in the region (as part of the labor force) - 130,100 people, which is less than 50% of the total number of labor resources 416,300 people	Bringing the level of labor force with higher education up to 80 - 85%. Ensuring the growth of labor resources with higher education by at least 200,000 people
	The number of labour resources in the composition of entrepreneurs is less than 20%	Bringing the share of entrepreneurs in the labor force to at least 35 - 40%. Entry of the region into the republican rating as a territory with a high level of entrepreneurial activity
Project activities to enhance investment in increasing the level of demographic attraction of rural areas of the region	The total number of working populations in rural areas is 117,100 people (less than 30% of the total labor force)	Bringing the share of labor resources in rural areas of the region to the level of-50-55%
	Total migration balance of the population, including rural areas – (-6 908) people	Reduction of the negative migration balance by at least 2 times. Reaching a positivebalancewithin 5 years

Note–Compiled by the authors

Demographic attraction can be considered as a composite resultant indicator of social policy [9].

The economic effect oriented to the improvement of economic policy on human resources management in the system of economy of the Pavlodar region, assumes a qualitative absolute dynamic of change of indicative indicators, characterizing both quantitative and qualitative aspects inherent in human resources.

Taking into account the above proposed project activities, it is important to compare them with the quantitative and qualitative aspects of improving the situation of human resources in the region, which can be achieved according to forecast estimates. This comparison is presented in accordance with table 9.

Conclusion

In the complex, it should be noted that the reserves of human resources development in the Pavlodar region can be fully realized both in the medium and strategic periods - from 3 to 5 years. The region has sufficient social and investment and economic potential, focused on significant improvement of both quantitative and qualitative indicators of the level of human resources development in the region.

Development of human resources in the region will allow in the nearest years to reach stage-by-stage significant improved indicators in the field of business entrepreneurship, innovativeness and competitiveness of the regional economic system.

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