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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	Mining and manufacturing	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.

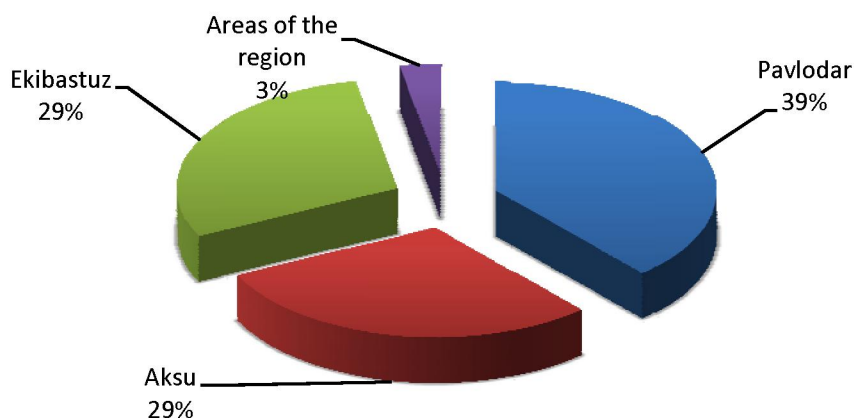


Figure 1 – the Structure of industrial production in the context of territorial economic entities of Pavlodar region

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.

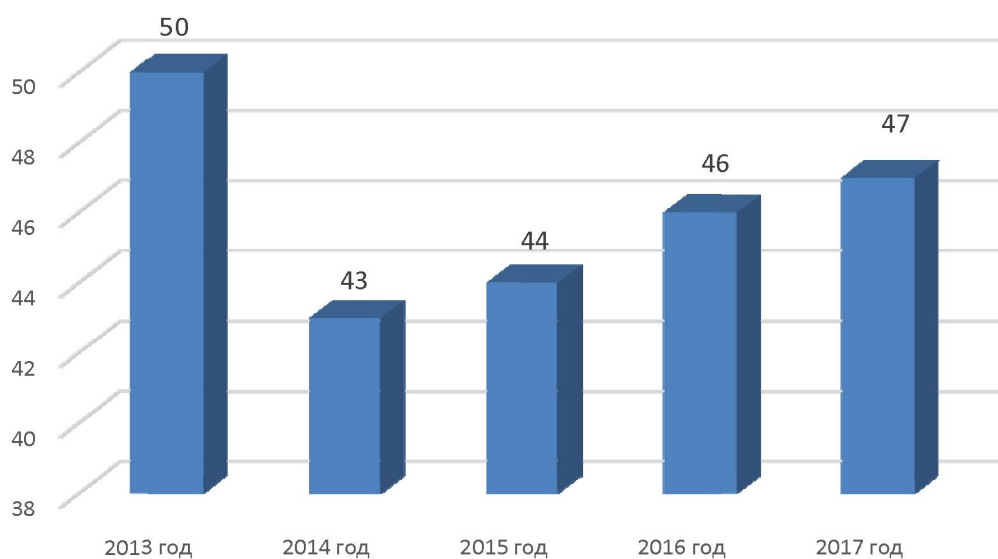


Figure 2 – Dynamics of industrial enterprises in the city of Aksu and Aksu rural zone

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 zone million tenge

Names of indicators	Years			
	2014	2015	2016	2017
Industry, total	284198,80	285336,12	387418,62	522504,57
Mining and quarrying	1373,60	1323,20	1466,21	1511,31
Manufacturing industry, total	230781,96	222382,38	314123,16	437438,45
- food production	1454,90	2021,39	1906,05	3753,27
- light industry	200,54	148,89	159,21	153,65
- manufacture of wooden products	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
- ferrous metallurgy	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
- furniture production	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 businesses number 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
Legal entities (LLP, JSC)	182	215	190	213	253
Individual entrepreneur	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.

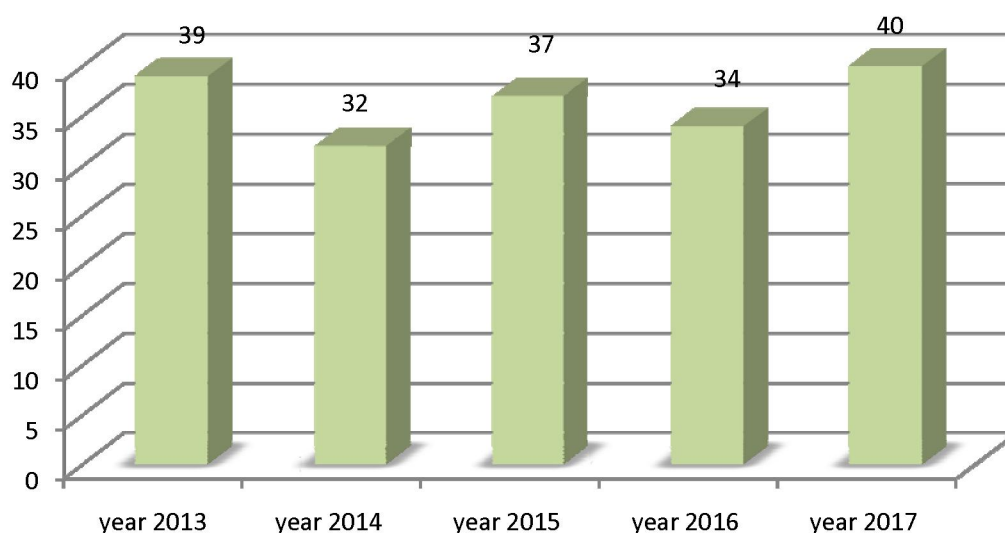


Figure 3 – Dynamics of innovation-active leading industrial enterprises in the city of Aksu and Aksu rural zone

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

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

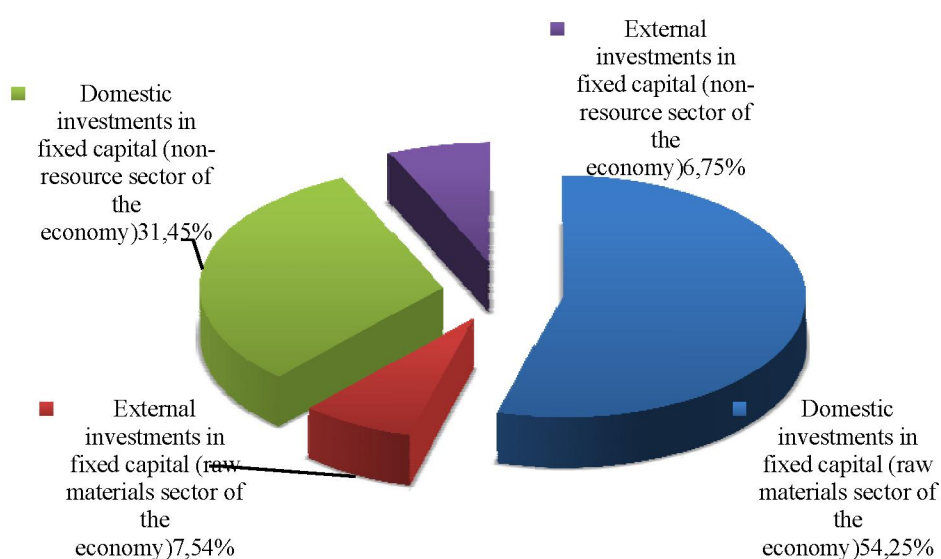


Figure 4 – Fixed capital investment structure in the economic system of Aksu city and Aksu rural zone

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 Technopark is 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 ДАМУ, 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 Ақсу. 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 территориальных округов 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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