# ANALYSIS OF LABOR MARKET TRENDS IN SINGLE-INDUSTRY TOWNS IN KAZAKHSTAN

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## ABSTRACT

*Purpose of the research* is to identify key trends and specifics of the formation of the labor market, as well as to develop recommendations for increasing employment in single-industry towns of industrial and raw materials type of the Republic of Kazakhstan.

*Methodology.* The following scientific methods are used in the work: statistical observation; comparative analysis; synthesis; grouping of statistical observation materials.

*Originality / value of the research.* The value of this study is to identify the key trends in the formation of the labor market in single-industry towns of the Republic of Kazakhstan, which made it possible to determine the directions of improving the sphere of employment and employment in these types of cities.

*Findings.* A study of the labor market in single-industry towns in Kazakhstan revealed a decrease in the population in these cities from 2017 to 2021. There is a decrease in the share of residents of single-industry towns in the total population of the country. The analysis showed that single-industry towns can be divided into four groups: large cities (Temirtau, Ekibastuz, Rudny), cities with a population of about 50-70 thousand people (Kentau, Balkhash, Zhanaozen, Kulsary, Aksu, Stepnogorsk), cities with a population of 20 to 50 thousand people (Khromtau, Tekeli, Aksai, Zhanatas, Karatau, Saran, Shakhtinsk, Abay, Arkalyk, Lisakovsk, Zhitikara, Altai), and a group of small single-industry towns (Kurchatov, Karazhal, Serebryansk). Temirtau, Ekibastuz and Rudny are the leaders in terms of the number of employed and unemployed and also have the largest population in the general sense. To ensure employment and sustainable development of single-industry towns in Kazakhstan, it is necessary to continue work on diversifying the economy, reducing dependence on prices for raw materials and developing small and medium-sized businesses. An important role is played by effective public administration in the development of single-industry towns and the digitalization of production.

*Keywords*: single-industry towns, employment, labor force, unemployment, labor market, industrial specialization.

## INTRODUCTION

The relevance of the study of the labor market and employment in single-industry towns of industrial and raw material type in the Republic of Kazakhstan is because there are 27 settlements with the status of «single-industry towns» in Kazakhstan, where about 1.5 million people or 16 % of the total urban population of the country live [1]. In the era of Soviet industrialization single-industry towns in Kazakhstan were created on the site of deposits, city-forming and processing enterprises.

In the territorial and spatial development of modern Kazakhstan, monotowns have become hotbeds of acute socio-economic problems, holding back the balanced sustainable development of the country. The main problems of single-industry towns are loss of competitiveness of the main industries, low quality of housing and

transport infrastructure, low wages and increased unemployment [1]. To improve the quality of life and solve the problems of employment in single-industry towns, the Republic of Kazakhstan has adopted special state programs [2; 3], some of which have already been completed, but the problems of these settlements remain unresolved.

There are attempts of the scientific community in the vision of the prospects of further development of single-industry towns. Kazakh scientists, in particular, a team of authors from the Institute of Economics of the Ministry of Education and Science of the Republic of Kazakhstan, having systematized the results of many years of research in the field of employment, specifics of the labor market in single-industry towns of Kazakhstan, published in 2014 a collective monograph «Mono-cities of Kazakhstan: methodological basis for assessing the state and directions of development» [4]. This work developed a methodological basis for assessing the economic profile and living standards of the population of single-industry towns and identified the specifics of employment and labor relations. This collective work of domestic scientists undoubtedly makes a great contribution to the development of theoretical-methodological and methodological foundations for the development of single-industry towns, but it is limited to statistical data on all single-industry towns of Kazakhstan, and we can point out the outdated data, which are presented for 2011.

Separately, it is worth noting a fairly significant contribution of Russian scientists in the development of the conceptual framework, specifics of employment and development of Russian single-industry towns. Thus, E. A. Efimova [5] considered the problems of town-forming enterprises in Russia and their impact on the labor market. It is interesting to note that the issues of monotown development have been actively discussed in the media and in the scientific community in Russia since 2009, according to the author E. A. Efimova's note, after the summer unrest in Pikalevo (Leningrad Oblast) and Baikalskoye (Irkutsk Oblast).

In Kazakhstan, similarly, the main impetus for the adoption of programs for the development of single-industry towns were centers of social unrest of the residents of Zhanaozen [6].

Attempts to solve social and economic problems of single-industry towns in the former post-Soviet countries have not been without studying the world experience in the support and development of cities and settlements. In particular, A. N. Glebova, V. N. Zelensky, and A. S. Lazareva made an attempt to work out the directions of modernization of Russian monotowns through the comparative analysis of international experience and Russian practice [7].

The problems of sustainable development of single-industry towns remain a separate block. In our opinion, it is the sustainable development of single-industry towns, which takes into account the balance of social, economic and environmental aspects of development, requires further research in this direction, because we can note the lack of scientific works, studies in the focus of achieving sustainability parameters in the development of single-industry towns.

For example, the works by A. I. Pyzhev, E. A. Syrtsova, R. V. Gordeev [8] is aimed at developing approaches to the assessment of sustainable development of single-industry towns, but it is limited to the specifics of Siberian single-industry towns of the Russian Federation.

Certainly, there are cases in the world of the practice of successful transformation of single-industry towns into developed industrial centers [9; 10].

A review of literary sources on the problems of single-industry towns' development, specifics of the labor market and employment in them [11; 12; 13] generally indicate insufficient theoretical and conceptual and methodological and practical elaboration of important issues: principles of organization of productive forces, employing diversification of economic structure and industries, development of small and medium business (SMB), creating attractive working and living conditions for young people, infrastructure development, social and cultural development level, as well as solving environmental problems

As we can see, the currently available programs for the development of single-industry towns in Kazakhstan, employment support programs – «Yenbek», Employment Road Map 2020 [14; 15] despite the declared purpose – sustainable socio-economic development of single-industry towns in the medium and long term – have not yet given their results.

The events of recent years in the country, against the background of the crisis development of the national economy and the unfavorable conjuncture of the world commodity markets signal the seriousness, relevance

and high degree of importance of solving the problems of single-industry towns in Kazakhstan, and above all, of providing employment and improving living standards. Back in November 2021, at a meeting in Ekibastuz, President Tokayev noted that the deterioration of water and sewage networks is 61 % on average, and in the cities of Arkalyk, Balkhash, Shakhtinsk and Temirtau, it reaches 90 %. Depreciation of heat networks and power lines averages 55 %, and in some single-industry towns – 85 % [16].

The consequences of systemic problems with engineering, automobile and other infrastructure facilities in single-industry towns like Temirtau, Stepnogorsk, Balkhash, Ekibastuz, and Ridder (depreciation of CHP, 40-50 % of roads in unsatisfactory condition) will cost Kazakhstan citizens dearly.

In the majority of single-industry towns, more than a third of economically active citizens are self-employed, and the average income per capita is lower than the average level. The results of all this are disappointing: since 1999, their population has halved, from 3 million to 1.5 million people, and this trend continues [16].

The solution of the main problems related to the development and improvement of life of the residents of single-industry towns requires a comprehensive and in-depth approach in the study of the potential for diversification of production and development of SME in single-industry towns, the elaboration of the directions of their sustainable development.

We consider improving the investment image of single-industry towns on the principles of marketing to be an important aspect in these directions. This study in this regard, firstly, will contribute to the expansion of existing in the world scientific community developments in the field of single-industry towns' development, and secondly, it is aimed at elaborating science-based recommendations on strategic priorities of single-industry towns' development on the basis of territorial marketing. Taking into account the above-mentioned urgent problems of development of single-industry towns in Kazakhstan, the joint efforts of the research group of Al-Farabi Kazakh National University and Narxoz University within the framework of the scientific project «Revival of single-industry towns in the conditions of New Kazakhstan based on territorial marketing», financed by the Science Committee of the Ministry of Higher Education and Science of the Republic of Kazakhstan, set a goal to develop the Strategy of revival and modernization of single-industry towns in New Kazakhstan. In this regard, it is very important to analyze the labor market in single-industry towns of the Republic of Kazakhstan to determine the trends, specifics and structure of the labor market. Labor market trends identified during the analysis and development of employment in single-industry and commodity-type cities will be taken as a basis for the development of this strategy.

In addition, the main results of the study can contribute to the implementation of «anchor» projects, which to date in single-industry towns of the country do not work in full, because they cannot find markets. It should be noted that the analysis was conducted on 25 out of 27 Kazakh monotowns, as data on Altay and Serebryansk are not representative and are not officially registered. In general, it is worth noting that, unfortunately, systematized official data on statistics on the number of employed, self-employed, levels of unemployment and basic income, as well as other important for a complete analysis of labor market and employment indicators in single-industry towns of Kazakhstan are not available in a comprehensive form. In the course of the study, information on single-industry towns in Kazakhstan was meticulously collected from the sources of periodicals, official websites of single-industry towns, sources from open sources of the World Wide Web, as well as official statistical data of the National Statistics Bureau of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan.

**MAIN PART**

To identify the key trends and specifics of the formation of the labor market in single-industry and raw material-type cities of the Republic of Kazakhstan, we first of all applied general scientific and statistical research methods.

To analyze the population dynamics of single-industry towns of the Republic of Kazakhstan from 2017-2021, we systematized indicators for all 27 single-industry towns of Kazakhstan, Table 1.

At the time of the study, there are 27 monotowns in Kazakhstan, with a population of about 1.5 million people, which is 8 % of the total population of the country. The largest number, namely 8 monotowns are located in the Karaganda region, the largest city in Kazakhstan is Temirtau – about 173 thousand people, the smallest city is Serebryansk – about 7 thousand people, according to official statistics of Kazakhstan.

Table 1 - Population of single-industry towns in the Republic of Kazakhstan at the end of 2017-2021

| Mono city | Years | | | | |
|---|---|---|---|---|---|
| | 2017 | 2018 | 2019 | 2020 | 2021 |
| Stepnogorsk | 46 276 | 45 917 | 45 524 | 45 217 | 49 783 |
| Kentau | 68 313 | 68 975 | 68 707 | 70 357 | 74 014 |
| Khromtau | 26 238 | 26 737 | 27 158 | 27 446 | 29 802 |
| Tekeli | 31 798 | 31 958 | 32 283 | 32 378 | 30 421 |
| Kulsary | 59 617 | 60 498 | 61 541 | 62 278 | 64 887 |
| Aksay | 34 552 | 35 310 | 35 448 | 35 349 | 36 675 |
| Zhanatas | 22 110 | 22 364 | 22 701 | 23 064 | 25 512 |
| Karatau | 29 835 | 30 204 | 30 403 | 30 501 | 28 384 |
| Balkhash | 72 230 | 72 892 | 72 999 | 72 750 | 73 870 |
| Zhezkazgan | 86 723 | 87 200 | 87 254 | 87 254 | 88 634 |
| Karazhal | 8 363 | 8 091 | 7 935 | 7 793 | 8 301 |
| Saran | 43 598 | 43 277 | 42 950 | 42 864 | 34 741 |
| Satpayev | 60 963 | 61 529 | 62 949 | 63 871 | 67 919 |
| Temirtau | 178 908 | 179 230 | 179 216 | 178 544 | 172 422 |
| Shakhtinsk | 37 849 | 37 653 | 37 339 | 37 179 | 39 393 |
| Abay | 28 244 | 28 363 | 28 802 | 28 638 | 28 627 |
| Arkalyk | 28 418 | 28 248 | 27 051 | 26 359 | 29 374 |
| Lisakovsk | 36 318 | 36 011 | 35 742 | 35 447 | 31 530 |
| Rudnyy | 115 536 | 115 297 | 114 966 | 114 172 | 111 705 |
| Zhitikara | 34 810 | 34 738 | 34 561 | 34 190 | 35 606 |
| Zhanaozen | 81 413 | 81 581 | 81 157 | 81 262 | 72 725 |
| Aksu | 42 265 | 41 625 | 40 766 | 40 289 | 51 732 |
| Ekibastuz | 134 145 | 133 889 | 133 676 | 132 762 | 129 510 |
| Kurchatov | 12 383 | 12 408 | 12 317 | 12 413 | 10 422 |
| Ridder | 57 541 | 57 107 | 56 455 | 55 893 | 52 657 |
| Altay (Zyryanovsk) | 36 369 | 36 111 | 35 440 | 35 144 | 36 484 |
| Serebryansk | 8 578 | 8 429 | 8 276 | 8 146 | 7 246 |
| Note: compiled by the authors according to [17]. | | | | | |

As seen from Table 1, the top three largest single-industry towns in Kazakhstan are Temirtau, Ekibastuz and Rudny – 172,422; 129,510 and 111,705 people, respectively. The second group of mono-cities with a population of 50-70 thousand are Kentau – 74 014; Balkhash – 73 870; Zhanaozen – 72 725; Kulsary – 64 887; Aksu – 51 732, with Stepnogorsk – 49 783 being a bit under that group. The third group of single-industry towns, where the average population is in the range of 20 to 50 thousand people is represented by such cities as Khromtau, Tekeli, Aksay, Zhanatas, Karatau, Saran, Shakhtinsk, Abay, Arkalyk, Lisakovsk, Zhitikara, Altay. On average, there are 32,212 people living here. And the smallest number of inhabitants is characterized by the fourth group of monotowns – Kurchatov – 10,422; Karazhal – 8,301; Serebryansk – 7,246 people. Only 25,969 people live in these three monotowns, an average of 8,656 people per town.

In general, for the period 2017-2021 in the dynamics there is instability in the number of residents of single-industry towns of the Republic of Kazakhstan compared to the national parameters, Figure 1.
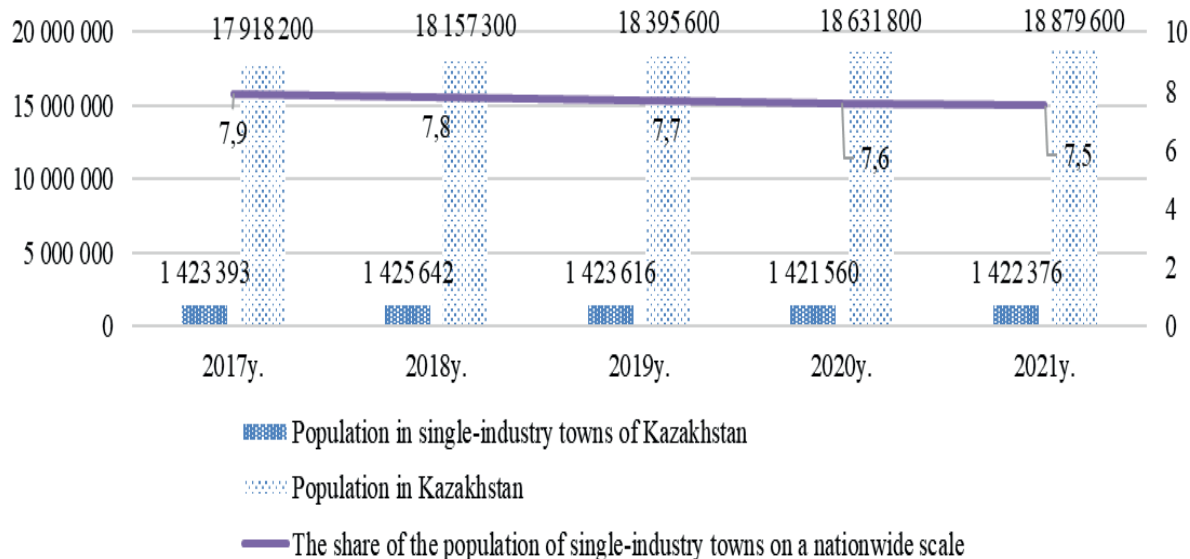
Figure 1 – Comparative dynamics of the number of inhabitants of the country
as a whole and single-industry town in Kazakhstan for 2017-2021.
Note – developed by the authors according to [17]

The highest peak in the population of all monotowns in the country is characterized by 2018 - 1 425 642 people, while in 2020 there were 4 082 fewer residents of monotowns, 1 421 560 people. In 2021, there were 816 more residents of monotowns of the republic compared to 2020.

So, in comparison with the republican parameters, where there is a positive dynamics of growth in the number of inhabitants of the country, in monotowns we can state the stability of the number of residents, but with a tendency of decrease in the share of population of monotowns in the total population of the country from 7.9 % – in 2017, 7.8 % – in 2018, 7.7 % – in 2019, 7.6 % – in 2020, 7.5 % – in 2021. Thus, on a nationwide scale, against the background of the growth of the population of Kazakhstan, the number of residents of single-industry towns tends to steadily decrease, by 0.1 p.p. annually.

Next, we conducted a study of the main indicators of the labor market and the development of employment in single-industry and raw material-type cities. As can be seen from the data in Table 2, for the period from 2017 to 2021. the indicator - the number of labor force in single-industry towns decreases from year to year. Comparatively, there is a decrease of 22,008 people, from 782,705 in 2017 to 760,697 in 2021, with a maximum decrease in the workforce in pandemic 2020 of 754,181.

Table 2 – Number of labor force in single-industry towns in the Republic of Kazakhstan for 2017-2021

| Mono city | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|
| Total, including: | 782 705 | 768 741 | 774 297 | 754 181 | 760 697 |
| Stepnogorsk | 38 869 | 38 732 | 38 217 | 36 427 | 35 538 |
| Khromtau | 13 294 | 13 549 | 13 476 | 13 829 | 13 889 |
| Tekeli | 17 898 | 18 076 | 17 834 | 17 489 | 17 546 |
| Kulsary | 30 284 | 28 429 | 28 390 | 28 219 | 29 010 |
| Aksay | 19 788 | 20 244 | 21 289 | 20 910 | 20 442 |
| Zhanatas | 9 916 | 10 086 | 9 580 | 9 014 | 8 574 |
| Karatau | 13 282 | 13 359 | 12 272 | 13 100 | 13 590 |
| Balkhash | 38 564 | 38 971 | 41 805 | 38 688 | 39 779 |

| Zhezkazgan | 41 804 | 41 289 | 41 894 | 39 831 | 40 808 |
|---|---|---|---|---|---|
| Karazhal | 7 772 | 9 210 | 8 963 | 9 321 | 8 747 |
| Saran | 25 798 | 25 581 | 25 156 | 26 331 | 25 796 |
| Satpayev | 33 464 | 31 771 | 32 438 | 32 385 | 31 968 |
| Temirtau | 95 566 | 96 008 | 98 131 | 98 064 | 95 851 |
| Shakhtinsk | 25 538 | 26 294 | 25 254 | 24 763 | 25 643 |
| Abay | 15 649 | 14 541 | 15 361 | 15 034 | 15 692 |
| Arkalyk | 17 040 | 15 551 | 14 216 | 12 309 | 12 236 |
| Zhitikara | 18 008 | 19 325 | 19 866 | 18 296 | 19 579 |
| Lisakovsk | 24 188 | 23 307 | 23 583 | 22 367 | 22 399 |
| Rudny | 74 439 | 73 986 | 73 034 | 71 770 | 76 010 |
| Zhanaozen | 51 795 | 43 591 | 43 725 | 41 904 | 43 715 |
| Aksu | 25 610 | 24 900 | 24 447 | 22 511 | 22 253 |
| Ekibastuz | 77 536 | 77 234 | 78 233 | 77 111 | 76 543 |
| Kurchatov | 7 976 | 7 338 | 7 954 | 7 222 | 7 984 |
| Ridder | 30 097 | 30 083 | 29 021 | 28 826 | 29 078 |
| Kentau | 28 530 | 27 286 | 30 158 | 28 460 | 28 027 |
| Note – compiled by the authors according to [17] | | | | | |

We remind you that the analysis is conducted on 25 of 27 Kazakh single-industry towns, as the data for Altai and Serebryansk are not representative and are not officially registered.

Logically, the leaders among single-industry towns in terms of labor force, as we see it, are the same 3 cities, where there is a large number of residents themselves (Temirtau, Ekibastuz, Rudny). The average number of labor force in these cities is 96,724; 77,331; 73,848 respectively.

So, the maximum number of labor force is 95,851 in Temirtau, while the minimum number in Kurchatov is only 7,984. Illustration of the extent of the «gap» in the number of labor force from the maximum to the minimum, we can observe in Figure 2.
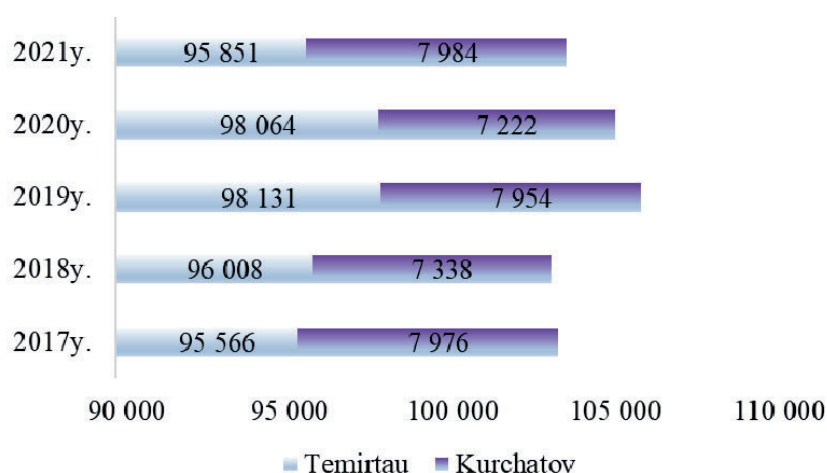


Figure 2 – Comparative parameters on the availability of labor in single-industry towns in Kazakhstan for 2017-2021. – «maximum-minimum».
Note – developed by the authors according to the data [17]

Separately, the city of Zhanaozen stands out, where the number of labor force is relatively higher than in other single-industry towns in the country, on average almost 45 thousand people, or 44,946 in the analyzed period. Next, a group of such single-industry towns with an average labor force of 39,745 are close, but lower: Zhezkazgan with 41,125 workers, Balkhash with 39,561 workers, Stepnogorsk with 37,577 workers.

In 2021, there are no particularly strong changes in the number of labor force compared to 2017. In general, the indicators have remained stable for 5 years. Thus, in Rudny there was a slightly noticeable increase in the number of the labor force by almost 2,000 people. Here is a trend of reduction in the number of labor force, although not significantly, but nevertheless it decreased in many single-industry towns of Kazakhstan: Stepnogorsk, Zhanatas, Arkalyk, Lisakovsk, Zhanaozen, Aksu, Ekibastuz, according to Figure 3.
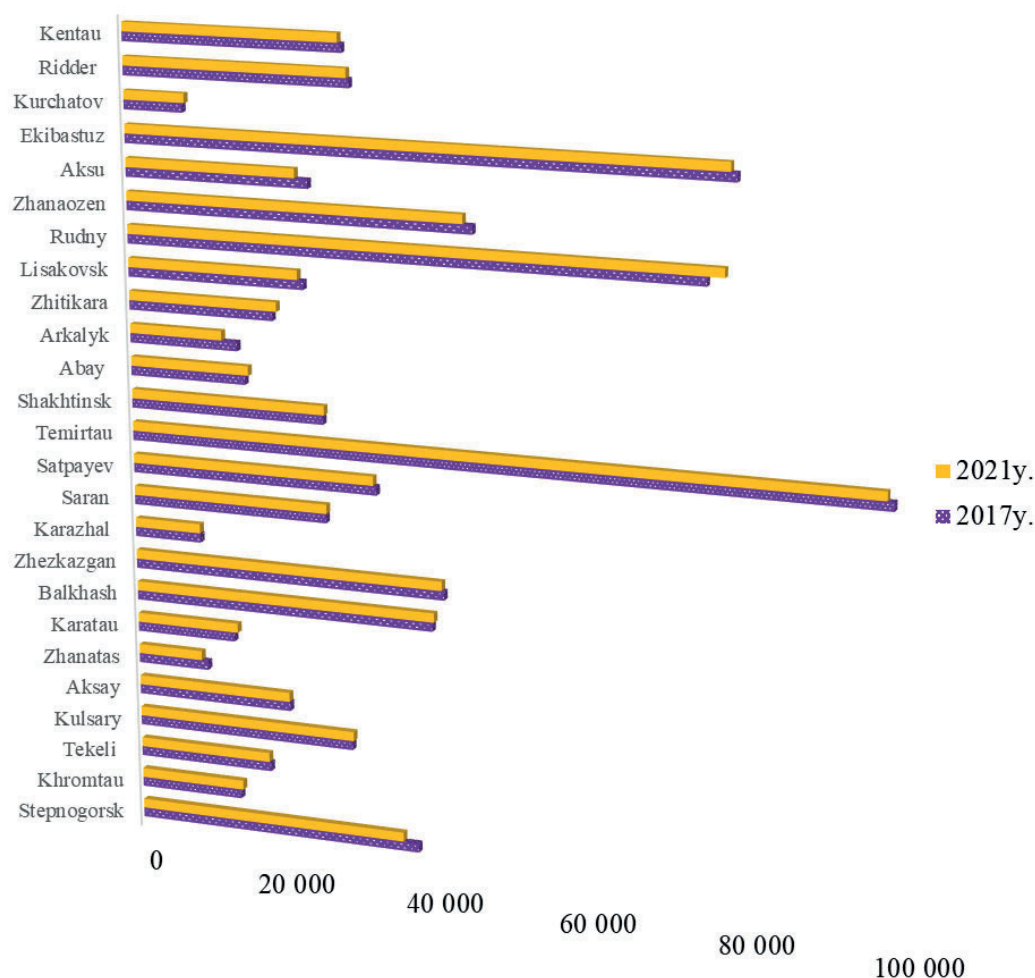


Figure 3 – Changes in the number of labor force in single-industry towns of Kazakhstan for 2017 and 2021

Note – developed by the authors according to [17]

Obviously, it will be interesting to study the structure of the labor force, in terms of the ratio of the employed and unemployed. In this regard, let us consider the data in Table 3.

As shown in Table 3, the following trends are observed in the labor force structure of single-industry towns in Kazakhstan:

- the leaders among single-industry towns in the number of employed are the cities of Temirtau, Ekibastuz and Rudny, which also dominate in terms of population as a whole:

- the number of unemployed is observed in correlation with the number of employed citizens, respectively, the leaders in the number of unemployed also became the cities of Temirtau, Ekibastuz and Rudny.

Table 3 – Labor force structure of single-industry towns in Kazakhstan, 2017-2021

| Mono city | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Empl. | Unemp. | Empl. | Unemp. | Empl. | Unemp. | Empl. | Unemp. | Empl. | Unemp. |
| Stepnogorsk | 37 307 | 1 562 | 37 171 | 1 561 | 36 711 | 1 506 | 34 971 | 1 456 | 34 054 | 1 484 |
| Khromtau | 12 671 | 623 | 13 097 | 452 | 13 000 | 476 | 13 258 | 571 | 13 081 | 808 |
| Tekeli | 17 034 | 864 | 17 180 | 896 | 16 946 | 888 | 16 672 | 817 | 16 702 | 844 |
| Kulsary | 28 845 | 1 439 | 27 085 | 1 344 | 27 286 | 1 104 | 26 898 | 1 321 | 27 664 | 1 346 |
| Aksay | 18 953 | 835 | 19 406 | 838 | 20 407 | 882 | 20 027 | 883 | 19 595 | 847 |
| Zhanatas | 9 505 | 411 | 9 665 | 421 | 9 180 | 400 | 8 627 | 387 | 8 189 | 385 |
| Karatau | 12 719 | 563 | 12 839 | 520 | 11 837 | 435 | 12 549 | 551 | 12 980 | 610 |
| Balkhash | 36 631 | 1 933 | 37 100 | 1 871 | 39 848 | 1 957 | 36 798 | 1 890 | 37 863 | 1 916 |
| Zhezkazgan | 39 622 | 2 182 | 39 274 | 2 015 | 39 974 | 1 920 | 37 903 | 1 928 | 39 048 | 1 760 |
| Karazhal | 7 409 | 363 | 8 775 | 435 | 8 642 | 321 | 8 977 | 344 | 8 432 | 315 |
| Saran | 24 670 | 1 128 | 24 500 | 1 081 | 24 141 | 1 015 | 25 212 | 1 119 | 24 741 | 1 055 |
| Satpayev | 31 942 | 1 522 | 30 416 | 1 355 | 31 144 | 1 294 | 31 017 | 1 368 | 30 656 | 1 312 |
| Temirtau | 90 953 | 4 613 | 91 589 | 4 419 | 93 783 | 4 348 | 93 561 | 4 503 | 91 506 | 4 345 |
| Shakhtinsk | 24 269 | 1 269 | 25 039 | 1 255 | 24 102 | 1 152 | 23 588 | 1 175 | 24 458 | 1 185 |
| Abay | 15 113 | 536 | 14 222 | 319 | 14 930 | 431 | 14 862 | 172 | 15 191 | 501 |
| Arkalyk | 16 099 | 941 | 14 713 | 838 | 13 439 | 777 | 11 699 | 610 | 11 490 | 746 |
| Zhitikara | 17 070 | 938 | 18 335 | 990 | 18 864 | 1 002 | 17 181 | 1 115 | 18 584 | 995 |
| Lisakovsk | 22 911 | 1 277 | 22 113 | 1 194 | 22 407 | 1 176 | 21 267 | 1 100 | 21 288 | 1 111 |
| Rudny | 70 720 | 3 719 | 70 081 | 3 905 | 69 307 | 3 727 | 67 890 | 3 880 | 72 254 | 3 756 |
| Zhanaozen | 49 348 | 2 447 | 41 228 | 2 363 | 42 138 | 1 587 | 41 149 | 755 | 42 338 | 1 377 |
| Aksu | 24 302 | 1 308 | 23 652 | 1 248 | 23 263 | 1 184 | 21 382 | 1 129 | 21 143 | 1 110 |
| Ekibastuz | 73 696 | 3 840 | 73 415 | 3 819 | 74 453 | 3 780 | 73 311 | 3 800 | 72 783 | 3 760 |
| Kurchatov | 7 589 | 387 | 6 992 | 346 | 7 590 | 364 | 6 879 | 343 | 7 617 | 367 |
| Ridder | 28 747 | 1 350 | 28 681 | 1 402 | 27 719 | 1 302 | 27 595 | 1 231 | 27 881 | 1 197 |
| Kentau | 27 046 | 1 484 | 25 641 | 1 645 | 28 904 | 1 254 | 26 937 | 1 523 | 26 529 | 1 498 |
| Note – compiled by the authors according to [17] | | | | | | | | | | |

As for single-industry towns, where the number of unemployed is registered at low parameters, the same trend can be seen. Where the number of residents is not high, there are low rates of unemployment. These are mono-cities Karazhal and Kurchatov. In Karazhal the average population for the analyzed period is only 8 thousand people, and the number of unemployed on average – 356 people. In Kurchatov, on average, 12 thousand inhabitants, of which the workforce is about 8 thousand people, and the average number of unemployed – 361 people.

It is interesting to look at the indicators of Abay, Karaganda region. At comparatively high indicators of population (about 28 thousand) and employed people on average about 15 thousand, a low number of unemployed is observed - 392 people in average for the last 5 years.

So, completing a small study of the labor market and employment in single-industry towns of Kazakhstan for the period from 2017-2021, we can come to the following results and conclusions.

**CONCLUSIONS**

Single-industry towns Temirtau, Ekibastuz, Rudny in Kazakhstan represent a group of leaders in terms of population, employed and unemployed. The results of statistical analysis record the following indicators for the number of inhabitants - 172,422; 129,510 and 111,705 people, respectively. The low population is revealed in single-industry towns: Kurchatov – 10,422; Karazhal – 8,301; Serebryansk – 7,246 people.

A comparative analysis with the indicators for the country as a whole has revealed that while the number of residents in single-industry towns remained the same during this period, their share in the total population of the country tends to decrease (by 0.1 p.p. annually).

Analysis of the main indicators of the labor market and development of the employment sphere in single-industry and raw material-type towns showed that the number of the labor force in single-industry towns is decreasing from year to year. Especially pandemic COVID-2019 had its impact on the reduction of the workforce in single-industry towns of the country. The reduction in the number of labor force is observed in many single-industry towns of Kazakhstan: Stepnogorsk, Zhanatas, Arkalyk, Lisakovsk, Zhanaozen, Aksu, Ekibastuz.

Analysis of the structure of the labor force, in terms of the ratio of the employed and unemployed showed a correlation between the number of inhabitants, the number of labor force and the number of unemployed. There is a close correlation between these indicators.

The monotowns of Temirtau, Ekibastuz and Rudny lead in terms of population, number of employed and unemployed. Karazhal and Kurchatov single-industry towns stand out by low rates of unemployment, but at the same time by the number of residents and employed.

When translating the results of statistical analysis into the practical field, we can put forward the following discussion issues.

First, due to the fact that employment in single-industry towns is provided mainly by one city-forming enterprise, there is a narrowly focused specialization of workers. The population is homogeneous by professional specialization. At the same time there are huge risks of the outflow of young people from monotowns to large settlements, the aging of the population, and labor migration.

In this regard, the question of diversification of the economic structure of single-industry towns is relevant. What ways will help to reduce dependence on the prices of raw materials, how to develop employment, small and medium business in single-industry towns. Since there is a problem of so-called hidden unemployment.

The question of state management in the development of monotowns remains acute and requires a new approach. Thus, all the adopted state programs and measures did not bring any results. The first program after the state audit was found to be ineffective. Further attempts are integrated into other programs, into the Program of Regional Development until 2020. It is necessary to eliminate the uncertainty, rushing from one program to another, and the lack of concrete steps on the part of state officials and the Government.

The next important prospective issue for the development of single-industry towns in Kazakhstan, we believe, is digitalization. When today the digital mine, digital industrial enterprise is developing in full force in the world, it is time for Kazakh city-forming enterprises of single-industry towns to introduce modern management processes, re-engineering, digitization of business processes and updating the professional skills of their employees.

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## ҚАЗАҚСТАННЫҢ МОНОҚАЛАЛАРЫНДАҒЫ ЕҢБЕК НАРЫҒЫНЫҢ ҮРДІСТЕРІН ТАЛДАУ

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**АҢДАТПА**

*Зерттеу мақсаты* – еңбек нарығын қалыптастырудың негізгі тенденциялары мен ерекшеліктерін анықтау, сондай-ақ Қазақстан Республикасының өнеркәсіптік және шикізат үлгісіндегі моноқалаларда жұмыспен қамтуды арттыру бойынша ұсынымдар әзірлеу.

*Әдіснамасы.* Жұмыста келесі ғылыми әдістер қолданылды: статистикалық байқау; салыстырмалы талдау; синтез; статистикалық байқау материалдарын топтастыру.

*Зерттеудің бірегейлігі / құндылығы.* Бұл зерттеудің құндылығы Қазақстан Республикасының моноқалаларында еңбек нарығын қалыптастырудың негізгі тенденцияларын анықтаудан тұрады, бұл қалалардың осы түрлерінде жұмыспен қамту және жұмысқа орналастыру саласын жетілдіру бағыттарын анықтауға мүмкіндік берді.

*Зерттеу нәтижелері.* Қазақстанның моноқалаларындағы еңбек нарығын зерттеу 2017-2021 жылдар аралығында бұл қалалардағы халық санының азайғаны анықталды. Ел халқының жалпы санындағы моноқала тұрғындарының үлес салмағының төмендеуі байқалады. Талдау моноқалаларды төрт топқа бөлуге болатынын көрсетті: ірі қалалар (Теміртау, Екібастұз, Рудный), шамамен 50-70 мың адам тұратын қалалар (Кентау, Балқаш, Жаңаөзен, Құлсары, Ақсу, Степногорск), халқы 20-дан 50 мыңға дейінгі қалалар (Хромтау, Текелі, Ақсай, Жаңатас, Қаратау, Саран, Шахтинск, Абай, Арқалық, Лисаковск, Жітіқара, Алтай) және шағын моноқалалар тобы (Курчатов, Қаражал, Серебрянск). Жұмыспен қамтылғандар мен жұмыссыздар саны бойынша Теміртау, Екібастұз және Рудный көш бастап тұр, сонымен қатар жалпы мағынада халық саны ең көп. Қазақстандағы моноқалалардың жұмыспен қамтылуын және тұрақты дамуын қамтамасыз ету үшін экономиканы әртараптандыру, шикізат бағасына тәуелділікті азайту, шағын және орта бизнесті дамыту бойынша жұмысты жалғастыру қажет. Моноқалаларды дамытуда және өндірісті цифрландыруда тиімді мемлекеттік басқару маңызды рөл атқарады.

*Түйін сөздер:* моноқалалар, жұмыспен қамту, жұмыс күші, жұмыссыздар, еңбек нарығы, өнеркәсіптік мамандандыру.

## АНАЛИЗ ТЕНДЕНЦИЙ РЫНКА ТРУДА В МОНОГОРОДАХ КАЗАХСТАНА

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**АННОТАЦИЯ**

*Цель исследования* – выявить ключевые тенденции и специфику формирования рынка труда, а также разработка рекомендаций по повышению занятости в моногородах промышленного и сырьевого типа Республики Казахстан.

*Методология исследования.* В работе использованы следующие научные методы: статистическое наблюдение; сравнительный анализ; синтез; группировка материалов статистического наблюдения.

*Оригинальность / ценность исследования.* Ценность данного исследования состоит в выявлении ключевых тенденций формирования рынка труда в моногородах Республики Казахстан, что позволило определить направления совершенствования сферы занятости и трудоустройства в данных типах городов.

*Результаты исследования.* Исследование рынка труда в моногородах Казахстана выявило снижение численности населения в этих городах с 2017 по 2021 годы. Отмечается уменьшение доли жителей моногородов в общей численности населения страны. Анализ показал, что моногорода можно разделить на четыре группы: высокочисленные (Темиртау, Экибастуз, Рудный), города с численностью около 50-70 тысяч человек (Кентау, Балхаш, Жанаозен, Кульсары, Аксу, Степногорск), города с численностью от 20 до 50 тысяч человек (Хромтау, Текели, Аксай, Жанатас, Каратау, Сарань, Шахтинск, Абай,

Аркалык, Лисаковск, Житикара, Алтай), и группа малочисленных моногородов (Курчатов, Каражал, Серебрянск). Темиртау, Экибастуз и Рудный являются лидерами по количеству занятых и безработных и также имеют наибольшую численность населения в общем смысле. Для обеспечения занятости и устойчивого развития моногородов Казахстана необходимо продолжать работу по диверсификации экономики, уменьшению зависимости от цен на сырьевые ресурсы и развитию малого и среднего бизнеса. Важную роль играют эффективное государственное управление в развитии моногородов и цифровизация производства.

*Ключевые слова:* моногорода, занятость, рабочая сила, безработица, рынок труда, промышленная специализация.

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## УПРАВЛЕНИЕ ЗНАНИЯМИ КАК ОСНОВА ДЛЯ СОВРЕМЕННЫХ ИННОВАЦИЙ

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### АННОТАЦИЯ

Современные глобальные вызовы диктуют необходимость разработки новых подходов к управлению. В настоящее время компании конкурируют не просто товарами и услугами, а знаниями и умением их эффективного применения.

*Цель статьи* заключалась в изучении понятийно-категориального аппарата knowledge management и в формировании собственного понимания управления знаниями.

*Методология исследования.* Проведен литературный обзор научных статей по knowledge management в рецензируемых журналах электронных баз данных с 1987 года в том числе с применением программы «Harzing's Publish or Perish». Были изучены труды ученых в сфере философии, социологии, экономики, информационных систем и т. д. На основании результатов проделанной работы структурированы понятия «данные», «информация», «знания» и «управление знаниями».