ELIT
Economic Laboratory Transition
Research Podgorica

Montenegrin Journal of Economics

For citation:

Pupysheva, T., Zhetpisbayeva, M., Koshebayeva, G., Magrupova, Z., Togaibayeva, L., Biryukov, V. (2025), "Financial Self-sufficiency of Rural Budgets as the Basis of Local Self-government", *Montenegrin Journal of Economics*, Vol. 21, No. 1, pp. 137-156.

Financial Self-sufficiency of Rural Budgets as the Basis of Local Self-government

TATYANA PUPYSHEVA[1], MUKHTARIMA ZHETPISBAYEVA[2], GAUKHAR KOSHEBAYEVA[3], ZULFIYA MAGRUPOVA[4], LYUSSIYA TOGAIBAYEVA[5], and VALERIY BIRYUKOV[6]

[1] PhD student, Karaganda University of Kazpotrebsoyuz, Karaganda, Kazakhstan, e-mail: ptn.77781@gmail.com, ORCID: 0000-0002-3806-6342
[2] Professor, Karaganda University of Kazpotrebsoyuz, Karaganda, Kazakhstan, e-mail: rimakeu@mail.ru, ORCID: 0000-0002-1341-3563
[3] Associate Professor, Abylkas Saginov Karaganda Technical University, Karaganda, Kazakhstan, e-mail: gauhark@bk.ru, ORCID: 0000-0002-0393-9844
[4] Associate Professor, Abylkas Saginov Karaganda Technical University, Karaganda, Kazakhstan, e-mail: mzm68@mail.ru, ORCID: 0000-0001-8190-5757
[5] Associate Professor, Abylkas Saginov Karaganda Technical University, Karaganda, Kazakhstan, e-mail: toglusia@mail.ru, ORCID: 0000-0002-4469-5022
[6] Associate Professor, Abylkas Saginov Karaganda Technical University, Karaganda, Kazakhstan, e-mail: v.biryukov@kstu.kz, ORCID: 0000-0003-2712-8840

ARTICLE INFO

Received September 18, 2023
Revised from October 17, 2023
Accepted November 18, 2023
Available online January 15, 2025

JEL classification: G18, G28, G32.

DOI: 10.14254/1800-5845/2025.21-1.11

Keywords:

Budget,
rural areas,
financial self-sufficiency,
sustainability,
economic potential,
local government

ABSTRACT

In today's rapidly changing reality of territorial communities, especially after the pandemic and other global events, ensuring and strengthening financial self-sufficiency becomes a critical task. Justification of effective mechanisms for strengthening the financial self-sufficiency of territorial communities is important for ensuring sustainable development of regions. The study of financial self-sufficiency of budgets of rural areas, including the Karaganda region, is of wide public and economic interest and can serve as the basis for the development of targeted measures to improve the financial sustainability and development of rural regions. The purpose of the study is to substantiate effective mechanisms for strengthening the financial self-sufficiency of territorial communities, taking into account modern challenges using materials from the Karaganda region.

INTRODUCTION

The study of financial self-sufficiency of rural budgets, especially using the example of a specific region such as the Karaganda region, is highly relevant for several reasons:

- *Regional inequality*. In many countries around the world, including Kazakhstan, there is inequality between urban and rural areas. A study of the financial self-sufficiency of rural budgets allows us to assess the extent to which these territories are able to provide for their financial needs independently.
- *Rural development*. Rural areas are often the main agricultural areas and are important for a country's food security and economy. Research on financial self-sufficiency will help determine how efficiently resources are being used and what measures can be taken to stimulate agricultural development.
- *Economic sustainability and diversity*. Financial self-sufficiency of rural budgets can help strengthen the sustainability of the region's economy. Diversity in revenue sources helps mitigate the negative effects of changes in one industry.
- *Government support*. The study of financial self-sufficiency of rural budgets can become an argument for justifying and rationalizing state support and financing of rural areas, especially in conditions of limited budgetary resources.
- *Tourism and infrastructure*. The development of rural areas may include the development of tourism, agrotourism and other areas. A study of financial self-sufficiency will help to understand how these industries can become an additional source of income for budgets.
- *Good management*. Knowledge about the factors influencing financial self-sufficiency will allow us to develop more effective strategies for managing and planning budgets in rural areas.

The study of financial self-sufficiency of rural budgets in Kazakhstan is an important tool for the development of equal and sustainable development of all regions of the country, providing quality services to the population and creating favorable conditions for entrepreneurship. Rural areas are home to a significant part of the population of Kazakhstan. Ensuring financial self-sufficiency of rural budgets helps ensure social justice and equal opportunities for development in all regions of the country. Rural development plays an important role in strengthening the sustainability of a country's economy. If rural budgets become more self-sufficient, this can reduce dependence on the central budget and help mitigate the impact of economic fluctuations. A financial self-sufficiency survey helps identify problem areas that require additional support. This can become the basis for the development of targeted programs for the development of rural areas. Knowledge of the factors influencing financial self-sufficiency allows management bodies to better plan expenses, attract investments and rationally use available resources. Financial self-sufficiency can contribute to the development of infrastructure, including roads, education, healthcare and other areas, which in turn improves the quality of life of the population. If the budgets of rural areas can provide for their financial needs, this can stimulate the development of local enterprises, the agricultural sector, and the creation of new jobs.

The development of self-government at the local level contributes to a more effective solution of local problems and complies with the principles of decentralization in management. The study of financial self-sufficiency helps to increase transparency and responsibility in the management of rural budgets, as it allows one to evaluate the effectiveness of expenses and results. The study of the financial self-sufficiency of rural budgets allows us to identify the key problems and challenges that these territories face, as well as to develop effective strategies and mechanisms to strengthen their financial base. This may include analyzing tax revenues, expenditures and investments, assessing the potential for developing new economic sectors, managing public and private resources, and creating innovative approaches to attracting investment and developing local infrastructure.

1. RESEARCH BACKGROUND

In their research, Voznyak, H. et al. (2022) developed a scientific and practical approach to assessing the self-sufficiency of territorial communities. Unlike others, it provides a comprehensive (integral) assessment of the importance of the components of financial self-sufficiency of territorial communities and allows us to identify the complementary influence of financial self-sufficiency on ensuring sustainable economic

development of the territory. The approach developed by the authors to assess the financial self-sufficiency of territorial communities represents a significant contribution to the analysis and planning of regional development (Kovács et al., 2023; Temerbulatova et al., 2024). It has a number of advantages and innovations compared to traditional methods of assessing financial self-sufficiency:

- Comprehensive assessment - they proposed an integral approach that takes into account not only individual financial parameters, but also their impact on the overall economic development of the territory. This allows us to assess the impact of financial self-sufficiency on various aspects of the region's sustainability.
- Taking into account the interaction of parameters - the approach takes into account the interaction of various parameters of financial self-sufficiency. This is important because in reality the parameters rarely act independently of each other, and their combined effects can have more significant consequences.
- Focus on sustainability - assessing the impact of financial self-sufficiency on sustainable economic development gives the approach strategic importance. It helps identify how financial sustainability can contribute to the long-term growth and prosperity of an area.
- Scientific and practical orientation - the described approach is not only theoretically justified, but also has practical application. It can be used by local governments, government research organizations and other interested structures to determine optimal strategies for regional development.
- Transparency and objectivity - the approach involves the use of quantitative data and methods, which ensures the objectivity of the assessment. This allows us to draw conclusions based on evidence and minimize subjective assessments (Voznyak et al., 2022).

Such a scientific and practical approach to assessing the financial self-sufficiency of territorial communities can become a valuable tool for making decisions on regional development, optimizing budget processes and ensuring the sustainability of local economies. According to Yegorycheva & Lakhizha, (2016), scientific research shows that in a number of modern studies related to strengthening the financial self-sufficiency of territorial communities, there is no unity of approaches to understanding the essence of this concept, as well as tools for its assessment and mechanisms for maintaining sustainable development. To do this, they propose to consider financially self-sufficient communities from the point of view of maximizing their own and delegated powers of local governments. They emphasize that a financially self-sufficient community must cover the entire volume of its obligations, and the accumulation of resources should not be spontaneous and chaotic, but be based on optimizing the management of existing financial resources, which is impossible without financial resources, which is impossible without using the promising capabilities of the territorial community.

Other studies by Lyuta & Pigul, (2015), Protsenko (2016) are devoted to general economic aspects and highlight the necessary components for resolving issues of local importance in the interests of community residents, as well as the implementation of their own and delegated powers of local governments. The issues of developing territorial communities and ensuring their sustainable development, including on the basis of decentralization, remain very relevant. Ensuring local development using financial policy instruments and increasing the social capital of territorial communities is a priority direction of modern research (Bridger & Alter, 2006). In addition to the financial component, relationships manifest themselves through social and economic effects. For example, economic and managerial effects have a significant impact on the socio-economic development of territorial communities (Storonyanska et al., 2020). It is impossible to achieve a high standard of living without ensuring the proper level of well-being (Voznyak et al., 2022).

On the other hand, the wealth of tangible and intangible heritage, the vibrancy of oral traditions, a strong sense of community and cultural identity are important local assets that can be transformed through effective development tools through appropriate policies and programs (Silva et al., 2018). Thus, some studies of the financial self-sufficiency of rural communities propose to evaluate it by local budget revenues (Krupin, & Pelehatyy, 2015), and in some - by a spatial assessment of financial self-sufficiency based on Moran. Some propose a spatial assessment of financial self-sufficiency based on Moran's I statistics (Kozera & Głowicka-Wołoszyn, 2016). Meanwhile, some other authors argue that index models with a

system of parameters that characterize both the internal potential of a territorial community and the effectiveness of its management should be used for assessment.

Factors influencing the economic self-sufficiency of a community are proposed to be identified based on the Fishbone Diagram, which makes it possible to establish the relationship between the effect and the strength of the factor's impact (Umanets et al., 2018). Researchers argue that a self-sufficient community should provide these services without expecting assistance from the government (Vernon & Qureshi, 2000). Findings from other studies (Behrman et al., 2012), (Gathergood, 2012; Henager & Mauldin, 2015) describe ways to achieve and strengthen their financial stability and well-being based on the theory of psychological self-sufficiency (PSS). Voznyak, H. and Koval, V. (2023) proposed mechanisms for strengthening the financial self-sufficiency of territorial communities in conditions of instability. The authors believe that expanding the powers of local government in terms of administering local taxes and fees, as well as strengthening control over their revenues, will allow mobilizing additional revenues into local budgets, which for certain reasons are not used.

Since the announcement of the Sustainable Development Goals (hereinafter referred to as SDGs), the need to localize the SDGs has been emphasized. In this context, sustainable rural development is still a relatively unexplored area in the context of using participatory budgeting as a tool for achieving the SDGs. Few countries have in practice introduced legal provisions allowing for participatory budgeting (especially in rural areas) (Bednarska-Olejniczak et al., 2020). State policy makers have also recognized the importance of this problem in the National Project for the development of the agro-industrial complex of the Republic of Kazakhstan for 2021-2025" and provided for "a stable increase in the incomes of one million rural residents driven by the formation of seven large ecosystems and implementation of investment projects" (Lemechshenko et al.,2022; Zhidebekkyzy et al., 2023). Financial self-sufficiency of rural budgets is a very relevant and important topic for research, especially in today's rapidly changing socio-economic environment. Rural areas play an important role in the economy and social life of the country, and ensuring their financial sustainability and development has a direct impact on the quality of life of the residents of these regions. Thus, the study of financial self-sufficiency of rural budgets has great potential for practical application and making a positive contribution to the development of local communities and strengthening their economic sustainability.

2. METHODOLOGY

Financial self-sufficiency of rural budgets is an important aspect of the development of the regional economy. It makes it possible to meet the social and infrastructural needs of the population, improve the quality of life and develop the territory. Let's consider an example of financial self-sufficiency of rural budgets using the example of the Karaganda region in Kazakhstan (Table 1).

Table 1. Development of financial self-sufficiency of rural budgets

No	*Factors*	*Features of influence*
1	Agricultural activity	Agriculture, crop production and livestock farming are actively developing in rural areas. Income from agricultural activities, taxes on agricultural enterprises and farms can significantly affect the budgets of rural areas
2	Natural resource development	If there are natural resources in the region, such as ore deposits or energy resources, the extraction and processing of these resources can also bring significant income to the budget of the rural area.
3	Investments and Entrepreneurship	Attracting investment and developing local entrepreneurship contributes to the creation of new jobs and economic growth, which in turn increases budget revenues.
4	Tourism	The development of tourism can become an additional source of income for rural areas. Attracting tourists to explore natural attractions, fishing, hunting and other outdoor activities can stimulate the economy of the region.
5	Subsidies and grants	Obtaining subsidies, grants and support from higher authorities or international organizations can significantly help ensure the financial stability of rural budgets.

Source: compiled by authors

Factors influencing the financial self-sufficiency of rural budgets can be varied and depend on the specific conditions of the region. Given the complexity of the interaction of all these factors, ensuring the financial self-sufficiency of rural budgets requires an integrated approach of active development policies, resource management and economic diversification. An integrated approach that influences the financial self-sufficiency of rural budgets can be presented as follows (Figure 1).

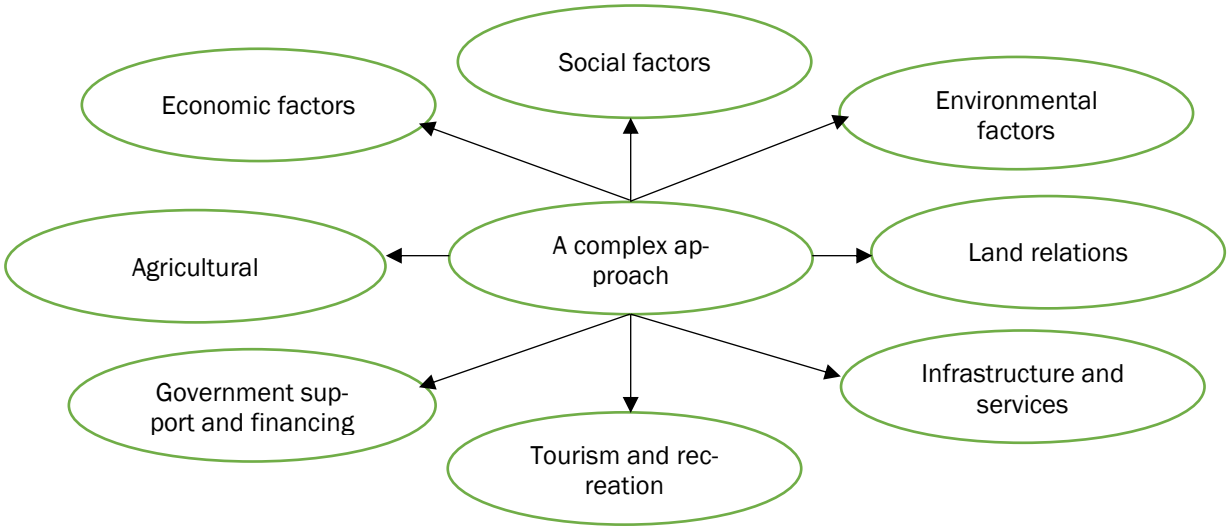

Figure 1. Factors influencing the financial self-sufficiency of rural budgets

Source: Compiled by the authors

For example:

- diversity of economic sectors in rural areas can improve financial stability. Dependence on one industry (agriculture) can make the budget vulnerable to fluctuations in that industry;
- attracting investment in various sectors can stimulate economic growth and increase budget revenues;
- a large population can lead to an increase in tax revenues if the population is actively engaged in labor activities;
- population decline, population aging and loss of youth may affect tax payers and social needs;
- the presence of natural resources, such as forests, ore deposits or water resources, can contribute to budget revenues through taxation of the extraction and use of these resources;
- good transport infrastructure can contribute to the development of tourism and other sectors of the economy, which increases budget revenues;
- high-quality educational and medical services attract the population and investors, which can have a positive impact on the budget;
- attracting tourists to rural areas can be an additional source of income for the budget through fees for services and taxes;
- financial support from higher authorities can contribute to the financial self-sufficiency of rural budgets;
- income from agriculture, product sales and taxes from agricultural enterprises affect the budget;
- income from land payments can be a significant source of income for the budget.

There are certain advantages and disadvantages of financial self-sufficiency of rural budgets (Figure 2).

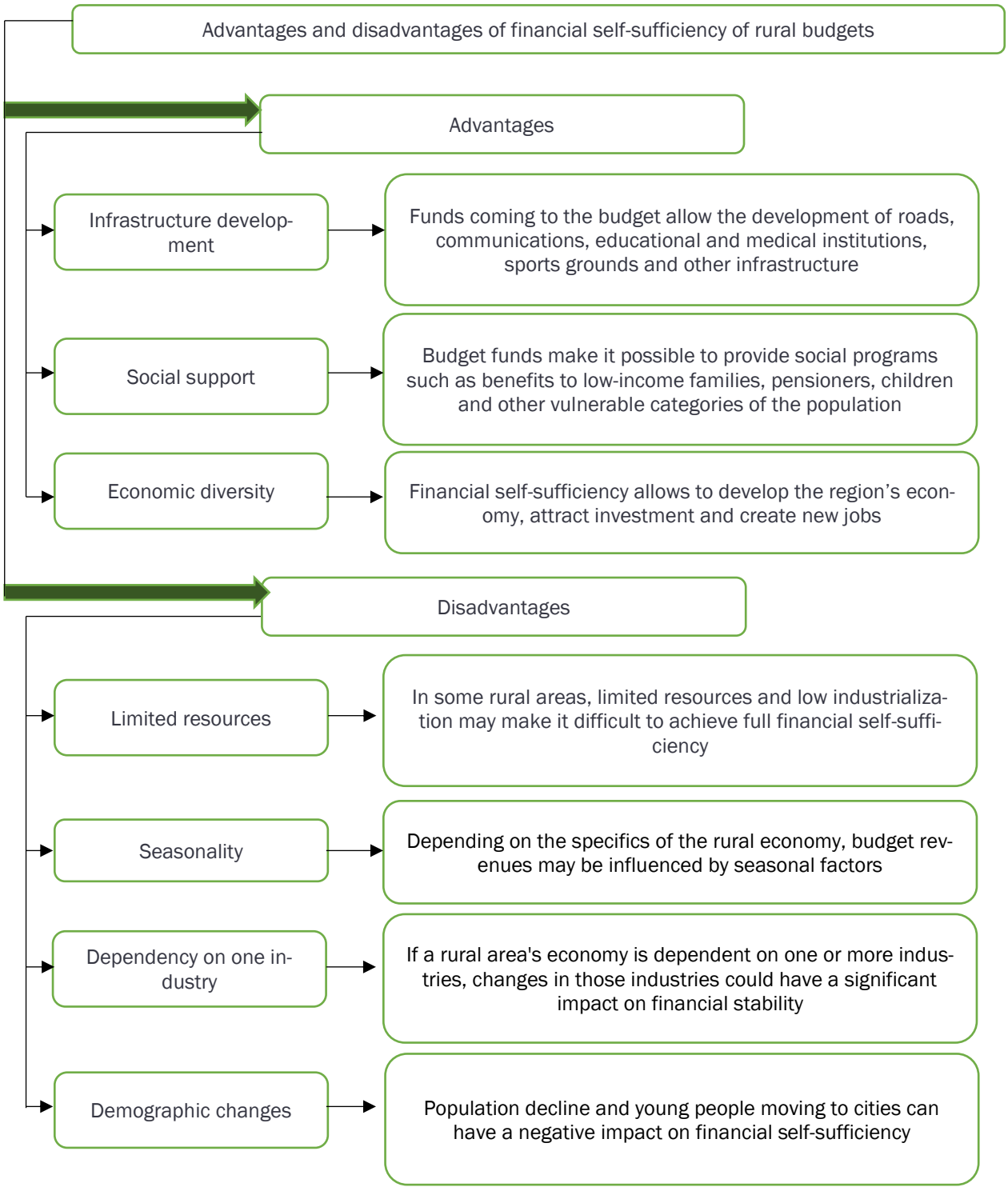

Figure 2. Advantages and disadvantages of financial self-sufficiency of rural budgets

Source: Compiled by the authors

To ensure financial self-sufficiency of rural areas, it is important to develop effective development strategies, maintain a diversity of economic sectors, stimulate investment and support social programs for the population (Ashirbekova et al., 2023). The budget is the main element of budget policy and a means for the state to implement strategic and tactical development plans for a certain period. At the expense of the budget, social programs are implemented, law and order and defense capabilities are maintained,

conditions are created to stimulate innovation, preserve the environment and implement other government functions. The rural budget is one of the basic institutions that helps the state pursue a unified social and economic policy. Through the budget, monetary resources are accumulated, which are subsequently used to solve socio-economic problems of the local community. According to Art. 52-1 of the Budget Code of the Republic of Kazakhstan, revenues to rural budgets consist of the following types: a) tax; b) non-tax; c) from the sale of state property; and d) transfers from higher levels of budgets.

In turn, tax revenues consist of the following types of taxes:

- individual income tax, not taxed at sources of payments, for individuals registered in rural districts;
- personal property tax. persons whose property is located in the rural district.
- tax on transport from individuals. and legal persons registered in a rural district;
- land tax from individuals. and legal persons on the lands of settlements, the land plot of which is located in a rural district;
- tax for placing outdoor advertising.

Non-tax revenues include:

- income from the rental of communal property (rent);
- voluntary collections of individuals and legal entities;
- fines provided for by the Code of Administrative Offences;
- income from the sale of state property.

3. ANALYSIS

Let us consider an analysis of the self-sufficiency of villages in the Republic of Kazakhstan from a regional perspective to identify a decrease or increase in the budget indicators of self-sufficiency of rural districts (Figure 3).

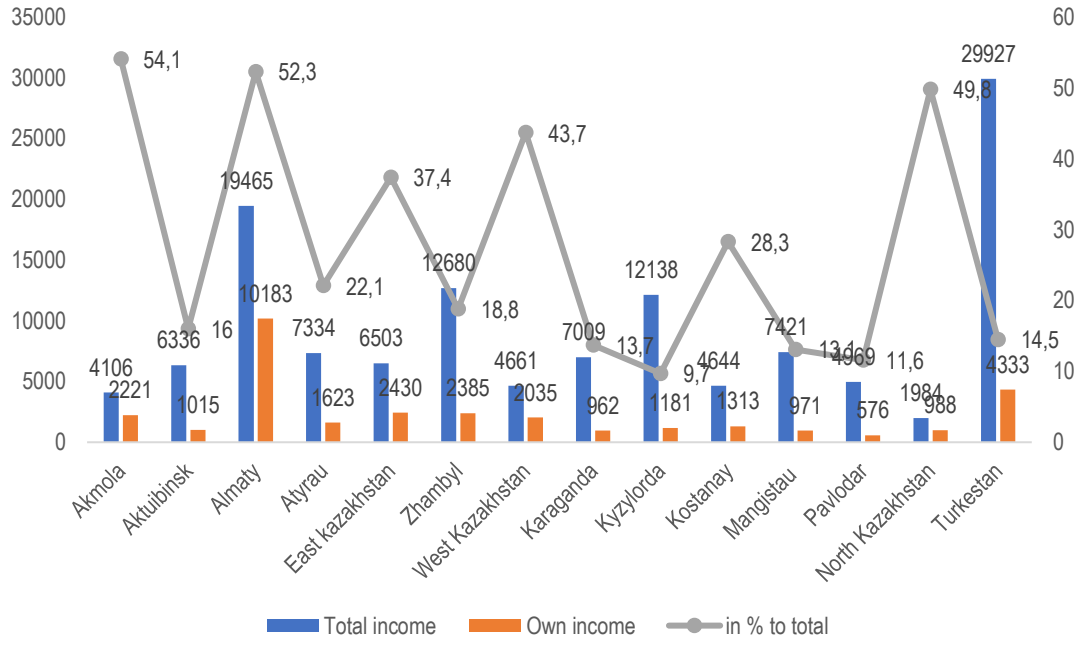

Figure 3. Share of self-sufficiency levels in villages in the Republic of Kazakhstan as of 01/01/2020, in million tenge

Source: https://www.gov.kz/memleket/entities/economy

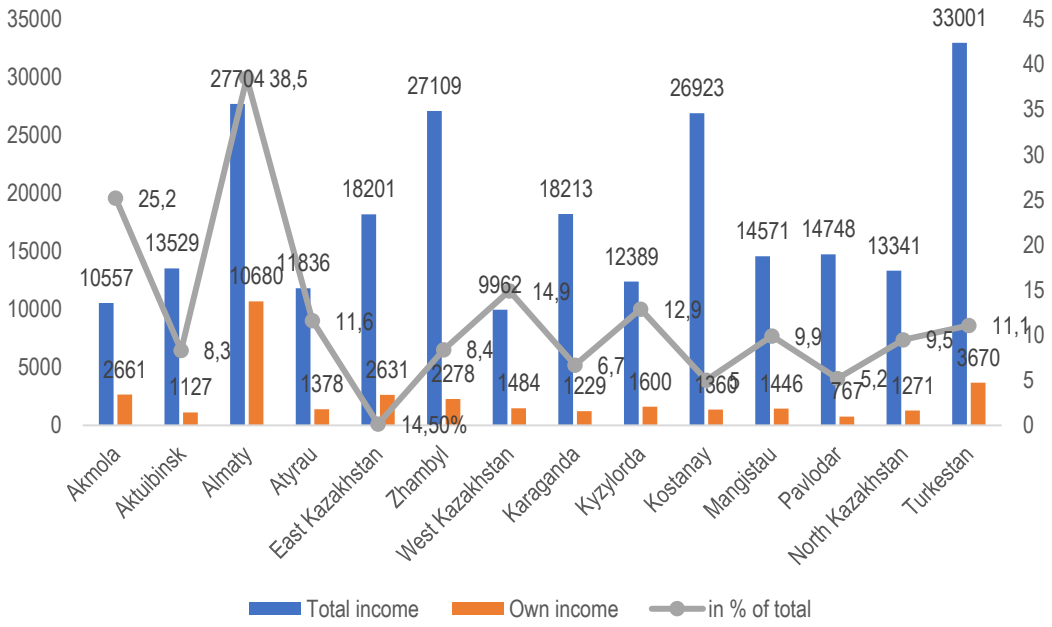

Figure 4. Share of self-sufficiency levels in villages in the Republic of Kazakhstan as of 01/01/2021, in million tenge

Source: https://www.gov.kz/memleket/entities/economy

As can be seen from Figure 3, 4, in all regions of the country, with the exception of the Kyzylorda region, there is a decrease in the budget indicators of self-sufficiency of rural districts as of 01.01.2021 compared to 01.01.2020. In the structure of tax revenues, the share of property taxes is significant; its share consistently accounts for more than half of tax revenues. The next important component of tax revenues from LSG budgets is personal income tax; its reduction from 7.9% to 3.8% in recent years is associated with exemption from taxes on the income of certain categories of taxpayers. Non-tax revenues include income from the rental of municipal property, parts of the net profit of state-owned enterprises, mandatory payments and fees, as well as fines. Their share is less than 1% of local budget revenues. In the structure of local self-government budget expenditures, three main areas can be distinguished: the social sphere (32.7%), housing and communal services and transport (32.6%) and the maintenance of the offices of akims of rural districts (25.5%).

4. EXPERIMENTS AND DEMONSTRATIONS

In order to study the problems and prospects for the development of local self-government in rural districts of the Karaganda region, 2 sociological surveys were conducted in June 2023. Surveys were conducted in all rural districts of the Karaganda region: Abai, Aktogay, Bukhar-zhyrau, Karkaralinsky, Nurinsky, Osakarovsky, Shetsky. A total of 660 people were interviewed, of which:

a) survey: 155 civil servants (government employees),
b) survey: 505 rural residents (aged 18 years and older).

In questions where respondents were given more than one choice, the sum exceeds 100%). Answers to basic questions (mainly budgetary questions): Answers to the questions showed that the majority of both civil servants (83.9%) and rural residents (64.0%) are aware that local self-government involves a system in which the population, with the help of akimats or with the help of representative bodies (for example, maslikhats) resolves issues of local importance (Table 2).

Table 2. Opinion of residents of rural areas of the Karaganda region about local self-government, in %

Understanding Local Government	*Civil servants, %*	*Villager, %*
A) when the population completely solves local problems on its own	12,2	26,3
B) when the population, with the help of akimats or with the help of representative bodies (for example, maslikhats), resolves issues of local importance	83,9	64,0
C) when one of the local residents takes responsibility in resolving issues of local importance	3,9	9,5
D) other	0	0,2
Total	100	100

Source: compiled by the authors

Civil servants believe that local self-government contributes to a greater extent to solving local problems through strengthening feedback between public administrations and the population (59.4%), contributes to solving rural problems by taking into account the opinions of rural residents (43.9%) and increases efficiency solving problems through decision-making at the local level (36.1%). Rural residents place greater emphasis on the fact that their opinion should be taken into account (41.0%), and only then the feedback between public administrations and the population should be strengthened (37.4%) (Table 3).

Table 3. Opinion of residents of rural areas of the Karaganda region on the influence of local government on rural life, in %

Possible answer	*Civil servants, %*	*Villager, %*
A) contributes to solving rural problems by taking into account the opinions of rural residents	43,9	41,0
B) increases the effectiveness of problem solving through decision making at the local level	36,1	29,3
C) contributes to solving local problems through strengthening feedback between akims and the population	59,4	37,4
D) increases the efficiency of using budget funds through the participation of the population in budget distribution	27,7	21,6
E) shifts the solution of problems to the population	5,2	2,2
F) has no effect	1,9	1,8
G) other	0,6	0,2

Source: compiled by the authors

The unequivocal opinion that the local budget is insufficient is shared by both civil servants (72.9%) and rural residents (68.1%). Only a little more than a tenth of respondents (14.2% of civil servants and 15.3% of rural residents) assess it as sufficient. And this is a serious problem (Figure 5).

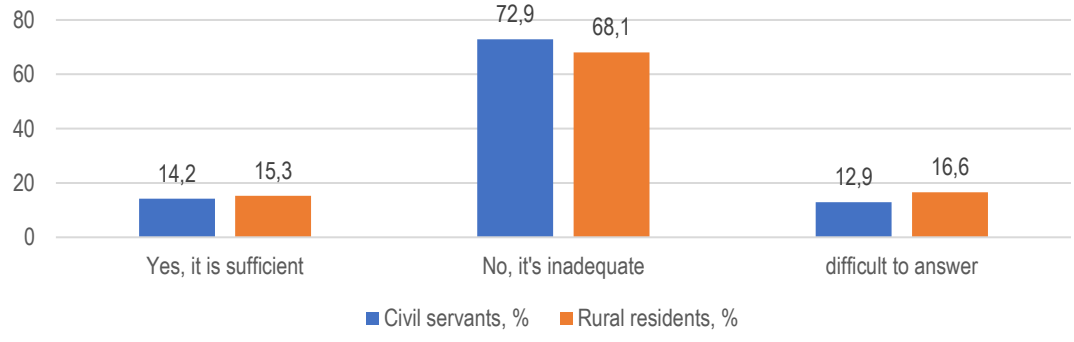

Figure 5. Opinion of residents of rural areas of the Karaganda region about the sufficiency of local budgets, in%

Source: Compiled by the authors

The majority of government officials (61.3%) note that they constantly involve the local community in the process of local budget allocation, and another 20.6% say that they sometimes involve them. Whereas only a tenth of those surveyed never do this. At the same time, almost half of rural residents (44.6%) admit that they have never taken part in the distribution of the local budget. And only 20.2% of respondents say that they are constantly involved in this process (Figure 6).

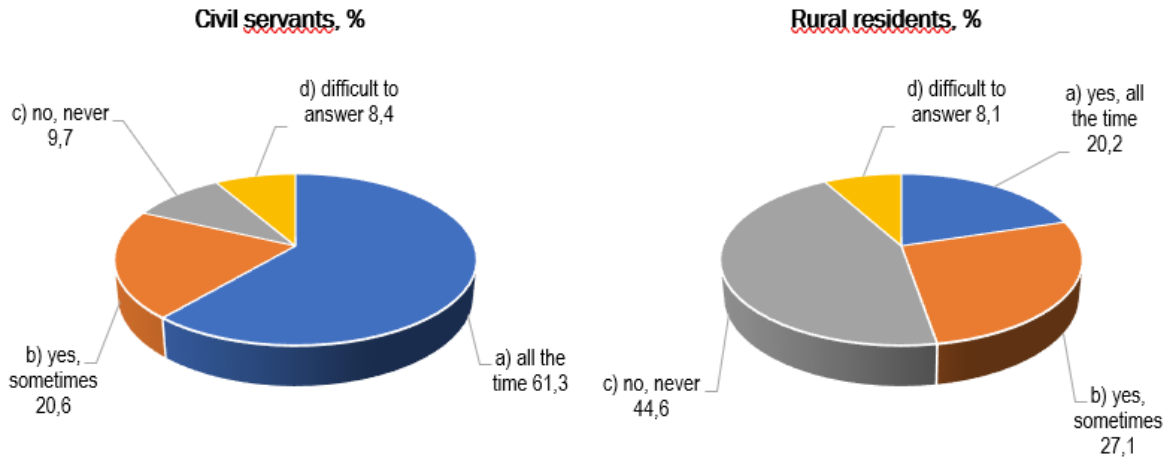

Figure 6. Opinion of residents of rural areas of the Karaganda region on the participation of the population in the distribution of local budgets, in%

Source: Compiled by the authors

The problem of increasing the local budget can be solved, first of all, by increasing the volume of government transfers and subsidies to local budgets. This is the opinion of the majority of civil servants (65.8%) and rural residents (62.4%). Also, civil servants assign great importance in solving this problem to business representatives, who, in their opinion, should participate in the formation of the local budget (43.2%) and increasing the number of taxes transferred to the local level (40.6%). Rural residents, in addition to the state, assign this role to business representatives (36.4%) (Table 4).

Table 4. Opinion of residents of rural areas of the Karaganda region regarding the measures necessary to increase the local budget, in %

Measures to increase the local budget	*Civil servants, %*	*Villager, %*
A) business representatives should participate in the formation of the local budget	43,2	36,4
B) it is necessary to increase the number of taxes transferred to the local level	40,6	19,2
C) it is necessary to increase tax rates	4,5	4,9
D) the state should increase the volume of transfers and subsidies to local budgets	65,8	62,4
E) nothing needs to be done, since there are already enough funds	1,3	3,4
F) other	1,3	0,6

Source: Compiled by the authors

The development of local self-government in rural districts is influenced by many factors, and, therefore, it is necessary to take measures aimed at its development. Civil servants believe that, first of all, the development of local self-government requires the desire and interest of the population itself (49.7%), increased funding (47.7%), support from higher government bodies (46.5%), and conducting explanatory work among the population about the importance of local government and opportunities for citizen

participation (43.9%). In this matter, rural residents place the main emphasis on increasing funding (51.5%), support from higher government bodies (41.6%), and only then on the desire and interest of the population itself (37.4%), carrying out explanatory work among the population about the importance of local government and opportunities for citizen participation (35.6%). In this matter, both of them attach the least importance to improving the legislative framework and increasing the responsibility of the population (Table 5).

Table 5. Opinion of residents of rural areas of the Karaganda region regarding the measures necessary for the development of local self-government, in %

Measures to increase the local budget	*Civil servants, %*	*Villager, %*
A) improvement of the legislative framework	34,8	30,7
B) increase in funding	47,7	51,5
C) support from higher government bodies	46,5	41,6
D) conducting explanatory work among the population about the importance of local government and opportunities for citizen participation	43,9	35,6
E) desire and interest of the population itself	49,7	37,4
F) increased responsibility of the population	38,7	29,1
G) nothing needs to be done, it is already developing well	1,9	1,6
H) nothing is needed, since local government does not decide anything	1,3	3,4
K) other	1,3	0

Source: Compiled by the authors

Using correlation-regression analysis, we will determine the correlation coefficients. An assessment of the closeness of the relationship between the volumes of receipts, income (excluding transfers) and transfers to the budgets of rural areas of the Karaganda region was calculated. The basis is taken from socio-economic characteristics and budget data for rural districts of the Karaganda region: Abai, Aktogay, Bukhar-zhyrau, Karkaralinsky, Nurinsky, Osakarovsky, Shetsky. To assess the close relationship between the volume of receipts, income (excluding transfers) and transfers to rural budgets with various indicators, the correlation coefficient is calculated using the formula:

$$r = \frac{\overline{xy} - \bar{x} \cdot \bar{y}}{\sigma_x \cdot \sigma_y}.$$

The calculation results are presented in Table 6.

Table 6. Correlation coefficients

No	*Factors studied*	*Correlation coefficients of the closeness of connections between factors and the volume of revenues to rural budgets, r*	*Correlation coefficients of the closeness of connections between factors and the amount of income (excluding transfers) in rural budgets, r*	*Correlation coefficients of the closeness of connections between factors and the volume of transfers to rural budgets, r*
1	Population	0,65	0,40	0,51
2	Number of rural settlements	0,66	-0,04	0,83
3	Territory of the district	-0,30	-0,06	-0,23
4	Gross output of agricultural products	0,09	-0,21	0,23
5	Industrial output volume	-0,67	-0,15	-0,54
6	Retail turnover	0,29	0,63	-0,27

7	Number of operating small and medium-sized businesses	0,92	0,50	0,64
8	Volumes of production by SMEs	0,60	0,51	0,35
9	Area of arable land in agricultural use	-0,43	-0,63	-0,04
10	Number of unemployed	0,26	0,63	-0,15
11	Livestock numbers in all categories	0,26	0,01	0,32
12	Cattle population	0,38	-0,07	0,57
13	Number of medical organizations (medical outpatient clinics, first-aid posts, hospital organizations)	0,49	-0,30	0,84
14	Number of state cultural objects	0,27	-0,50	0,78

Source: Compiled by the authors

According to the calculations made, the greatest close relationship was recorded between the volumes of all revenues to the budgets of rural areas and the number of operating small and medium-sized businesses: r = 0.92. The regression line graph describing the original data is shown in Figure 7.

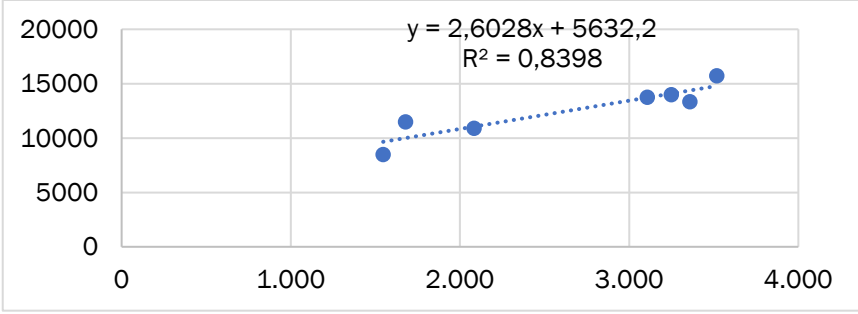

Figure 7. Graph of the dependence of the volume of revenues to rural budgets on the number of operating small and medium-sized businesses

Source: Compiled by the authors

As a result, there is an average close relationship between the volume of revenues to the budgets of rural areas and the volume of output of small and medium-sized businesses: r = 0.60. The regression line graph describing the original data is shown in Figure 8.

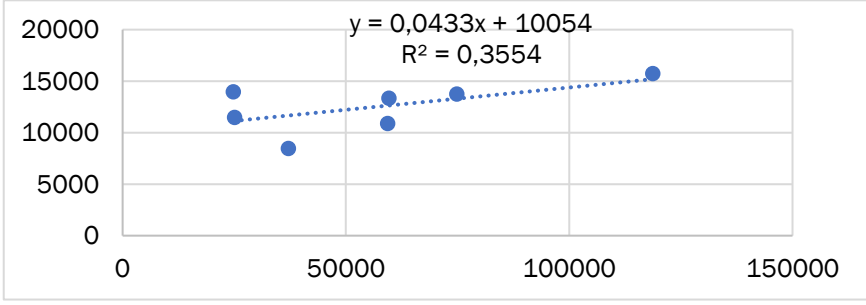

Figure 8. Graph of the dependence of the volume of revenues to the budgets of rural areas on the volume of output of small and medium-sized businesses

Source: Compiled by the authors

In addition, an average close connection was recorded between the volume of revenues to the budgets of rural areas with the number of rural settlements (r = 0.66) and population size (r = 0.65). The regression line graph describing these dependencies is shown in Figures 9 and 10.

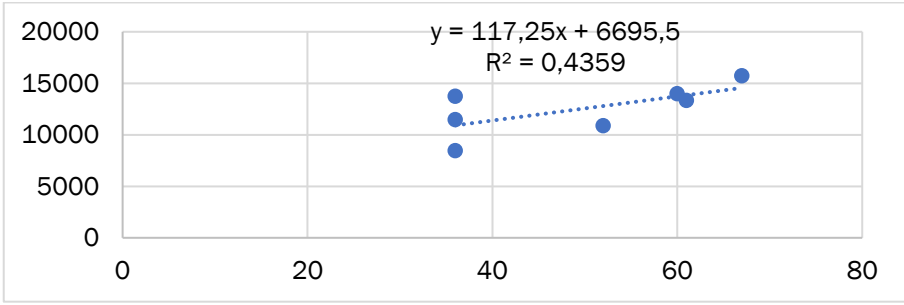

Figure 9. Graph of the dependence of the volume of revenues to rural budgets on the number of rural settlements

Source: Compiled by the authors

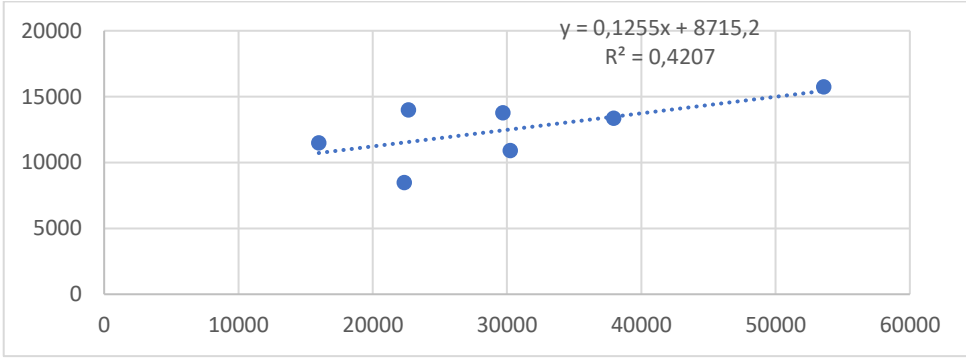

Figure 10 – Graph of the dependence of the volume of revenues to rural budgets on the population size
Source: Compiled by the authors

Also, the average close relationship between the volume of revenues to the budgets of rural areas and the number of medical organizations (medical outpatient clinics, first-aid posts, hospital organizations): r = 0.49 (Figure 11).

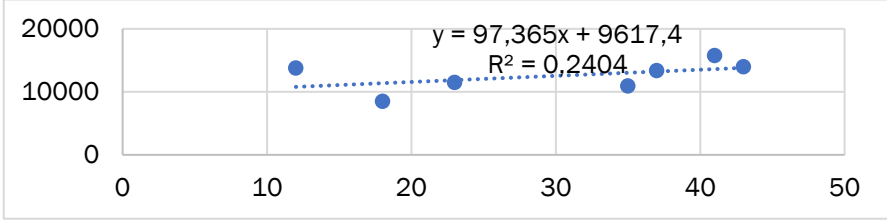

Figure 11. Graph of the dependence of the volume of revenues to rural budgets on the number of medical organizations

Source: Compiled by the authors

Graphical analysis shows that the empirical values are quite close to the regression line. This indicates a strong close relationship between the volume of revenues to the budgets of rural areas and such an economic indicator as the number of operating small and medium-sized businesses, as well as an average close relationship with the volume of output of small and medium-sized businesses. Also, an average close relationship is observed between the volume of revenues and such indicators as the number of rural settlements and population.

As for the connection with the budget income of rural areas (excluding transfers), the greatest connection was recorded here with retail trade turnover (r = 0.63) (Figure 12).

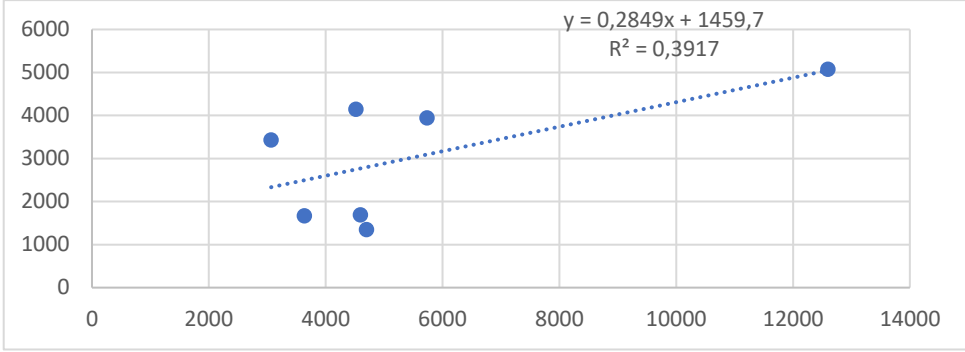

Figure 12. Graph of the dependence of income in rural budgets on retail turnover

Source: Compiled by the authors

The connection with the number of unemployed is the same (r = 0.63) (Figure 13).

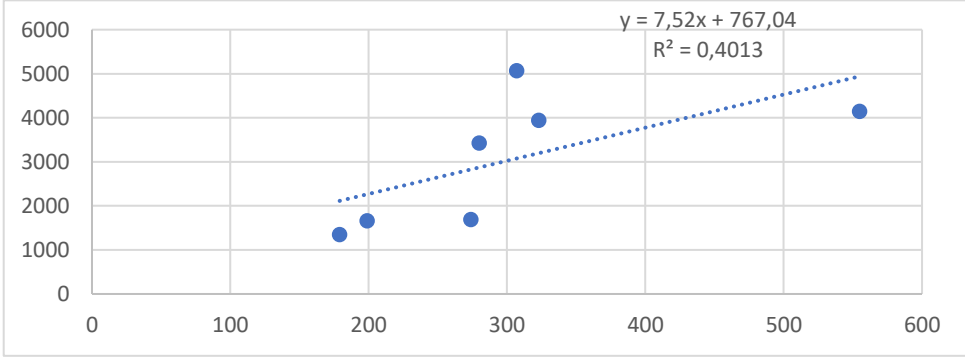

Figure 13. Graph of the dependence of the volume of income in rural budgets on the number of unemployed

Source: Compiled by the authors

An average close connection was recorded between the income of rural budgets and the volume of output of small and medium-sized businesses (r = 0.51) and the number of operating small and medium-sized businesses (r = 0.50). The regression line graph describing these dependencies is shown in Figures 14 and 15.

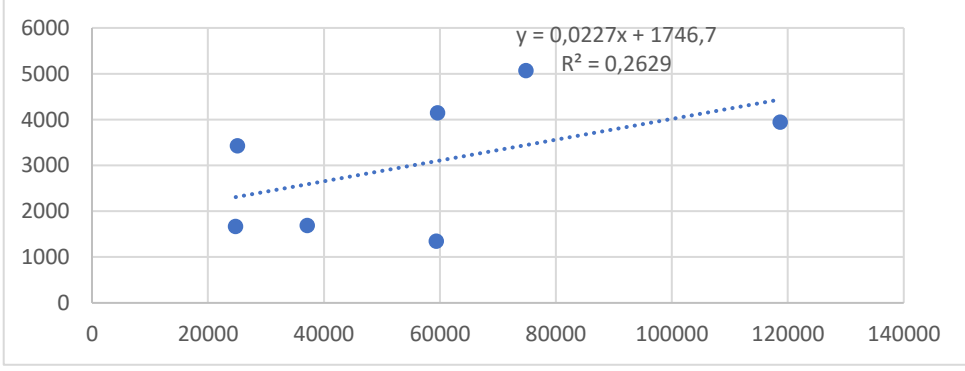

Figure 14. Graph of the dependence of the volume of income in the budgets of rural areas on the volume of production by small and medium-sized businesses

Source: Compiled by the authors

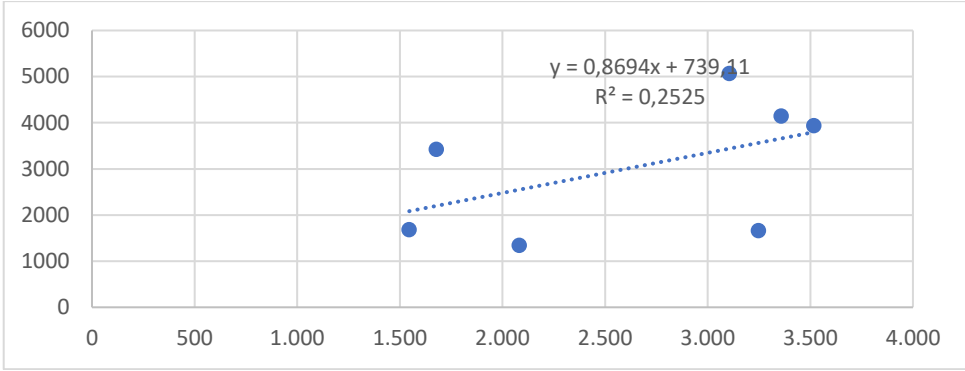

Figure 15. Graph of the dependence of the volume of income in rural budgets on the number of operating small and medium-sized businesses

Source: Compiled by the authors

In addition, the average closeness of the connection was recorded between the budget income of rural areas and the population size: r = 0.40. This connection is shown in Figure 16.

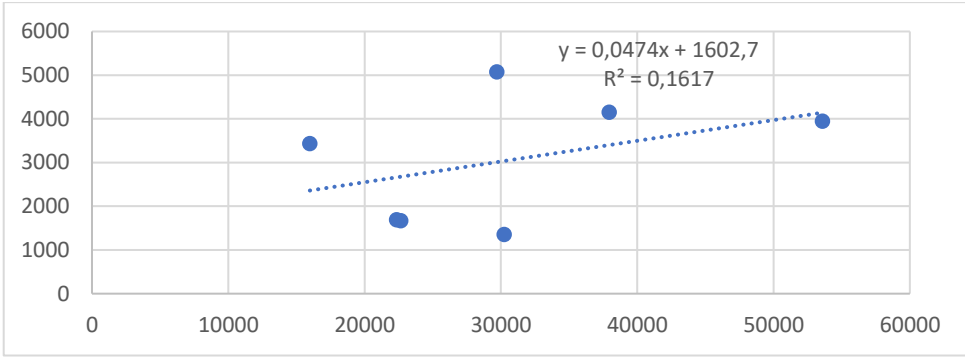

Figure 16. Graph of the dependence of the volume of income in rural budgets on the population size

Source: Compiled by the authors

Graphical analysis shows that the empirical values are averagely close to the regression line. This indicates an average close relationship between income in the budgets of rural areas (excluding transfers) with such economic indicators as retail trade turnover, the volume of output of small and medium-sized businesses and the number of operating small and medium-sized businesses, as well as such social demographic characteristics such as population and number of unemployed. The relationship with other indicators of rural budget income is either insignificant or inversely proportional. According to the calculations made, there is a clear dependence of the volume of transfers to the budgets of rural areas on such factors as: the number of medical organizations (medical outpatient clinics, first-aid posts, hospital organizations) (r = 0.84) and the number of state cultural facilities (r = 0.78) . Regression line graphs describing the original data are shown in Figures 17 and 18.

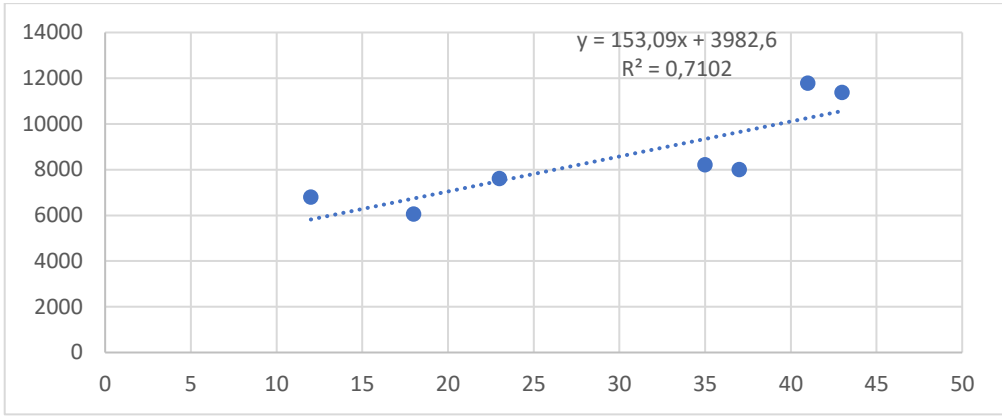

Figure 17. Graph of the dependence of the volume of transfers to rural budgets on the number of medical organizations

Source: Compiled by the authors

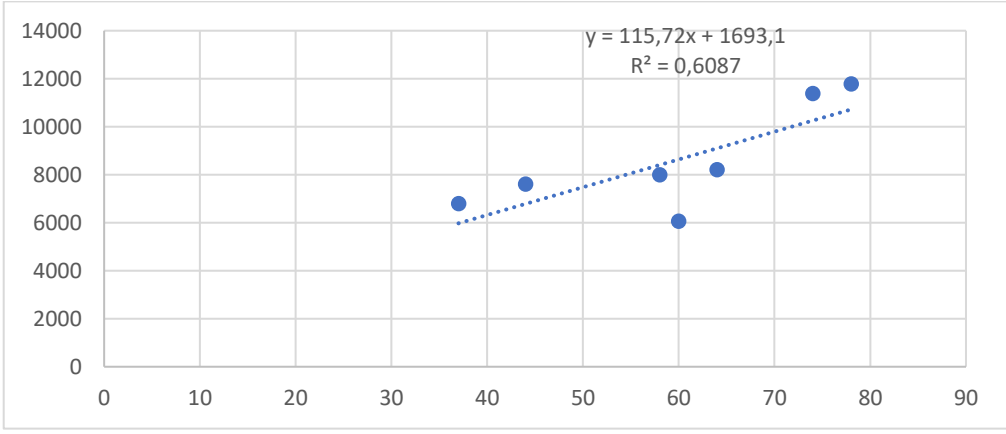

Figure 18. Graph of the dependence of the volume of transfers to rural budgets on the number of state cultural objects

Source: Compiled by the authors

In addition, there is a strong connection between the volume of transfers to rural budgets and the number of rural settlements: r = 0.83. The regression line graph describing the original data is shown in Figure 19.

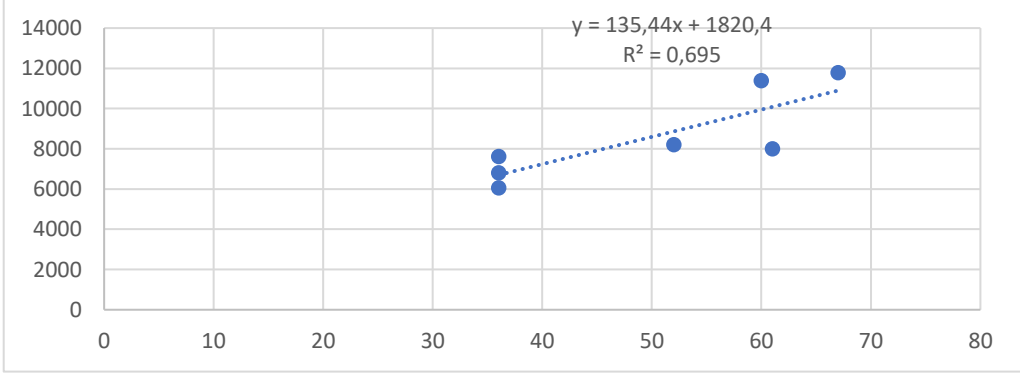

Figure 19. Graph of the dependence of the volume of transfers to rural budgets on the number of rural settlements

Source: Compiled by the authors

The average close relationship was recorded between the volume of transfers to the budgets of rural areas and the number of operating small and medium-sized businesses: r = 0.64. The regression line plot is shown in Figure 20.

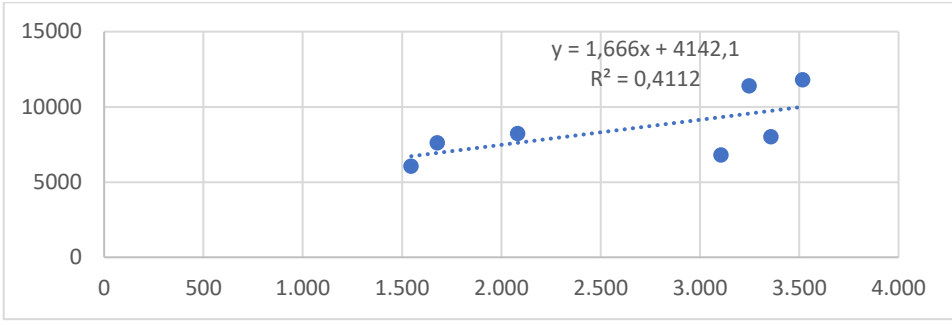

Figure 20. Graph of the dependence of the volume of transfers to the budgets of rural areas on the number of operating small and medium-sized businesses

Source: Compiled by the authors

Calculations showed that the volume of transfers to rural budgets is also on average related to the number of cattle: r = 0.57 (Figure 21).

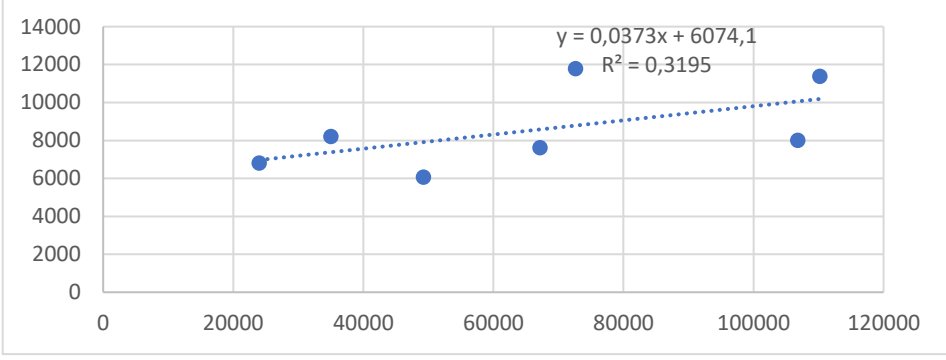

Figure 21. Graph of the dependence of the volume of transfers to rural budgets on the number of cattle

Source: Compiled by the authors

Also, the average close relationship between the volume of transfers to the budgets of rural areas and the population size: r = 0.51 (Figure 22).

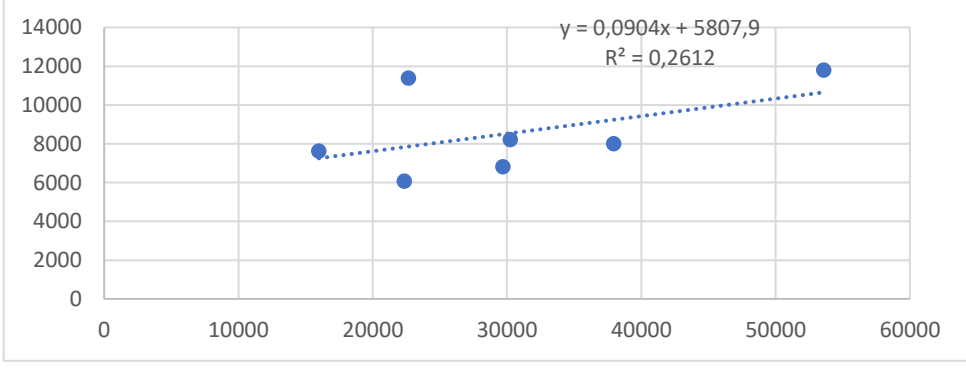

Figure 22. Graph of the dependence of the volume of transfers to rural budgets on the population size

Source: Compiled by the authors

Thus, with regard to calculations of the closeness of connections between transfers to the budgets of rural areas, there is a dependence on the number of medical organizations, the number of state cultural facilities and the number of rural settlements. As well as the average closeness of connection with such indicators as: the number of operating small and medium-sized businesses, the number of cattle, and the population.

In general, the factors on which the volume of revenues to the budgets of rural areas, as well as the volume of their income (excluding transfers), largely depend:

- number of operating small and medium-sized businesses;
- volumes of product output by SMEs;
- population;
- retail turnover;
- number of unemployed.

The volume of transfers to rural budgets significantly depends on the number of medical organizations, the number of state cultural facilities and the number of rural settlements. An analysis of the existing LSG system allowed us to draw the following conclusions on key problematic issues that impede the effective functioning of local governments, namely:

- The economic and administrative dependence of the administration of the rural district on the district level of government reduces the independence of local self-government bodies in resolving everyday issues of the local population;
- Lack of sufficient financial resources is a limiting factor in the development of local self-government;
- Existing legislative restrictions in the activities of the executive body of local self-government are an obstacle to the provision of timely and high-quality services to the population.

CONCLUSION

To increase the independence and efficiency of local self-government through economic self-sufficiency, the direct interest of local authorities in stimulating business activity is necessary.

As the analysis shows, the parameters of the LSG reform currently being implemented in Kazakhstan indicate the authorities' commitment to maintaining high centralization of public administration.

An important factor that can ensure the success of the reform and its subsequent implementation in upper-level administrative units (cities of republican and regional significance) is the economic self-sufficiency of local government, which can provide solutions to a wide range of local problems and challenges.

The basis of economic self-sufficiency is the budget and the corresponding tax base for its formation. The current tax base that forms the budget of local self-government bodies is extremely insufficient for the effective operation of local self-government.

An analysis of the existing concept of LSG shows that its economic reform parameters do not take into account stimulating factors for the development of the rural economy and, therefore, do not consider the village from the position of an economic driver.

World experience in the development of local self-government shows that access of administrative-territorial units to the results of successful economic development by expanding income-generating opportunities is an important factor in stimulating business activity in rural areas. It follows that in order to increase the effectiveness of the reform, it is necessary, along with political decentralization, to simultaneously carry out decentralization of the fiscal system.

A central part of fiscal decentralization is reducing the amount of taxes collected by central budgets. This will provide incentives for local self-government to independently seek additional sources of financing, including through the creation of conditions for the development of private business in the territory of local self-government reporting.

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