

The concept of sustainable development of territories

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Abstract. The authors of the article study the features of functioning and development of territories as the bases of forming of social infrastructure in the education sphere. The basic problems and the condition of the programme of the territories development are considered, the indicators of social-and-economic development are analyzed, the procedures of the programme creation for the development of social infrastructure within the development of the national Education project, the technique of forecasting of key indicators is applied. The features of the territories development with carrying out the analysis of the key parameters are investigated. The need of the programme of the social infrastructure development regarding education during of identification, studying micro- and macro-factors of the development of the area is proved. The approaches to the realization of the stages of the development programme and forecasting of change of key indicators are developed, the interrelation of the most important factors of their functioning is investigated. The periods in which there were maximum structural changes in development of rural territories are revealed as the result of quantitative assessment of structural shifts. It is proved that this approach is the tool allowing to improve the process of social-and-economic development taking into account the forecast, and, therefore, to increase the efficiency of activity of the sphere of education that will allow to strengthen the financial state and positions of the enterprises of this industry in the market. Some conclusions are drawn on the prospects of the territories development in the conditions of development and implementation of the development programme.

1 Introduction

One of the main directions of strategic planning for the state is the sustainable development of rural territories due to the increase in social-and-economic indexes, creations of the conditions for competitive situation agrarian economy and increases in the population welfare. Nowadays holding separate actions in the form of target programmes of different level is observed, including federal and regional programmes. However the accurate concept and the methodological basis for the assessment of the state and the prospects of the development is not provided.

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The problem of the agricultural territories development was considered by many scientists including: Agababyan, E.A. [1], Baygildina, Z.F. [2], Bogachyov, A.I. [3], Bukhtiyarova, T.I. [4] Voropinova, O.A. [5], Glagoleva, L.E. [6], Echin, H.M. [7], Lylov, Ampere-second. [8], Polukhina, M.G. [9], Semyonov, C.H. [10], Timonina, E.A. [11], Turovaya, And. Century [12], Shumakova, O.V. [13]. The matters of the education features as the main priority project for the region development were considered by the following scientists: Zavalishina, E. M [14], Zanayev, C.C. [15], Kozubayeva, A.O.[16], Pomazkova, H.M. [17], Prokhorova, L. B.[18], Rysbekova, A.A. [19], Shulepova, A.V [20].

We will provide the programme of development and the formation technique for the sustainable development of rural territories and social infrastructure.

1. Rural territories cover the considerable part of the territory of Russia and about 27% of the total number of the population live there. The village has the extreme social-and-economic importance in the country scales. Rural territories act as the main supplier of food, raw materials and materials for many industries in the country. Now the Russian village has faced a great number of problems which have caused the decrease in the indicators of the agriculture production. The most important problem is the problem of functioning of education in general. It is difficult to be implemented in the modern world without having due education. Let us consider some problems in education with the help of the example of Sergachsky municipal district in Nizhny Novgorod Region. The bulk of educational institutions are not adapted for the visit of children with limited opportunities.

2. Deficiency of young staff.

3. Elimination and reorganization of educational institutions because of weak staffing levels.

4. Insufficient financing.

5. Remote education is developed poorly.

Having considered the education problems in the Sergachsky municipal district, we can draw the conclusion that for high-quality functioning of educational institutions and the compliance modern is necessary for the requirements constant purchase for educational institutions of the latest domestic and foreign samples of the equipment, regular carrying out maintenance functions and implementation of construction of educational institutions as well as the involvement of young specialists.

2 Objective of the research

The research objective is the development of the concept and methodical provisions of the programme and the priorities of the long-term development of rural territories. One of the key social spheres is the sphere of education, considered as the example.

The major factor influencing the assessment of the sustainable social-and-economic development, as well as the factor, demonstrating the quality of the population life is the creation of the conditions for this development. Thus, the improvement of the population life quality and the development of the region is the direction of the increase in the level of competitiveness of the Russian agrarian economy. The allocation of rural territories from the similar ones is the practical confirmation of its best market position in the comparison with competitors.

Therefore, the research problem within this scope of the research comes down to the solution of the following issues: unstable demographic situations, irrational use of the available resources, high unemployment rate, dependence of level of competitiveness of rural territories on level of quality of life of villagers.

3 Materials and Methods

The education system is one of the most numerous and important articles of social-and-economic development in our country. One of the main issues in the development of education is the issue of financing of the education system. The main amount of financing of the education system of each of the considered municipal districts is financing of the region (in this case of the Nizhny Novgorod Region) that makes up about 60% of the total amount. About 39% are money from the local budget and a small part is the means received from private investors.

Let us consider the indicators characterizing social and economic development of Sergachsky district in the Education direction (table 1).

Table 1. Indicators characterizing social-and-economic development of Sergachsky district in the Education direction.

Indicator	2014	2015	2016	2017	2018
Number of educational institutions of piece.	30	20	20	20	20
Amount of the parental payment raised from parents (lawful representatives) for supervision and care of children in municipal preschool educational institutions of the Sergachsky municipal district	827 607	827 607	827 600	870 638	905 665
• in the city area;	1345	1547	1512	1465	1457
• in rural areas;	2667	2702	2723	2785	2875
Number of pupils of the preschool educational organizations, persons.	96.2%	100%	100%	100%	100%
Number of pupils of educational institutions, persons.	56.3%	59.3%	81%	81%	72%
Share of children aged from 3 up to 7 years provided with places in the preschool educational organizations for the end of reporting year of %	10	11	10,9	10,8	10,4
Specific weight of children aged from 5 up to 18 years receiving services in additional education in the total number of children aged from 5 up to 18 years of %	9.8	11.8	10.8	12.7	8.8
Number of pupils of the organizations of preschool education counting on 1 pedagogical worker	99.32	99.30	100.00	98.60	99.00
Number of pupils in the general education organizations counting on 1 pedagogical worker	18%	20.3%	21%	21%	24%
Specific weight of the persons who have passed the unified state examination from number of the graduates participating in the % unified state examination	23000	23700	23709	26525	27252
Specific weight of number of teachers aged up to 35 years in the total number of teachers of the general education organizations	25201	25800	25814	28630	29357
Average salary of teachers of preschool educational institutions	20200	20201	20457	25668	29412
Average salary of teachers of educational institutions	100.87	102.01	101.64	98.45	95.16
Average salary of teachers of the organizations of additional education	100	100	100	100	100
Relation of the average monthly salary of pedagogical employees of the educational organizations of preschool education to the average salary in the general education of %	80.16	78.29	79.24	89.65	100.18

We can draw the following conclusions on the basis of the table. From 2014 to 2019 the number of educational institutions was reduced by 10 units. It is connected with the fact that in 2015 the network of the municipal educational organizations has undergone big changes. For the purpose of increase in efficiency of activity several kindergartens and schools have been reorganized in the form of accession to larger educational organizations as structural divisions. Several institutions have been liquidated, in connection with not

completeness children. In 2014 1 kindergarten has suspended educational activity in connection with construction of the new building of kindergarten within the target program, and in 2015 work has been resumed. The number of the studying educational institutions has increased by 208 people. The amount of a parental payment has increased: in the city area for 78 rubles has also made 905 rubles in 2019; in rural areas – for 58 rubles has also made 665 rubles in 2019. Growth of the salary at teachers of preschool, educational institutions and the organizations of additional education is observed. Specific weight of number of teachers aged up to 35 years in the total number of teachers of the general education organizations increased and was 24% in 2019.

4 Results and Discussion

Let us give some provisions for the development of the strategic programme of development of the industry "Education". The procedure of development of the programme of development of production forces assumes the following actions:

1. The main strategic objective is designated - to create conditions of receiving the quality general education, granting to each person opportunities for identification of the abilities and development of intellectual, creative potential for the purpose of the fullest personal self-realization and providing the greatest contribution to development of the municipal district

2. Development priorities in the form of strategic tasks are formulated. 1. Development of personnel capacity of municipal educational institutions and increase in professional competence of workers; creation of the multimedia center for career guidance. 2. Improvement of quality of teaching mathematics, Russian, natural sciences, when maintaining the provided volume of knowledge and qualities of arts education; creation of the intermunicipal resource center of natural and mathematical education. 3. Consolidation of professional activity of institutions of education (preschool educational institution, OO, SPO, VO) in uniform educational space 4. Creation of conditions for the organization of programs of additional education on the organization of new productions and diversification.

3. Complex assessment

3.1. Identification and the analysis of the main problems (restrictions) of social-and-economic development of the industry for an average and long-term outlook the analysis of potential of development of the main sectors of economy for an average and long-term outlook by SWOT technique.

SWOT-analysis allowing to reveal strong and weaknesses and to analyse opportunities and threats is used for the identification of potential of epy education system of the Sergachsky municipal district.

Internal environment

Strengths

- rather stable qualified pedagogical collective;
- high share of specialists of the highest and first qualification categories;
- positive experience of works of creative groups of teachers of topical issues of educational process;
- effective system of social and psychology and pedagogical escort of pupils.
- the use of the modern pedagogical technologies which are available ICT in educational process.

Weaknesses

- "aging" of pedagogical staff that brakes to introduction in work of innovative technologies;
- low activity of parents in management in educational institutions;

External environment**Opportunities**

- interaction with operating controls in education from other areas for exchange of experience;
- participation in various regional programs;
- existence and manifestation of social tolerance to pupils and pupils;
- development of the educational environment providing quality harmonious education;

Threats

- insufficient financing of an education system;
- great completeness of the educational institutions;

SWOT analysis allows to select the priority strategy of development for an educational system of the Sergachsky municipal area:

- ensuring quality of education;
- continuous increase in professional level of teachers.

3.2. The key external factors (an opportunity and threat) having an impact on development of the industry by a technique the STEP analysis.

One of the most widespread ways of the analysis of the external environment of the organization is PEST – the analysis. This studying of all factors having an impact on activity of the organization. Let's consider PEST – the analysis at schools and kindergartens of the Sergachsky municipal district of the Nizhny Novgorod Region (table 2).

Table 2. STEP- analysis.

The analyzed factors	Coefficient of the expert competence	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Average probability	Total value of the design factor
		0.20	0.21	0.17	0.23	0.19		
The factor influence								
Social factors								
Poor birth rate in rural areas, in this regard, closing of educational institutions in villages.	5.00	0.7	0.75	0.86	0.90	0.65	0.78	3.9
Risk of outflow of staff from villages to big cities	4.00	0.5	0,54	0.54	0,78	0.78	0.62	2.48
Orientation of students and teachers to a successful Unified State Examination	3.00	0.4	0,63	0.63	0,98	0.98	0.56	1.68

Great number of pupils finish only 9 classes at school and go to colleges and technical schools, being afraid not to pass the Unified State Examination	3.00	0.78	0,95	0.95	0,78	0.78	0.83	2.49
Modern children practically do not read the book	2.00	0.54	0,56	0.56	0,70	0.70	0.63	1.32
There is a lot of "paper work" at teachers	2.00	0.39	0,56	0.56	0,89	0.89	0.64	1.28
There is no uniform school uniform at all schools of Sergachsky district	2.00	0.41	0,41	0.41	0,56	0.56	0.48	0.96
Shortage of young specialists	2.00	0.63	0,69	0.69	0,85	0.85	0.71	1.42
Technological factors								
Lack of material resources of rural educational institutions	3.00	0.78	0.65	0.85	0.74	0.77	0.75	2.25
Due to the pandemic many schools were not ready to provide distance learning of pupils	2.00	0.65	0.69	0.45	0.55	0.47	0.57	1.14
Economic factors								
Limited budget of educational institutions that limits their opportunities	3.00	0.65	0.56	0.69	0.37	0.45	0.54	1.62
Lack of additional sources of financing of activity of educational institutions	2.00	0.77	0.59	0.87	0.65	0.45	0.66	1.32
Political factors								
Increase in the requirements to activity of educational institutions from the state	4.00	0.39	0.49	0.59	0.65	0.61	0.55	2.32
Heavy responsibility of the heads of educational institutions for not observance of requirements of the legislation of the Russian Federation	4.00	0.78	0.98	0.95	0.76	0.83	0.86	3.56
All budgetary organizations should	2.00	0.87	0.87	0.86	0.78	0.75	0.82	1.64

buy goods according to federal law No. 44-FZ of 05.04.2013 that complicates activity of the organization								
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According to the table the most influential factors in each group have been revealed:

- Social: poor birth rate in rural areas, in this regard, closing of educational institutions in villages (3.9);
- Technological: the lack of material resources of rural educational institutions (2.25);
- Economic - the limited budget of educational institutions that limits their opportunities (1.62);
- Political: heavy responsibility of heads of educational institutions for not observance of requirements of the Russian legislation(3.56).

Thus, the executive bodies need to pay bigger attention to rural educational institutions, to direct all forces to allowing reorganization or liquidation of schools and gardens in villages.

4. Trend analysis of the key indicators of the development.

Studying of trends of change of one of the key performance indicators of the social-and-economic development of Sergachsky district - Number of pupils of educational institutions, persons is carried out. The analysis of temporary ranks by means of statistical calculations is applied. Use which allows to carry out the assessment of regularities and dependences for receiving the model forming a basis for further forecasting of trends. The main idea of these researches to evaluate a trend on the basis of what to carry out creation of expected models.

Mean square deviation the smallest at quadratic model, respectively this model most precisely describes basic data. Let us provide the equation describing these temporary ranks, the received trend is the following:

$$Y_t = 2859.62 - 168.65*t + 39.25*t^2$$

The interpretation of the results of the carried-out analysis is the following: the expected values allow to foresee the possible level of the studied indicator. Use of model for forecasting of results, so-called predictive modeling. The forecast will allow to obtain information for adoption of the effective management decision.

5. Indicators of achievement of the goal and indicators of direct results: availability of preschool education will be established at the level of 100%; the share of disabled children aged from 1.5 up to 7 years captured by preschool education from the total number of disabled children of this age will reach 90%; the share of disabled children to whom conditions for receiving the quality primary general, main general, secondary general education are created in the total number of disabled children of school age will make not less than 99%; specific weight of number of the educational organizations providing providing standardly fixed list of data on the activity on the official sites in the total number of the educational organizations will remain at the level of 100%; the relation of the average monthly salary of pedagogical employees of municipal educational institutions to the average monthly salary in the general education of the Sergachsky municipal district of the Nizhny Novgorod Region will remain at the level of 100%; specific weight of number of teachers of the general education organizations aged up to 35 years in the total number of teachers of the general education organizations will reach 26%; specific weight of population at the age of 5 - 18 years, captured by education, in the total number of the population at the age of 5 - 18 years will increase to 90%; updating of a bus fleet will be 10 units.

6. Programme actions.

1. The resolution of the government of the Nizhny Novgorod Region of 29.03.2019 No. 180 "On the approval of the state programme "Major repair of the educational organizations of the Nizhny Novgorod Region implementing general education programs"

2. Resolution of the government of the Nizhny Novgorod Region of 27.11.2018 No. 800 "About the adoption of Targeted investment program of the Nizhny Novgorod Region for 2019-2021"

3. The resolution of the government of the Nizhny Novgorod Region of 29.12.2015 No. 893 "About the approval of the state program "Creation of new places in the general education organizations of the Nizhny Novgorod Region according to the predicted requirement and modern conditions of training, for 2016 - 2025"

Sources of financing of actions of the Program: regional and local budget and also extrabudgetary funds

7. The expected efficiency of the Programme implementation.

As the result of performance of actions it will be provided: modernization of education according to modern requirements; creation of the barrier-free educational environment for children with limited opportunities; completeness qualified specialists and young staff of institutions of preschool and school education; elimination of turns in educational institutions by increase in number of places; maintaining availability to children of additional education and increase in number of children aged from 5 up to 18 years receiving services in additional education in the total number of children aged from 5 up to 18 years [21-24].

5 Conclusion

It is possible to draw the following conclusions on the basis of the conducted scientific research:

1. The offered algorithm allows to determine the key parameters, to specify the value of the factors considering some features of the enterprises activity and the specifics of the education industry, the offered actions, to carry out the forecast for the key parameters of social-and-economic development.

2. This technique is the tool allowing to improve the process of social-and- economic development taking into account the forecast, and, therefore, to increase the efficiency of activity in the education sphere that will allow to strengthen the financial state and the positions of the enterprises of this industry in the market.

3. The offered measures for the development of rural territories regarding the social infrastructure will allow to improve the management process and also gives th primary analysis for the expediency of investment into the development of education in the explored regions and estimates of their payback as well.

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