

Potential of Labor Resource Reproduction in Rural Areas

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Abstract — The authors note that in most scientific studies of the problems related to labor resources that each region has its own specifics, and therefore the recommendations applicable in one of them cannot be fully implemented in the other. Since the reproduction of labor resources is closely related to demographic and migration aspects, a deeper and more detailed analysis of these processes is needed, starting with rural settlements. In the course of the study, an assessment was made of the condition of the labor resources of the rural areas in the Lipetsk region, not only in the whole region, but also in the context of the main municipalities. The main trends in the development of labor resources were also identified and the factors influencing them were analyzed. In determining the demographic potential of the reproduction of labor resources, it was found that there is a steady tendency to its decline in almost all administrative entities. This is explained by the decrease of the main demographic indicators: rates of natural population growth, aging of rural residents, imbalances between the number of men and women of reproductive age. Due to the high migration outflow of rural residents to cities, the influx of migrants into the countryside also does not provide sufficient migration potential for the reproduction of labor resources.

Keywords — labor resources, rural areas, labor resource reproduction, demography, migration.

I. INTRODUCTION

In the Russian scientific community, labor resources in rural areas have always been given highest attention. This is due to the fact that under the conditions of low labor productivity, agriculture required a lot of labor, and therefore the rural labor market was unattractive for labor and, therefore, scarce. At present, *the situation has changed*: modern equipment and technologies have reduced the need for labor by 5 times [1]; the number of rural residents wishing to leave the countryside has increased [2]; the outflow of the able-bodied population from countryside to cities grew as well [3]; overall, the demographic potential of rural areas deteriorated [4–7]. And the countryside as a whole has become labor surplus. Many works of Russian scientists are devoted to issues of employment and unemployment of rural residents, the rural labor market, labor reproduction, and demographic problems in the countryside.

At the same time, in Russia, due to the size of its territory, the variety of natural and climatic conditions, and ethno-cultural characteristics of residents of different regions, it is impossible to apply uniform recommendations in the field of

rural labor resources. A *deeper analysis* of the state and trends of their development in each particular region is needed. In particular, very few scientific works are devoted to the labor resources of the Lipetsk region, especially the reproductive potential of rural territories remains poorly understood. Therefore, the *objective of this work* was to study the possibilities of reproducing the labor resources of rural areas in the Lipetsk region in the context of its main municipal units.

II. INFORMATION BASE AND METHODS OF RESEARCH

In theoretical terms, the paper is based on the works of scientists who have studied the reproductive processes of labor resources in other regions of Russia. They allowed outlining the range of problems that we need to pay attention to. The empirical base was the data of Russian national statistics, summarized by the territorial body of the Federal State Statistics Service in the Lipetsk Region, as well as information on labor resources received by the Department of Labor and Employment of the Lipetsk Region from the municipalities. All this information was processed using classical methods of scientific research: analytical, statistical and economic, calculating average values, constructing series of dynamics, comparative analysis, interpretation, abstract logical method.

III. CONDITION AND TRENDS IN THE LABOR RESOURCE DEVELOPMENT

The Lipetsk region is in the 2nd place in the Central Federal District in terms of the share of the rural population (35.5 %) in its total number, after the Tambov Region (38.9 %). This indicates the lower level of urbanization in the region. Therefore, a significant part of the labor resources lives in the rural areas of the Lipetsk region (Fig. 1).

The number of labor resources is steadily declining: during the period for which we possess the information, the decrease was 5.2 %. This *first general trend* is explained by a number of reasons, which will be discussed below.

Also, as well as the Russian regions differ, there are big differences between the municipalities of the Lipetsk region. The change in the number of rural labor resources in each specific district of the Lipetsk region occurs according to individual scenarios (table 1). Therefore, the *second trend* is the differentiation of regions in terms of direction and rate of change in the number of labor resources.

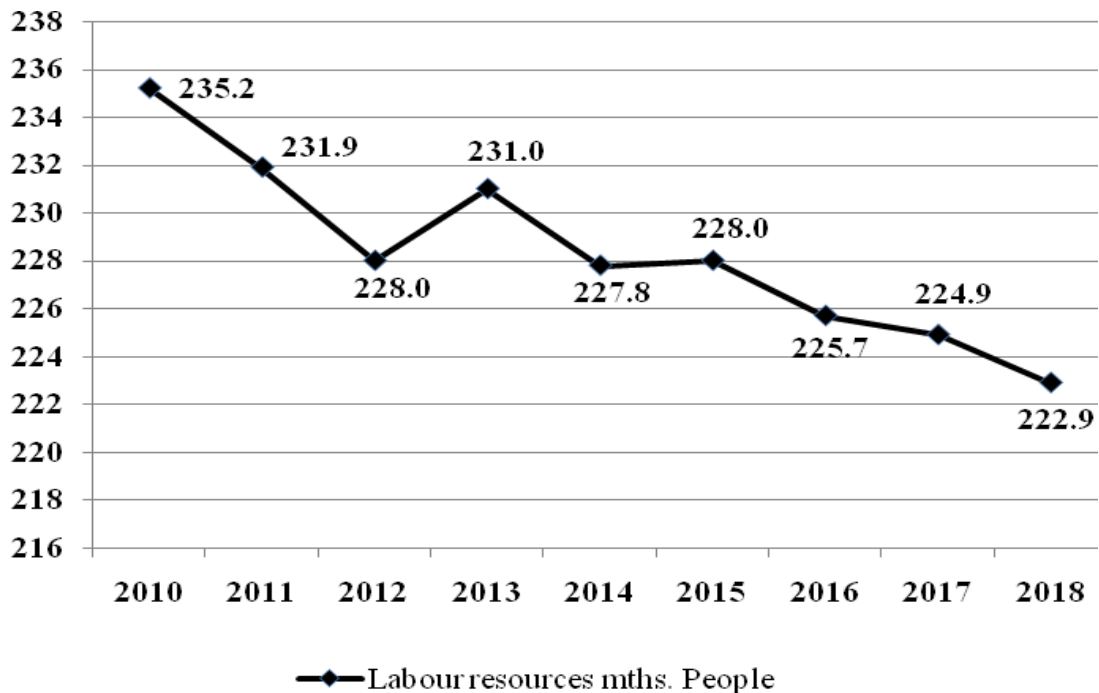


Fig. 1. Dynamics of the rural labor resources in the Lipetsk region
(Source: compiled by the author based on the labor resource balances provided by the Department of Labor and Employment of the Lipetsk Region)

TABLE I. CHANGES IN THE NUMBER OF RURAL LABOR RESOURCE IN THE LIPETSK REGION

Districts	Number, people		2018 in % to 2010
	In 2010	In 2018	
Lipetsk region, total	235215	222949	94.79
including districts			
Gryazinsky	14899	17832	119.69
Khlevensky	10302	12203	118.45
Lipetsky	28962	30553	105.49
Zadonsky	13048	13146	100.75
Eletsky	16694	16586	99.35
Dobrovsky	12298	11980	97.41
Terbunsky	13631	13076	95.93
Stanovlyansky	10007	9552	95.45
Lev-Tolstovskiy	10347	9704	93.79
Usmanskyy	16408	15267	93.05
Chaplyginsky	11262	10400	92.35
Krasninsky	8365	7257	86.75
Volovskyy	8188	7093	86.63
Dolgorukovskyy	10298	8874	86.17
Izmalkovskyy	10621	8791	82.77
Dobrinskyy	19998	16473	82.37
Lebedyanskyy	11684	8758	74.96
Dankovskyy	8203	5404	65.88

^a Source: compiled by the author based on the labor resource balances provided by the Department of Labor and Employment of the Lipetsk Region

As can be easily seen from the data in Table 1, the increase in labor resources was noted in four districts, and the decrease is in all the others. The increase in the number of labor resources in the Gryazinsky district occurred due to the creation of a special economic zone of industrial type on its territory. In the Khlevenskiy district, an economic zone of agro-industrial type is actively developing. Zadonsky district, due to its natural and climatic conditions, is attractive as a place for recreation. The Lipetsk region is a suburban territory of the city of Lipetsk, and therefore both residents from remote areas of the region and residents of the regional center often move here. In most other areas of the Lipetsk region, significant annual fluctuations in the number of labor resources with a general negative trend are noted.

At the same time, as it shown by a deeper study of the changes (Fig. 2) that occurred during the analyzed period, in some regions there is a steady negative dynamics in the reduction of labor resources (Dankovskyy, Lebedyanskyy, Volovskyy, Dolgorukovskyy, Dobrinskyy districts), and in some it is not so clearly manifested (Eletsky, Dobrovsky, Terbunsky, Stanovlyansky districts).

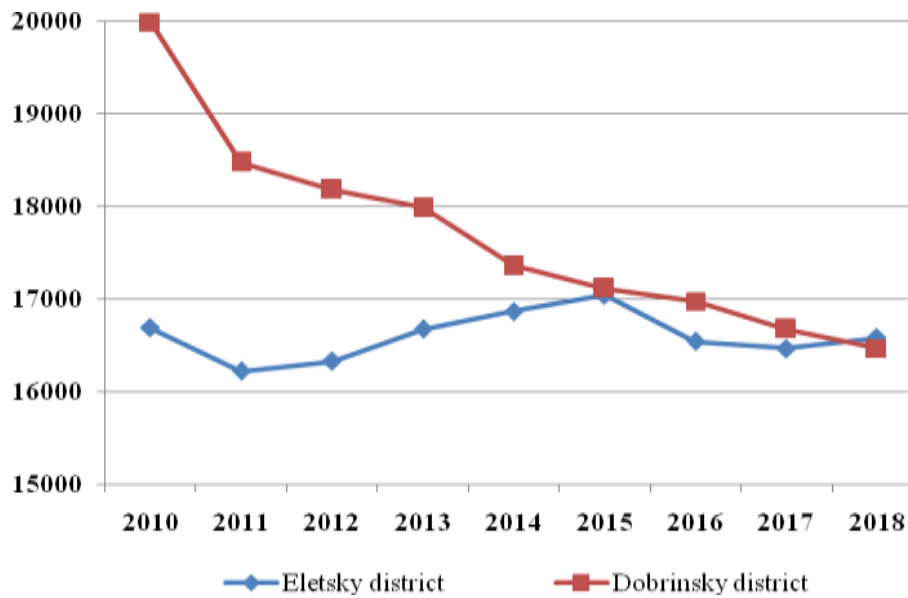


Fig. 2. Dynamics of the rural labor resources in some districts of the Lipetsk region, people
 Source: compiled by the author based on the labor resource balances provided by the Department of Labor and Employment of the Lipetsk Region

The creation of large enterprises in the regions with large numbers of new jobs, which immediately attract labor resources, has the greatest influence on this process. For example, in the Eletsy district, these are the construction and launch of a greenhouse complex, the beginning of operation in the branch of the Lipetsk Special Economic Zone, and other investment projects. The absence of large investment projects (as, for example, in the Dobrinsky district) or the delay in their implementation (as in the Dankovsky district) leads to a slowdown in the economic development of rural areas and a very significant outflow of the able-bodied population from their rural areas.

The situation with labor resources can also radically differ within the districts, in the territories of certain rural settlements. As an example, we can consider the generally prosperous Khlevensky district (table 2).

The increase in the number of labor resources in certain rural settlements is primarily due to the emergence of new jobs within their territories. Thus, a greenhouse complex and a large vegetable storehouse were built on the lands of the Kon'-Kolodezsky village soviet. A plant was built in the Vvedensky settlement, for grain, legumes, and oilseed conditioning and storage. Yelets-Malaninskoye settlement, located on the banks of the Don River, is attractive from the point of view of ecology, the possibility of recreation. A number of settlements have the same attractiveness, in association with which there is a migratory influx of the population in the Khlevensky district.

Quite a different situation is observed in rural settlements of the Dankovsky district (table 3): in all rural settlements without exception, labor resources decreased considerably.

TABLE II. THE DYNAMICS OF RURAL LABOR RESOURCES OF KHLEVENSKY DISTRICT OF THE LIPETSK REGION

Rural areas	Number of labor resources, people									2018 in % to 2010
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Rural settlements, total	10302	10393	10531	10869	10505	10902	11488	11990	12203	118.45
including village soviets:										
Kon'-Kolodezsky	982	944	902	940	948	1136	1452	1136	1390	141.55
Vvedensky	288	317	315	339	331	409	393	393	402	139.58
Khlevensky	3054	3139	3499	3352	3361	3472	3642	4154	4087	133.82
Elets-Malaninsky	617	614	639	625	651	664	618	607	792	128.36
Sindyakinsky	348	296	463	461	406	399	405	373	439	126.15
Vorobyovsky	534	511	500	600	451	518	508	512	602	112.73
Malininsky	212	229	195	293	256	259	264	243	231	108.96
Dmitryashevsky	1195	1181	1030	1085	1001	1035	1145	1145	1292	108.12
Otskochensky	365	358	410	507	438	432	436	800	389	106.58
Verkhne-Kolybelsky	414	420	370	373	380	450	450	436	440	106.28
Fomino-Nogachevsky	366	365	370	458	440	428	373	386	373	101.91
Nizhne-Kolybelsky	365	365	656	446	467	607	358	702	361	98.90
Voron-Lozovsky	238	246	161	221	219	222	230	232	224	94.12
Novo-Dubovsky	632	717	332	602	647	360	693	354	567	89.72
Eletsko-Lozovsky	692	691	689	567	509	511	521	517	614	88.73

b. Source: compiled by the author based on the labor resource balances of the rural settlements of Khlevensky district of the Lipetsk region

TABLE III. DYNAMICS OF RURAL LABOR RESOURCES OF DANKOVSKY DISTRICT OF THE LIPETSK REGION

Rural areas	Number of labor resources, people									2018 in % to 2010
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Rural settlements, total	8203	8311	7839	7380	6655	6719	6177	6054	5404	65.88
including village soviets:										
Teplovsky	329	340	363	324	312	344	266	258	306	93.01
Novonikol'sky	496	508	465	433	418	487	460	449	412	83.06
Kudryavschinsky	378	428	395	348	332	337	340	335	305	80.69
Malinkovsky	376	390	373	352	350	352	328	325	288	76.60
Trebunsky	327	367	324	300	291	333	320	310	248	75.84
Berezovsky	832	826	830	789	724	680	615	600	615	73.92
Yagodnovsky	384	383	358	325	312	335	295	287	270	70.31
Balovnevsky	917	819	725	692	620	766	719	705	585	63.79
Voskresensky	897	930	875	849	722	687	632	622	550	61.32
Bigil'dinsky	845	989	930	890	760	716	651	628	498	58.93
Speshnevo-Ivanovsky	1408	1358	1293	1242	1001	937	928	924	807	57.32
Perekhval'sky	306	271	231	209	196	225	194	191	164	53.59
Oktyabr'sky	442	456	451	422	422	320	246	239	227	51.36
Polibinsky	266	246	226	205	195	200	183	181	129	48.50

^c Source: compiled by the author based on the labor resource balances of the rural settlements of Dankovsky district of the Lipetsk region

The largest losses (in per cent) were observed in the territories of Polibinsky, Oktyabr'sky, Perekhval'sky, Speshnevo-Ivanovsky, Bigil'dinsky village soviets. The key reason for this problem is the lack of jobs on the territory of rural settlements: large employers operating in the Soviet era (collective farms and state farms) ceased to exist, and new ones (agricultural holdings, farms), thanks to modern equipment and technologies, no longer need so many workers. This trend is a world-wide characteristic feature [8]. Therefore, rural employment decreased sharply: in 2010 only 55.22 % of all available labor resources in the Dankovsky district were employed (table 4). It is the presence of the opportunity to work at the place of residence that is the main driver of reducing or increasing the number of labor resources in a given territory. This *third trend* is manifested not only in Russia, but also in other countries [9].

TABLE IV. RURAL LABOR RESOURCES OF DANKOVSKY DISTRICT, EMPLOYED IN THE LOCAL ECONOMY

Rural areas	2010		2018	
	people	% of all available labor resources	people	% of all available labor resources
Rural settlements, total	4530	55.22	4550	84.20
including village soviets:				
Balovnevsky	540	58.89	539	92.14
Novonikol'sky	305	61.49	370	89.81
Bigil'dinsky	432	51.12	437	87.75
Speshnevo-Ivanovsky	718	50.99	707	87.61
Polibinsky	155	58.27	112	86.82
Kudryavschinsky	248	65.61	263	86.23
Berezovsky	616	74.04	526	85.53
Teplovsky	140	42.55	253	82.68
Malinkovsky	242	64.36	238	82.64
Yagodnovsky	184	47.92	220	81.48
Trebunsky	216	66.06	200	80.65
Voskresensky	445	49.61	443	80.55
Perekhval'sky	177	57.84	120	73.17
Oktyabr'sky	112	25.34	122	53.74

^d Source: compiled by the author based on the labor resource balances of the rural settlements of Dankovsky district of the Lipetsk region

As it can be seen from the data in Table 4, the potential for further reduction of labor resources in the Dankovsky district is preserved, but its pace will be significantly lower. The same trend with a slowdown in the reduction of labor resources in rural areas will be manifested in the Lipetsk region as a whole.

IV. DEMOGRAPHIC POTENTIAL OF LABOR RESOURCE REPRODUCTION IN THE RURAL AREAS

The reproduction of labor resources largely depends on the demographic situation in the rural areas. It is no coincidence that many scientists pay much attention to this [4–7, 10]. Thus, Kunitsa M.N. [5] notes not only a decrease in the demographic potential of rural territories, but also differentiation of the depopulation by different administrative entities. Pencheva S.N. [6] indicates that a negative demographic situation in rural areas leads to serious socio-demographic imbalances among both the rural population and labor force.

The demographic situation in rural areas is influenced by various factors and problems. One of the most significant problems hindering the reproduction of labor resources is the outflow of qualified personnel to the regions with higher wages [3]. The most important factor hindering the normal reproduction of labor resources is the existing level of wages in rural areas [11]. Migration behavior of rural residents does not contribute to the reproduction of labor resources in rural areas as well [2].

According to statistics of the Lipetsk region in 2012–2018 (Fig. 3), negative natural population growth is observed, and in the rural areas the decrease is much higher than in cities and district centers. It is worth noting, that in 2015–2016, along with slight improvement in the demographic situation in the urban environment, the situation in the rural areas, on the contrary, worsened. Thus, the living standards (in rural areas they are much worse than in the city) directly affect the reproduction of the population.

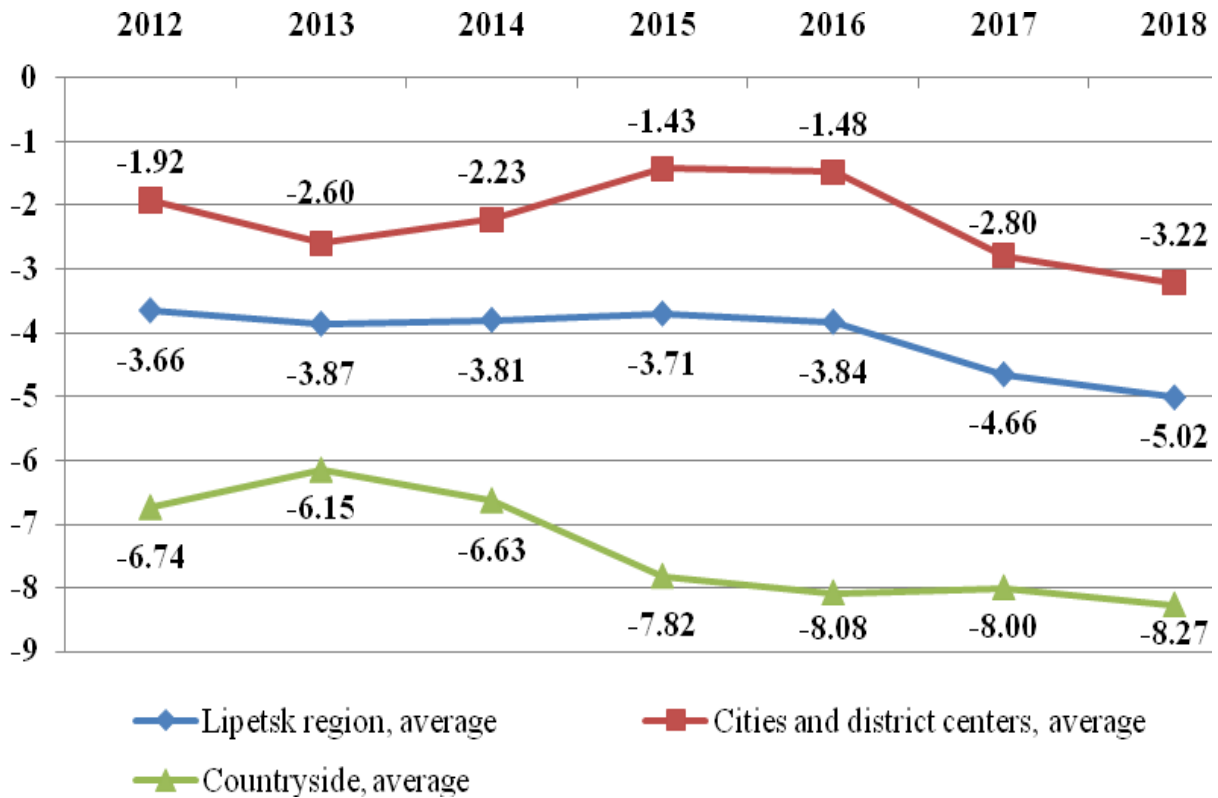


Fig. 3. Dynamics of the natural growth of the population, per 1000 capita in the Lipetsk region, in 2012–2018. Source: compiled and calculated by the author based on the statistical bulletins “Population in terms of municipalities of the Lipetsk region as by January, 1st” for 2013–2019, provided by the Federal State Statistics Service in the Lipetsk Region

If we look at the natural growth in the context of administrative entities (table 5), then here we can also see a large spread.

Firstly, in all district centers, the average annual population growth in 2012–2018 exceeds the same indicator in rural areas of the same district (the only exceptions were the towns of Gryazi and Gryazinsky district). This additionally confirms the above conclusion that in the current conditions the living standards affect the demographic reproduction processes.

Secondly, the negative natural growth indicates that the stimulating effect of the implementation of the program to overcome the demographic crisis in Russia, adopted in 2006, has been exhausted and other additional measures are needed.

Thirdly, the potential for the labor resource reproduction at the expense of the younger generation in rural areas is gradually decreasing, which could create serious problems in the future.

The important role in the reproduction of the population and labor resources belongs to the family. Every man and every woman should be able to create a normal family, give birth to children. Unfortunately, at present, an unfavorable situation has developed in rural areas in this process (table 6).

As the data in Table 6 show, there are significantly more men than women of the corresponding age in rural areas of the Lipetsk region. Most importantly, the situation in recent years has only gotten worse. Accordingly, the potential of rural areas for reproduction of both the population and labor resources is reduced.

TABLE V. DYNAMICS OF THE NATURAL GROWTH OF THE POPULATION IN THE ADMINISTRATIVE ENTITIES OF THE LIPETSK REGION IN 2012-2018, PER 1000 CAPITA

Administrative entities and settlements	2012	2014	2017	2018	Annual average growth during 2012-2018
Lipetsk region, average	-3.66	-3.81	-4.66	-5.02	-4.08
Cities and district centers, average	-1.92	-2.23	-2.80	-3.22	-2.24
Usman' (town)	2.74	7.82	-1.80	-1.67	1.81
Terbuny (settlement)	0.55	1.24	-2.66	-2.25	-0.49
Lipetsk (city)	-0.86	-1.33	-1.71	-2.07	-1.16
Gryazi (town)	-2.73	-2.58	-3.74	-3.07	-2.74
Khlevnoye (settlement)	-6.56	-3.56	-0.33	-3.51	-2.98
Dobrinka (settlement)	-0.95	-3.40	-7.37	-3.57	-4.07
Dobroye (settlement)	-6.82	-3.87	-5.35	-6.69	-4.13
Stanovoye (settlement)	-2.30	-7.59	-6.26	-4.58	-4.40
Lev Tolstoy (settlement)	-3.37	-4.91	-3.52	-6.52	-4.79
Volovo (settlement)	-8.18	-5.87	-5.40	-6.05	-5.20
Lebedyan' (town)	-5.34	-5.45	-5.98	-5.82	-5.42
Elets (town)	-5.15	-5.28	-5.57	-7.24	-5.50
Zadonsk (town)	-5.11	-5.84	-4.88	-4.79	-5.76
Izmalkovo (settlement)	-5.34	-9.60	-7.13	-5.13	-6.03
Chaplygin (town)	-6.65	-9.01	-6.56	-5.17	-6.65
Dolgorukovo (settlement)	-10.09	-7.96	-8.05	-4.96	-6.86
Krasnoye (settlement)	-8.20	-8.62	-6.52	-11.61	-7.78
Dankov (town)	-6.07	-8.96	-8.91	-9.62	-7.85
Countryside, average	-6.74	-6.63	-8.00	-8.27	-7.38
Gryazinsky district	-0.47	3.43	-4.40	-3.81	-1.16
Lipetsky district	-3.41	-4.18	-5.34	-5.64	-4.31
Lev-Tolstovskiy district	-4.67	-4.12	-4.46	-6.03	-4.88
Dobrinsky district	-4.53	-4.59	-7.94	-7.38	-6.22
Eletsky district	-5.91	-5.95	-5.95	-5.85	-6.39
Terbunsky district	-6.53	-7.38	-7.10	-9.59	-6.70
Lebedyansky district	-6.34	-5.29	-9.13	-7.49	-7.74
Chaplyginsky district	-7.16	-7.82	-8.78	-10.71	-8.37
Stanovlyansky district	-7.72	-9.27	-9.00	-9.77	-8.60
Krasninsky district	-10.43	-7.29	-9.27	-10.76	-8.77
Zadonsky district	-6.95	-8.38	-8.56	-10.63	-8.90
Izmalkovskiy district	-11.21	-11.31	-9.65	-8.22	-9.65
Dankovskiy district	-7.30	-10.10	-10.76	-11.12	-9.67
Dolgorukovskiy district	-10.51	-9.31	-9.75	-10.29	-9.97
Khlevensky district	-9.94	-10.17	-8.59	-9.46	-10.01
Usmanskoy district	-9.29	-10.09	-10.50	-9.49	-10.20
Volovskoy district	-10.38	-9.74	-10.37	-10.46	-10.27
Dobrovskiy district	-10.09	-10.08	-12.49	-12.10	-11.22

^e Source: compiled and calculated by the author based on the statistical bulletins "Population in terms of municipalities of the Lipetsk region as by January, 1st" for 2013–2019, provided by the Federal State Statistics Service in the Lipetsk Region

TABLE VI. NUMBER OF FERTILE-AGE WOMEN PER 1000 MEN IN THE RURAL AREAS OF THE LIPETSK REGION IN 2012-2018, PEOPLE

Age groups	2012	2013	2014	2015	2016	2017	2018
18–19	942	968	1012	1020	1019	991	1007
20–24	1019	1011	995	977	949	959	974
25–29	944	954	942	924	922	892	864
30–34	948	920	921	921	904	898	877
35–39	1017	1017	993	965	961	939	894
40–44	990	1005	1027	1034	1034	1031	1025

^f Source: compiled by the author based on the statistical bulletins "Population in terms of municipalities of the Lipetsk region as by January, 1st" for 2013–2019, provided by the Federal State Statistics Service in the Lipetsk Region

V. MIGRATION POTENTIAL OF LABOR RESOURCE REPRODUCTION IN THE RURAL AREAS

The reproduction of labor resources could be facilitated by the influx of migrants. There is a rather powerful migration movement of the population in the Lipetsk region. Migration occurs in three main directions: (1) within the region among its territories; (2) within Russia with other regions; (3) with foreign countries. It can be of two types: resettlement and labor migration. And they both affect the reproduction of labor resources.

However, as studies have showed [12], a full compensation for the retired labor resources does not occur, since people

who are disabled are often predominant among those arriving in the countryside. Meanwhile, the working-age population mostly leaves the villages and countryside, in the first place. It is this circumstance that creates great problems for the labor resource reproduction in the rural areas. Although statistics show that in general, able-bodied migrants prevail in the Lipetsk region over a long time interval (table 7); but this information does not give us any idea of the situation in certain areas where the picture is completely different.

The scale of the resettlement migration in the rural areas is quite considerable (Fig. 4).

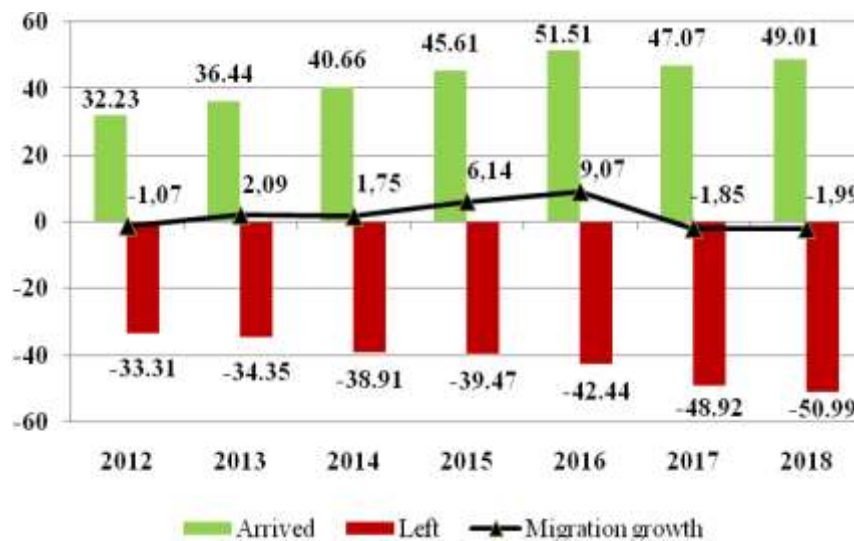


Fig. 4. Resettlement migration in the rural areas of the Lipetsk region in 2012–2018, per 1000 capita, peopleSource: compiled and calculated by the author based on the statistical bulletins “Population in terms of municipalities of the Lipetsk region as by January, 1st” for 2013–2019, provided by the Federal State Statistics Service in the Lipetsk Region

The assessment of migration growth in rural areas showed that it has a positive balance, capable of ensuring the reproduction of labor resources, in only two areas, Gryazinsky and Lipetsky districts. In 7 more regions, a positive migration increase does not provide coverage for natural decline. In the remaining 9 rural districts, there was a negative migration balance. Thus, able-bodied migrants primarily settle in the

Gryazinsky district near the enterprises of the Special Economic Zone and in the Lipetsky region near the regional center of the city of Lipetsk. Therefore, the influx of migrants into the countryside can not fully compensate for the natural decline in the working-age population in the vast majority of rural areas (in 16 districts out of 18).

TABLE VII. REPRODUCTION OF WORKING-AGE RURAL POPULATION IN THE LIPETSK REGION IN 2013-2018, PEOPLE

The types of growth (decrease) of the able-bodied population	2013	2014	2015	2016	2017	2018	Total of 2013–2018
Entered the working age during the year	3837	4014	3805	3930	3847	4006	23439
Left the working age during the year	6383	6666	7118	6828	7009	6991	40995
Died in the working age during the year	1579	1643	1446	1403	1265	1314	8650
Annual growth (decrease) of the working-age population due to the natural change	-4125	-4295	-4759	-4301	-4427	-4299	-26206
Annual growth (decrease) of the working-age population due to the migration	-83	40	1590	2662	-755	-730	2724
Total growth (decrease) of the working-age population	-4208	-4255	-3169	-1639	-5182	-5029	-23482

Source: compiled by the author based on the statistical bulletins “Population in terms of municipalities of the Lipetsk region as by January, 1st” for 2013–2019, provided by the Federal State Statistics Service in the Lipetsk Region

VI. WHAT CAN FACILITATE THE LABOR RESOURCE REPRODUCTION IN THE RURAL AREAS

First of all, an efficiently functioning enterprise within the territory of a rural settlement is a fundamental factor affecting the reproduction of labor resources. It provides employment for the majority of local residents and prevents mass migration, both resettlement and labor one. This is confirmed by other researchers [13].

To improve the process of the labor resource reproduction in rural areas, their adequate motivation is required. This is evidenced by the data of a number of studies [14–17]. The motivational conditions for the labor resource reproduction in rural areas are the creation of new jobs and higher wages for rural residents. The key factor in the reproduction of labor resources in agriculture is their wages.

Of course, we must not forget about the role of the government, which can have a very strong impact on the rural labor market. Thus, in all federal and regional Programs aimed at the development of rural territories, measures are provided with appropriate funding aimed at resolving the issues related to the reproduction of labor resources in rural areas [18]. But there are also skeptical scientists [19] who believe that the measures taken by the state to stimulate demography in the countryside do not give results, the outflow of labor from the rural areas and the aging of the rural population will continue. But we hold a different point of view [20]. Since the families living in rural areas have lower incomes in comparison with urban ones, financial governmental support will be very relevant for them. This can significantly affect the demographic component of the reproduction of labor resources in rural areas. By the way, the latest initiatives of the President of Russia, announced in January 2020 in the President's Address to the Federal Assembly, can become a new incentive for rural residents and will help increase fertility, which will ultimately affect the reproduction of labor resources.

VII. CONCLUSION

Summing up the study, we found that the tasks set were more ambitious than it was initially seen. The reproduction processes associated with labor resources turned out to be similar in the whole of the Lipetsk region and in all its territories, but they differed sharply in terms of their flow in each region. And therefore, for a deeper analysis and study, and even more so to determine the necessary level of reproduction of labor resources, it is necessary to move from the regional scale to certain areas and even rural settlements.

Therefore, we can assume that the goal of the research was mainly achieved by us. In the course of this work, we were able to:

1) highlight the main trends in the development of labor resources in rural areas of the Lipetsk region: (i) a steady gradual reduction in their numbers; (ii) a significant differentiation of areas in terms of pace and direction of changes occurring to the labor resources; (iii) the close relationship of changes in the number of labor resources with their employment in the economy of the districts;

2) determine the gradual decrease in the demographic potential of labor resource reproduction due to the decrease in the birth rate, as well as to the negative imbalances in the ratios between the number of women in the reproductive age and men of the same age groups;

3) find out that, despite the migration attractiveness of the Lipetsk Region, which contributes to the creation of a positive migration balance, the influx of migrants, both domestic and from other countries, is still insufficient to create migration potential for the reproduction of labor resources.

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