



# Assessment of Current State of Urban Resettlement in a Russian Region. Case Study: Orel Region

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## ABSTRACT

This article gives the evaluation of the state of urban resettlement in Orel region, one of the Central Russia provinces. It provides the research of the change in urban population of the region, urbanization dynamics. The article reveals the main reasons for the decrease in urbanization intensity, gives the analysis of the rate of urbanization in terms of administrative districts of the region, provides the classification of urban settlements of the region according to population and research of the change in urban population resettlement during intercensal periods.

## 1. INTRODUCTION

The term "resettlement" describes the historical process of settlement of a territory and spatial organization of population.

Development of social division of labour resulted in occurrence of two major types of settlements – the urban and the rural settlements. Towns are main points throughout the whole resettlement net.

A town is a settlement in which the greater part of population is engaged in industrial production, transport, communications, trade and social sphere. Its number of inhabitants must be not less than 12 thousand people or not less than 3 thousand people in other town formations called urban-type settlements. The greater part of population of the urban-type settlements must be engaged in nonagricultural sphere.

## 2. RESULTS AND DISCUSSION

The population of Orel region ranks 63<sup>rd</sup> among regions of the Russian Federation and 17<sup>th</sup> of 18 regions of the Central Federal District.

As compared to the 2002 population census population of Orel region decreased by 73,300 citizens

including 31,100 citizens in urban settlements and 42,200 citizens in rural settlements.

Table 1. Time history of Orel region population size changes in the latest intercensal period.

Population	Thousands of citizens		2010 % compared to 2002
	2002	2010	
Total population	860.3	786.9	91.5
Urban population	546.5	515.4	94.3
Rural population	313.8	271.5	86.5

Population decrease mainly resulted from natural loss (overbalance of the deceased over the born citizens) and migration outflow of the citizens out bounds of the region. Increase only was registered in Orel District adjoining the regional center (+1,217 citizens or 1.8%).

The population of Orel region inhabits 20 urban settlements (towns and urban-type settlements) and 2922 rural settlements.

According to the results of the 2010 Russian census the percent of townspeople in Orel region is 65.5% which amounts to 518,700 citizens (63% or

549,900 citizens according to the 2002 Russian census) of total population of the region which is almost 8% less than the average value in Russia (73.7%).

Thus the process of urbanization was going on in the region during the latest intercensal period: percent of townspeople in the total population increased by 3 points (in the absolute decrease in urban population).

Urbanization dynamics can be represented in historical retrospective in the following manner. Percent of urban population amounted to 9% in Orel region in 1926.

In 1939 rate of urbanization was 13%. During and after the Great Patriotic War it remained between 12% and 13%. 1950's saw increase of rate of urbanization (23.7% in 1959) which mainly resulted from industrial development and consequently from activation of migratory movement of rural population to urban settlements. During the following years the rate of urbanization was consistently increasing (1%-2% a year).

Overbalance of the urban population over the rural population was registered in 1976 for the first time and after that the annual increase of percent of the urban population amounted to 1%.

The crisis 90's of the previous century saw stabilizing of the rate of urbanization (at the level of 63%). In the second half of the 20<sup>th</sup> century percent of the urban population increased and amounted to 66% (513,665 citizens).

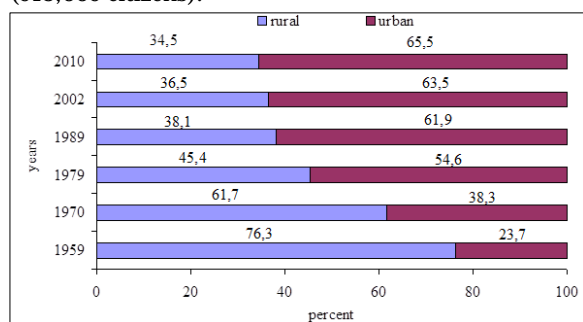


Fig. 1. Proportion of urban and rural population.

Urbanization is both a phenomenon and a process. It is important not only to represent the rate of urbanization but also provide qualitative assessment of the process history. For this purpose the rate of urbanization intensity (growth) is calculated. To do that the data of percent of the urban population is required.

Even a general analysis of the statistical data provided in the table shows that the process of urbanization was actively developing in the 1960's – 1970's. It slowed down in the 1980's, stabilized in the 1990's, slightly increased in the first decade of the new millennium and kept insignificantly growing in the beginning of the second decade.

But as the percent of the urban population has grown by 1% from 1961 to 1962 and as well by 1% from

1970 to 1971 we can come to a conclusion of monotony of urbanization process. Using the rate of urbanization intensity we can prove that such is not the case.

Now we calculate the rate of urbanization intensity for that periods and compare them:

$$Ir_{1961-1962} = (L_{1962} - L_{1961}) / L_{1961} * 100\%$$

$$Ir_{1970-1971} = (L_{1971} - L_{1970}) / L_{1970} * 100\%$$

where "Ir" stands for "urbanization intensity rate" and "L" stands for "level".

It turns out that  $Ir_{1961-1962} = 3.7$ , an  $Ir_{1970-1971} = 2.6$ . It follows that although the change of percent of the urban population amounts to 1% for the both periods it turns out that the process of urbanization was developing during the first period more rapidly than during the second one.

Using the above introduced formula we calculate the rate of urbanization intensity for some other periods and build the table 3 on its basis.

The obtained data show that the processes of urbanization were developing most intensively in Orel region from 1950 to 1960 and within following two decades they saw slowdown (approximately twofold decrease).

The 1980's saw sharp slowdown of urbanization as its intensity decreased four-fold compared to the first period, 10.5 – fold compared to the second period, 5 and 4.5 – fold compared to the third and fourth period, respectively.

The lowest intensity of urbanization was registered in two last decades.

It all reflects gradual slowdown of rate of growth of urbanization which is connected to depopulation processes in Orel rural settlements which were the major "supplier" of human resources to the urban settlements of Orel region in Soviet period (in the conditions of active industrial growth). By now this component has lost its lapsed might.

Towns are mostly supplied with the "result" of natural increase of rural population.

Percent of the urban population in the total population is the major index of the level of urbanization.

At the same time urbanization is pretty complex and multiform process, so this index is not enough for its characterization.

That is why the level of urbanization is most frequently determined by the percent of townsmen living in big towns. Just so, nowadays approximately 62% of townsmen live in Orel which is the only big town in Orel region.

About 18.5% of townsmen live in towns of regional subordination (Livny, Mtsensk) and the rest of them (19.5%) live in four towns of regional subordination and 13 urban-type settlements.

Table 2. Dynamics of percent of the urban population of Orel region, %.

Year	Percent of the urban population	Year	Percent of the urban population	Year	Percent of the urban population
1926	9	1968	36	1981	57
1939	13	1969	37	1982	58
1946	12	1970	39	1983	58
1950	13	1971	40	1984	59
1959	24	1972	42	1985	60
1960	25	1973	44	1986	61
1961	27	1974	47	1987	61
1962	28	1975	49	1988	62
1963	30	1976	51	1989	62
1964	31	1977	53	1990	63
1965	32	1978	54	2000	63
1966	33	1979	55	2002	63
1967	35	1980	56	2012	66

Growth of the urban population of Orel region is formed by the following components: natural increase of population of towns, mechanical growth of rural population and migrations from other regions and countries, inclusion into town boundaries or attribution of suburban areas to administrative subordination, transformation of rural settlements to urban settlements.

These presences which explain the urbanization mechanism directly affect qualitative and quantitative characteristics of urbanization.

Table 3. Dynamics of the rate of urbanization intensity.

Period	The rate of urbanization intensity for the period
1926-1946	33.3
1950-1960	92.3
1961-1970	44.4
1971-1980	40.0
1981-1989	8.8
1990-2012	4.8

Besides, urbanization changes the process of development of settlements, it leads to spatial expansion of urban zones and influences the economical and cultural state of adjoining settlements.

Maximal indexes of urbanization are possessed by Bolkhovsky (64.3%), Uritsky (50.0%) and Glazunovsky (46.7%) districts, and minimal ones – by Orel district (18.0%) and Pokrovsky district (27.4%).

Percent of the urban population of other districts ranges between 42.0% and 30.0% with the exclusion of the administrative districts where regional centers are rural settlements too.

Table 4 (“Urban population of districts of Orel region”) reflects time history of changes of percent of urban population of Orel region.

Taking into account the components of urban population change (natural and migration increase) rates of annual urban population increase were generally decreasing but remained positive from 1970 till 1997 and became negative only in 1998.

This tendency mainly remained actual in the first decade of the current millennium.

So, urban population increase was registered in all districts in the second half of the previous century. Due to decrease of total population in the new millennium urban population of most districts of the region decreased too.

Slight urban population increase was registered in the latest intercensal period in Bolkhovsky, Verkhovsky, Hotynetsky and Uritsky districts while it stagnated in Kolpnyansky, Novoderenkovsky and Orel district.

There are seven towns in Orel region.

Three of them – Orel, Mtsensk and Livny – fall into the category of towns of regional submission, and the others (Bolkhov, Dmitrovsk-Orlovsky, Maloarkhangelsk and Novosil) are the towns of district submission. 13 urban-type settlements are located in Orel region. 84.5% of urban population (84.3% in 2002) lives in the towns and the remaining population inhabits the urban-type settlements.

Table 4. Urban population of districts of Orel region (census data, thousands of citizens).

Districts	1939	1959	1970	1979	1989	2002	2010
<b><i>In the region</i></b>	<b>162.5</b>	<b>220.4</b>	<b>362</b>	<b>492.5</b>	<b>554.7</b>	<b>546.5</b>	<b>522.4</b>
Orel	110.6	149.9	232.2	305	336.9	333.3	316.8
Livny	12	23.9	37.3	44.9	51.7	52.8	50.7
Mtsensk	11.5	14.3	27.8	41.8	48.4	47.8	44.7
Bolhovskiy	12.7	11.3	13.3	13	13.1	12.1	12.6
Verkhovskiy	-	3.7	6.2	7.3	9	8.1	8.4
Glazunovskiy	-	-	5.6	6.4	7	6.8	6.4
Dmitrovskiy	5.4	5.6	6.3	6.8	7	6.5	6
Dolzhanskoy	-	-	-	3.4	4.3	5	4.6
Zalogoshenskiy	-	-	4.6	5.1	5.7	6	5.5
Kolpnyanskiy	-	-	6.1	7	7.6	7.2	7.2
Kromskiy	-	3.2	4.9	5.8	7.1	7.2	7.1
Maloarhangelskiy	3.5	2.5	3	3.6	4.3	4	3.9
Mtsenskiy	-	-	-	3.2	3.1	-	-
Novoderenkovskiy	-	-	-	3.8	4.8	4.7	4.7
Novosilskiy	3.3	2.4	3	3.2	4.2	4	3.8
Orel district	-	-	-	7.4	12.4	12.1	12.1
Pokrovskiy	-	-	-	3.4	4.3	4.6	4.5
Sverdlovskiy	-	-	5	5.6	6.3	6.4	5.8
Uritskiy	3.5	3.6	6.7	8.2	8.8	9.7	10
Hotynetskiy	-	-	-	4	4.6	4.2	4.4
Shablykynskiy	-	-	-	3.6	4.1	3.9	3.4

Table 5. Reflects population of towns and urban-type settlements of Orel region as of 2010.

Towns	Population, thousands of citizens	Urban-type settlements	Population, thousands of citizens
<b><i>Total</i></b>	<b>438.5</b>	<b><i>Total</i></b>	<b>84.1</b>
Orel	316.8	Znamenka	12.1
Livny	50.7	Vekhoye	8.4
Mtsensk	44.7	Naryshkino	10
Bolkhov	12.6	Kromy	7.1
Dmitrovsk-Orlovskiy	6	Glazunovka	6.4
Maloarkhangelsk	3.9	Kolpny	7.2
Novosil	3.8	Zmiyevka	5.8
		Zalogosh	5.5
		Khomutovo	4.7
		Pokrovskoye	4.5
		Dolgoye	4.6
		Khotynets	4.4
		Shablykino	3.4

According to the actual classification urban settlements of Orel region fall into the following types depending on their size:

- **big towns** (more than 100 thou. citizens) – Orel.

- **medium towns** (from 50 to 99 thou. citizens) – Livny.

- **small towns** (up to 50 thou. citizens) – Mtsensk, Bolkhov, Dmitrovsk - Orlovsky, Novosil, Maloarkhangelsk.

Moreover, the population of the latter three does not comply with the status of a town but they are referred to as towns due to historical traditions (there are more than 140 towns like these three in Russia).

- **urban - type settlements** (from 3 to 12 thou. citizens) – all 13 urban-type settlements of Orel region.

A more detailed classification of urban settlements according their population provides us with additional information on distribution of urban population:

- *towns with up to 5 thou. citizens* – Novosil, Maloarkhangelsk;

- *towns with 5 to 9.9 thou. citizens* - Dmitrovsk-Orlovsky;

- *towns with 10 to 19.9 thou. citizens* – Bolkhov;

- *towns with 20 to 49.9 thou. citizens* – Mtsensk;

- *towns with 50 to 99.9 thou. citizens* – Livny;

- *towns with 100 to 499.9 thou. citizens* – Orel;

- *urban-type settlements with up to 5 thou. citizens* – Shablykino, Knotynets, Pokrovskoye, Khomutovo, Dolgoye;

- *urban-type settlements with 5 to 9.9 thou. citizens* – Zalegosh, Zmiyevka, Glazunovka, Kolpny, Kromy, Verkhovie, Naryshkino;

- *urban-type settlements with 10 to 19.9 thou. citizens* – Znamenka.

Progressively as the urban population increases, the functions they perform expand too.

According to the structural and functional characteristics the towns of Orel region mainly fall into the category of transition-type towns between industrial and local organizing centers.

Table 6. Urban settlements grouping according to their population (according to the censuses data).

Urban settlements grouping	Number of urban settlements		Number of their citizens, (thou. citizens)		2010 in % compared to 2002	Number of citizens, % by the end	
	2002	2010	2002	2010		2002	2010
Total number of towns	7	7	460.6	435.6	94.6	100	100
<i>of which with population (thou. citizens):</i>							
up to 5	2	2	8	7.3	91.2	1.7	1.7
from 5 to 10	1	1	6.5	5.7	87	1.4	1.3
from 10 to 20	1	1	12.2	11.4	94	2.6	2.6
from 20 to 50	1	1	47.8	43.2	90.4	10.4	9.9
from 50 to 100	1	1	52.8	50.3	95.3	11.5	11.6
250 a	1	1	333.3	317.7	95.3	72.4	72.9
Total number of urban-type settlements	13	13	85.9	79.8	92.8	100	100
<i>of which with population (thou. citizens):</i>							
up to 5	4	5	17.5	20.4	116.7	20.3	25.6
from 5 to 10	8	7	56.3	47.4	84.1	65.6	59.4
from 10 to 20	1	1	12.1	12	99.2	14.1	15

The exclusions are Mtsensk and Livny – towns with primary significance of industrial centers (the principal town-forming factor in them is production sector) – and Orel referring to multifunctional towns with high level of industrial production concentration with a relatively developed social and production infrastructure. Changes in distribution of urban population in last but one and

last intercensal periods (from 1989 to 2002 and from 2002 to 2010) are characterized by the following peculiarities:

- the number of towns remained the same and the number of urban-type settlements decreased during last but one intercensal period (an urban-type settlement Otradinky (Mtsensky district) with

population of 3.1 thou. citizens was transformed into a rural settlement in 1998);

- the number of towns and urban-type settlements remained the same within the period from 2002 to 2010;

- within the period from 1989 to 2002, the number of townsmen in the region decreased by 4 thousand people (from 550 thousand citizens to 546 thousand citizens): 2 thousand people both in towns and urban-type settlements;

- within the last intercensal period the number of townsmen decreased much more – by 31.1 thousand people (25 thousand people in towns and 6.1 thousand people in urban-type settlements);

- within the last but one intercensal period the number of citizens living in the towns with population from 5 to 9.9;

- from 10 to 19.9; from 20 to 49.9 thousand citizens decreased (1 thousand in each group);

- the number of citizens of the town from the category of towns with population from 50 to 99.9 thousand citizens (Livny) increased by 1 thousand;

- within the period from 2002 to 2010 the population decrease was registered in all towns groupings (and in the regional center too!);

- within the last but one intercensal period the number of citizens living in the urban-type settlements decreased by 1 thousand in each of the two groups (up to 5 thousand citizens and from 5 to 9.9 thousand citizens);

- within the period from 2002 to 2010 the population decrease was registered in two of three groups of urban-type settlements, and the only exclusion was the group of settlements with population of up to 5 thousand people which saw growth by 3.1 thousand people.

Accurate information on distribution of urban population within the last intercensal period is reflected in the table below.

### 3. CONCLUSION

Each type of urban settlements of Orel region experiences its own problems that sharpened during the period of establishment of market-oriented economy.

High concentration of industrial production and population accompanied with the growth of urban areas results in decline of sanitary and hygienic living conditions, overload of passenger transportation, disruption of water and heat supply, lack of residential space, social and cultural facilities etc.

In small and medium towns one of numerous problems is employment of population.

Development of market relations requires complex development of economy of different types of urban settlements.

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