

COMPARATIVE ANALYSIS OF URBAN AREAS OF THE REPUBLIC OF TATARSTAN AND PERM KRAI

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Abstract: *The processes of urbanization are widely covered in modern scientific and periodical literature, have long been at the epicenter of attention of scientists dealing with the problems of territorial organization of society. The article is devoted to a comparative analysis of the urbanized territories of the two regions of Russia – the Republic of Tatarstan and the Perm Krai. The capital cities of the regions have a population of over a million people. The 20th century was the century of the formation of urbanization processes in that and in the other region. And the process of urbanization was accompanied by industrialization, which was going on at a high pace. The end of the 20th century – the beginning of the 21st century was characterized by the most important trends that influenced all regions of Russia and, first of all, urbanized ones: the transition from the command economy to a market economy; the transition from industry to post-industry. These trends also manifested themselves in the studied regions. In the work were analyzed such characteristic features of the urban areas as the proportion of the population living in settlements with a population of more than 2,000 inhabitants; the share of the population living in settlements with a population of more than 2000 people in which: 70% of the population is housed in apartment buildings; more than 70% of the population is provided with centralized sewerage; less than 10% of the population have a personal subsidiary farm; the proportion of professionally educated residents exceeds 45%. The authors identify the similarities and differences by the example of urban areas of two regions of Russia.*

Key words: city, urban areas, urbanization, urban population

JEL codes: R10, R20, R52

1. Introduction

The processes of urbanization are widely and extensively covered in modern scientific and periodical literature. The growth of the population of the largest cities, the emergence of agglomerations and megalopolises are at the epicenter of attention of scientists dealing with the problems of territorial organization of society. The complex, multifunctional, dynamic nature of urbanized areas requires an interdisciplinary approach to study and is the cause of not stopping attempts to provide a more accurate and detailed scientific explanation for the ongoing urbanization processes.

In the broadest approach, urbanization is understood as the complex process of increasing population of cities (in recent decades, mainly large and large), the formation and expansion of new forms of urban settlement, incl. agglomerations and megalopolises, the spread of urban lifestyle and a number of other quantitative and qualitative processes, such as suburbanization, de-urbanization, with which pendulum migration is directly related.

Scientific publications of recent years are devoted to various aspects of the life of urbanized territories. The issues of sustainable development of cities, the preservation and improvement of the urban environment, changes in spatial and functional saturation, the gentrification of large cities, the decline in the population of small and medium-sized cities affect the cities of the world in one way or another. All of these questions and case-study of urban areas of different country are closely studied by modern science (Fang and Yu, 2017; Saraiva et al., 2017; Serbanica and Constantin, 2017; Vaz et al., 2017; Lopez-Morales et al., 2016; Delgadillo, 2016; Rodriguez et al., 2016; Bertinelli and Black, 2004; Fang, 2016). Research of the beginning of the 21st century is dedicated to the various driving forces of urbanization process, including accumulation of human capital as a leading factor of urbanization and economic growth (Forstall et al., 2009).

Urbanization is an extremely complex geographical, social and historical process. The regions of the world and the country differ significantly in the nature and speed of the processes of urbanization, as well as in approaches to determining the criterion of the minimum population of city and, in general, the indicator of urbanization.

The difference in approaches to the definition of the term of "city", its boundaries and minimum of population requires scientific understanding and the development of methods for determining. Especially the problem is relevant for growing large cities and their agglomerations. For example, the study of the criteria for determining the world's largest agglomerations based on unofficial sources and by the United Nations are considered in article "Which are the largest? Why lists of major urban areas vary so greatly" by Forstall et al. (2009).

2. Methodology and Data

Modern socio-economic geography increases and enriches its methodical apparatus, using and transforming traditional methods of economic geography, creating and borrowing new ones. Investigating the issues of improving the territorial organization of society, locating the population and justifying the social and economic strategy of subjects at different levels, geographers use various indicators that reflect the processes of economic development.

Humanization of public geography aims at studying the level, quality and lifestyle of the population, its physical and social health, the well-being and comfort of the living environment through new methods and approaches. In this regard, the study of demographic processes (including urbanization) with the identification of their territorial features, cause-effect relationships and development problems is in the focus of attention of public geography, requires updating the methodological apparatus and rethinking traditional approaches (Nefedova, 2002, 2013).

Traditional methods in geographical science remain descriptive and comparative. Geographical description today is transformed into more modern types: descriptive-comparative, descriptive-predictive, comparative-constructive, which allow for collecting, analyzing and interpreting information about social processes and phenomena not only in terms of data accumulation, but also their structuring in accordance with the requirements regional development. Thus, the modern algorithm is implemented according to the scheme: description – explanation – foresight – management.

The article is devoted to a comparative analysis of the urbanized territories of two regions of Russia that are part of the Volga Federal District – the Republic of Tatarstan and the Perm Territory. These regions have number of features of socio-economic development that unite them. Possessing a favorable economic-geographical position, rich and diverse natural-resource and economic potential, the Republic of Tatarstan and the Perm Krai have a number of competitive advantages among the regions of the Ural-Volga region.

First, both regions are located in the middle and lower reaches of the Kama, and Tatarstan is at the confluence of the Volga and Kama, which provides them with important transport and logistics functions, due to the crossing of the most important waterways of Europe with the Trans-Siberian Railway. Both metropolitan cities – Kazan and Perm – are located on the banks of the largest rivers, which largely shaped the history of cities and their spatial configuration. The Kama River contributed to the emergence on its shores in the Perm region in the 1950s the new city of Tchaikovsky with energy and water-intensive industries. and in Tatarstan the formation of the Nizhnekamsk territorial production complex – with the machine-building and chemical industries in Naberezhnye Chelny and Nizhnekamsk, the construction of the Nizhnekamsk hydroelectric power station.

In addition to this general branch of industrial specialization for the Perm Krai, other industries, such as the mining of hard coal and potassium salts, and metallurgical production, which played an important role in the formation of the urban settlement system, are especially important. Along the western slopes of the Ural

Mountains, a whole axis of cities has formed, whose city-forming industries are associated with the extraction and primary processing of natural resources.

Thirdly, an important stage in the development of urbanization processes was the period of the Second World War. The largest enterprises in the western part of the country were evacuated beyond the Volga and gave a powerful impetus to the further development of the cities of Tatarstan and the Kama region. It should be noted that the evacuation of not only the largest industrial enterprises, but also the institutions of the social sphere, in particular culture, was also great importance.

At the same time, the regions have their own specifics. Distribution of population between urban and rural areas in Perm Krai and the republic of Tatarstan since 1990 year is shown in tables 1 and 2.

A retrospective analysis of the formation of a system of urban settlements in the Perm Krai made it possible to reveal a very important trend: most of the modern cities of the Kama region, having flourished during the industrialization period, began to experience depression in the second half of the twentieth century due to the depletion of raw materials (for example, Kizel and Gremyachinsk in Kizelovsky coal basin), reduction or loss of the main city-forming enterprises (Nytva, Aleksandrovsk, Chusovoi) and, as a consequence, outflow of population. Of the 24 urban settlements in Perm Krai, two-thirds belong to the so-called single-industry towns.

It is also alarming that some urban settlements located in the south of the Perm region have a highly specialized economy associated with oil production (Osa, Chernushka). Cities that have a centuries-old history and once complex multi-sectoral economy in recent decades have turned into servicing oilfield settlements. Thus, in the region, the restructuring of production, the development of new types of activities, including innovative ones, in the Tertiary Quaternary sectors should be carried out.

In the light of the above, it can be noted that the depressed state of the economy of many cities of the Perm Krai leads to a decrease in the level and quality of life of the population, the urban environment is losing its benefits and is being transformed, which requires new approaches to the study of urbanization processes.

The experience of the Republic of Tatarstan is interesting because by the present moment a certain specialization of urbanized territories has been established in the Strategy of Social and Economic Development of the Republic of Tatarstan until 2030 (adopted in 2015) (www1). Thus, the specialization of the Kazan agglomeration now and for the future is connected with post-industrial development, with the leading importance of the sphere of education and IT, tourism, high-tech medicine and metropolitan regional functions. The branches of the Kamsk agglomeration specialization are industrial production – machine building, chemical industry, energy, and the emerging Almeteyev agglomeration specializes in the oil industry.

Common to both regions was a certain decline in the level of urbanization in the mid-90s of the last century combined with serious transformation processes of the country's economic system. Also, both regions have experienced the influence of de-industrialization and transition to a post-industrial society, primarily in metropolitan cities and their agglomerations.

Tab. 1 Distribution of population between urban and rural areas in Perm Krai

Years	The entire population thousand people	including		In the total population %	
		urban	rural	urban	rural
1990	3028.0	2330.9	697.1	77.0	23.0
1995	2963.9	2269.7	694.2	76.6	23.4
2000	2878.9	2176.3	702.6	75.6	24.4
2005	2751.6	2072.8	678.8	75.3	24.7
2010	2648.7	1980.8	667.9	74.8	25.2
2015	2637.0	1991.8	645.2	75.5	24.5
2016	2634.4	1992.0	642.4	75.6	24.4

Source: The estimation data for table "Distribution of population between urban and rural areas in Perm Krai" is based on the data of Federal State Statistics Centre of Russian Federation (www2)

By 2016, the level of urbanization in the Perm Krai, according to official data, was 75.6% (table 1), while the maximum level fell in 1990 – 77%. De-urbanization in this case can be explained, first of all, by changing the status of a number of urban-type settlements, as well as reducing the population in many urban areas due to the difficult social and economic situation in them. The level of urbanization in Tatarstan, calculated according to the official methodology, is increasing from 73.4% in 1990 to 76.4% in 2016. Until 2005, the Perm region was considered to be a more urbanized region, and from the middle of the 2000s, on the contrary, Tatarstan due to high rates of urbanization, is at this level ahead of the Perm region.

As of 2016, in 17 out of 40 municipal districts of the Perm Krai, the administrative centre was a rural settlement (42.5%). In Tatarstan, in 13 out of 43 municipal districts, the administrative centre is a rural settlement (30.2%). As a rule, social infrastructure facilities of the district level are concentrated in the

administrative centres of municipal districts, which allows them to be viewed as centres with a broader and higher quality service.

Tab. 2 Distribution of population between urban and rural areas in the Republic of Tatarstan

Years	The entire population, thousand people	including		In the total population, %	
		urban	rural	urban	rural
1990	3664.7	2693.6	971.0	73.4	26.6
1995	3756.5	2752.3	1004.2	73.2	26.8
2000	3788.3	2788.2	1000.1	73.6	26.4
2005	3764.9	2804.8	960.1	74.5	25.5
2010	3786.0	2850.8	935.2	75.2	24.8
2015	3861.9	2947.9	914.0	76.3	23.7
2016	3877.0	2966.2	910.8	76.4	23.6

Source: The estimation data for table "Distribution of population between urban and rural areas in the Republic of Tatarstan" is based on the data of Federal State Statistics Centre of Russian Federation (www2)

3. Results and Discussion

There are many methods for identifying urban areas. The UN methodology assumes for simplicity that the city considers any settlement of more than 2,000 inhabitants.

According to the 2010 All-Russia Population Census, there were 92 settlements in the Perm region with a population of more than 2000 inhabitants, of which 25 are cities, 19 are urban-type settlements, 20 are settlements, 29 are villages were lived 2170 thousand people i.e. 82.4% of the total population on the edge.

According to the same census data in the Republic of Tatarstan, the number of settlements with population is less than in the Perm Krai – only 74, with an aggregate population of 2976.6 thousand people i.e. 78.6% of the total population of the republic.

According to the methodology of the World Bank, cities with a population of more than 50 thousand people, plus territories with a population density of more than 150 people to km², with distance from cities (over 100 thousand people) not exceeding 60 minutes may be considered as urbanized. A total of 7 settlements in the Perm Krai had in 2010 a population of more than 50 thousand people (their total population was 1512 thousand people or 57.4% of the total population of the region). In the Republic of Tatarstan, nine cities with a population of more than 50 thousand people, in which live 2419.8 thousand people, what is 63.9%. These cities and their population at 2016 are shown in table 3.

Tab. 3 Cities of the Republic of Tatarstan and Perm Krai with population over 50000 in 2016 year

Cities with population from... to (thousand)	Republic Of Tatarstan		Perm Krai	
	City	Population (thousand)	City	Population (thousand)
from 1000	Kazan	1217.0	Perm	1041.9
from 500 to 1000	Naberezhnye Chelny	526.7	-	-
from 250 to 500	-	-	-	-
from 100 to 250	Nizhnekamsk	236.2	Berezniki	146.6
	Almetyevsk	152.6		
	Zelenodolsk	98.8	Solikamsk	95.2
	Bugulma	86.1	Tchaikovsky	83.1
from 50 to 100	Elabuga	73.3	Kungur	66.3
	Leninogorsk	63.3	Lysva	63.1
	Chistopol	61.0	Krasnokamsk	54.0

Source: The estimation data for table "Cities of the Republic of Tatarstan and Perm Krai with population over 50000 in 2016 year" is based on the data of Federal State Statistics Centre of Russian Federation (www2)

Thus, as a basis for the study, we selected the settlements of the Perm Krai and the Republic of Tatarstan with a population of more than 2000 inhabitants according to the 2010 All-Russia Population Census (www2).

The features of the architectural appearance were estimated through the proportion of the population living not in individual houses. In Perm Krai, according to this criterion, rural settlements were separated from each other. Gamovo, Kondratovo village, Maisky settlement, Pesyanka village, Sylva settlement, Kultayevo, Ust-

Kachka villages, village of Ferma, Crying, Platoshino, Savino villages - located directly in the agglomeration zone of Perm, and also villages Berezovka, Markovsky, Zyukaika, Komsomolsky, Kerchevsky, Plekhanovo. In these settlements, the proportion of the population living in multi-unit buildings exceeds 70%. Many of the listed settlements previously had the status of urban-type settlements. The aggregate number of the population living in such settlements amounted to 1917 thousand people in 2010 (i.e. 72.8%).

On the contrary, in such urban areas as Usolye, Chermoz, Kalino settlement – this indicator did not exceed 50%, and in Vereshchagino, Ocher, Oktyabrsky village, Suksun town, Okhansk city, Cherdyn town, village It was in the range of 50 to 70%.

In the Republic of Tatarstan, among the rural settlements, a high proportion of the population living in apartment buildings is noted in the village of Krasny Klyuch, Krugloe Pole village, Osinovo village, Tatarstan state farm, Aisha village, Lenino-Kokushkino, Beetki village, the village of Biryulinsky zhorosovkhoz. Cumulatively, in settlements where at least 70% of the population lives in multi-unit buildings, in 2010 it was 2563.9 thousand people (i.e. 67.7%).

However, it should be noted that in the current urbanization processes that accompany the transition to the postindustrial stage of urban development, the presence of multi-apartment buildings in the urban settlement and the indicator of the proportion of the population living in them lose their relevance.

In the Republic of Tatarstan, due to the peculiarities of economic activity and natural and climatic conditions, a greater number of towns and urban-type settlements are observed, with a low proportion of the population living in multi-unit buildings. Priorities - their housing and de-urbanization – an increase in the number of cottage settlements around cities, the phenomenon of second homes and dachas. For example, in 7 urban-type settlements (the village of Aksubaev, the village of Rybnaya Sloboda, the village of Kamskoye Ustye, the village of Rich Saba, the village of Apastovo, the village of Nizhnie Vyazovy, the town of Baltasi) and in 5 cities (Bolgar, Buinsk, Tetyushi, city Laishevo, Arsk), the proportion of such residents does not exceed 50%.

Estimation of the condition and degree of housing arrangement can characterize the level of provision of the population with centralized (communal) drainage – sewerage. More than 90% of the population is provided with this type of improvement in rural settlements such as Maisky settlement, Markovsky village, Pesyanka village. In the village of Kondratovo, the village of Sylva, villages Gamow, Kultayevo, Lobanovo, Ust-Kachka, village of Ferma, villages Komsomolsky, Platoshino this indicator exceeds 70%. The cumulative number of the population residing in such settlements was, according to the census, 1666.5 thousand people (i.e. 63.2%) (Chekmeneva et al., 2017).

The lower level of real urbanization is connected with the fact that such urban settlements as Cherdyn, Chermoz, Kalino settlement are classified as "half-heaths" (less than 20% of the population is provided with centralized sewerage); Kudymkar, Ocher city, Oktyabrsky village, Suksun town, Okhansk city, Lyamino village, Novoiilinsky village, Teplya Gora village, Vsevolod-Vilva village are related to the category "neither city nor village" (from 20 to 50%); Lysva, Kungur, Vereshchagino, town of Osa, Nytva, village Yayva, village Sars, village Overyata, village Pashiya, village Nyrob, village Pavlovsky are in fact "sub-cities" (from 50 to 70%).

In the Republic of Tatarstan more than 70% of the population is provided with this type of improvement in such rural settlements as Gabishevo, Krasny Klyuch village, Beetki village, Krugloe Pole settlement, Osinovo village, Biryulinsky zverohskhoz village. In total, in settlements where more than 70% of the population is provided with centralized sewerage, there are a total of 2,536.2 thousand people, i.e. 67.0%.

In such urban areas as the town of Laishevo, Arsk, Bolgar, Kamskoye Ustye, the village of Nizhnie Vyazovy, the village of Rybnaya Sloboda, the village of Rich Saba, the village of Apastovo and the town of Baltasimene 30% of the population are provided with centralized sewerage.

Interestingly enough, in our opinion, is the indicator of the proportion of the population that has personal subsidiary plots. Among urban entities with a high proportion of the population with personal subsidiary plots (more than 20%), one can note the city of Lysva, Kungur, Chernushka, Nytva, Uralskiy town, Okhansk city, Suksun town, Usolye town, e.g. Cherdyn, town of Chermoz, village Kalino. The aggregate number of the population living in settlements where the share of the population with a private subsidiary farm less than 10%, in 2010 amounted to 1626.7 thousand people (i.e. 61.7%).

In the Republic of Tatarstan, there are many more settlements where the population has personal subsidiary plots: rural rich Saba and Lower Vyazovy (more than 50%), Vasilievo village, Kamskoye Ustye village and Laishevo town (from 40 to 50%), village Alekseevskoe, village Lower Maktama, Aktyubinsky village and Atsubaev village (from 30 to 40%), Chistopol, Kukmor settlement, Mamadysh town, Agryz town, Urusu village and Zainsk town (more than 20%). The total population of settlements, where the share of the population with a personal subsidiary farm less than 10%, in 2010 amounted to 2413.1 thousand people (63.7%).

As a criterion for the level of education, one can use the proportion of the population with a higher, secondary, primary professional, postgraduate or uncompleted higher education. According to this indicator, it is possible to exclude such entities as city of Chermoz, Ugleurskiy settlement, Nyrob, village Yayva, village Sars,

village Lyamino, village Pashia, village Novoyilinsky, village Teplya Gora, village Pavlovsky, village Vsevolodo- Vilva, village Kalino (with a share of the persons under consideration is less than 45%). Thus, the number of people living in settlements with a high proportion of professionally educated residents amounted to 2011.6 thousand people (i.e. 76.3%).

Among the urban settlements in Tatarstan, the share of the professionally educated population is less than 45% only in Aktubinskiy. Thus, taking into account the criterion of professional education, urbanization in Tatarstan reaches 77.8%.

In a generalized form, the data of research of urban area and comparison of urbanization indicators calculated with different criteria for the Perm Krai and the Republic of Tatarstan (the proportion of the population living in settlements with a population of more than 2,000 inhabitants; the proportion of the population living in settlements with a population of more than 50000 inhabitants; the share of the population living in settlements with a population of more than 2000 people and in which 70% of the population is housed in apartment buildings; the share of the population living in settlements with a population of more than 2000 people and in which more than 70% of the population is provided with centralized sewerage; the share of the population living in settlements with a population of more than 2000 people and in which less than 10% of the population have a personal subsidiary farm; the share of the population living in settlements with a population of more than 2000 people and in which the proportion of professionally educated residents exceeds 45%) is presented in the table 4.

Tab. 4 Comparison of urbanization indicators calculated with different criteria for the Perm Krai and the Republic of Tatarstan in 2010

Level of official urbanization	Republic of Tatarstan	Perm Krai
	75.2%	74.8%
The proportion of the population living in settlements with a population of more than 2000 inhabitants	78.6%	82.4%
The proportion of the population living in settlements with a population of more than 50000 inhabitants	63.9%	57.4%
The share of the population living in settlements with a population of more than 2000 people and in which 70% of the population is housed in apartment buildings	67.7%	72.8%
The share of the population living in settlements with a population of more than 2000 people and in which more than 70% of the population is provided with centralized sewerage	67.0%	63.2%
The share of the population living in settlements with a population of more than 2000 people and in which less than 10% of the population have a personal subsidiary farm	63.7%	61.7%
The share of the population living in settlements with a population of more than 2000 people and in which the proportion of professionally educated residents exceeds 45%	76.3%	77.8%

Source: Own calculations

4. Conclusions

Urbanization is a complex global process. More than half of the world's population are living in urban areas. Cities are the locomotives of the world progress. In the same time, they concentrate both problems and possibilities in economic, environment and social life. Urbanization is understood as interdependent processes of urban population growth, the formation of agglomerations and megalopolises, the spread of urban lifestyles and a number of other not only quantitative but also qualitative processes such as suburbanization, de-urbanization and other.

The regions researched in the study have both common and different properties. At the turn of the millennium, the processes of de-industrialization, transition to post-industrial development and innovative economy have become clear in these regions. It should be emphasized that at the present time urbanization processes do not differ in dynamics or rapid growth (changes).

"Quantitatively", they have frozen at approximately the same level, and even have a slightly noticeable downward trend in the Perm Krai, this trend has been observed for a longer period, in the Republic of Tatarstan it was overcome in five years, and now there is a larger proportion in cities than in Perm Krai. Although in the late 90's the Perm Krai was the leader in terms of the indicator quite noticeably – more than 3%.

Different criteria for the allocation of urban areas allow us to speak about the ambiguity of the urbanization index. Thus, private approaches made it possible to talk about the fluctuation in the level of urbanization in the Perm Krai from 82.4% to 61.7%, and in Tatarstan – from 78.6% to 63.7%. At the same time, most of the calculated alternative urbanization indicators are less than those calculated according to the official methodology, i.e. now we have an overestimated level of urbanization on an official level.

The next important step is the development of an integral indicator that will include the criteria already considered and presented, and in the final analysis will reveal the real level of urbanization in the different regions.

References

Fang C., Yu D. (2017): *Urban agglomeration: An evolving concept of an emerging phenomenon*. "Landscape and Urban Planning", Vol. 162, pp. 126-136.

Saraiva M., Roebeling P., Sousa S. (2017): *Dimensions of shrinkage: Evaluating the socio-economic consequences of population decline in two medium-sized cities in Europe, using the SULD decision support tool*. "Environment and Planning B – Urban Analytics and City Science", Vol. 44, No. 6, pp. 1122-1144.

Serbanica C., Constantin D. (2017): *Sustainable cities in central and eastern European countries. Moving towards smart specialization*. "Habitat International", Vol. 68, pp. 55-63.

Vaz E., Taubenboeck H., Kotha M. (2017): *Urban change in Goa, India*. "Habitat International", Vol. 68, pp. 24-29.

Lopez-Morales E., Shin H.B., Lees L. (2016): *Latin American gentrifications*. "Urban Geography", Vol. 37, No. 8, pp. 1091-1018.

Delgadillo V. (2016): *Selective modernization of Mexico City and its historic center. Gentrification without displacement?* "Urban Geography", Vol. 37, No. 8, pp. 1154-1174.

Rodriguez M., Mercedes Di Virgilio M. (2016): *A city for all? Public policy and resistance to gentrification in the southern neighborhoods of Buenos Aires*. "Urban Geography", Vol. 37, No. 8, pp. 1215-1234.

Bertinelli L., Black D. (2004): *Urbanization and growth*. "Journal of Urban Economics", Vol. 56, No. 1, pp. 80-96.

Forstall R.L., Greene R.P., Pick J.B. (2009): *Which are the largest? Why lists of major urban areas vary so greatly*. "Tijdschrift voor economische en sociale geografie", Vol. 100, No. 3, pp. 277-297.

Fang C., Yu D. (2016): *China's new urbanization: developmental paths, blueprints and patterns*. Springer.

Nefedova T.G. (2013): *Large, small, medium-sized city and village in Russia*. In Akimenko A.D., Baburina V.L., Kirillova P.L., Mahrova A.G., Safronova S.G. (eds): *Geography, urban planning, architecture: synthesis of sciences and practices*. Oykumena, pp. 171-190.

Nefedova T.G. (2002). *Between town and country*. "World of Russia", Vol. 4, pp. 61-83.

Chekmeneva L.Yu., Balina T.A., Nikolaev R.S. (2017): *The level of urbanization in the Perm region: new approaches to assessment*. "Modern problems of geography and geology", Tomsk State University, pp. 567-571.

Online sources

(www1) http://pravo.tatarstan.ru/rus/gossov/zakon.htm?npa_id=4431

(www2) http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/population/