Settlement transformation and the problems of its adequate consideration in the spatial development strategy

Olga V. Kuznetsova¹

1 The Federal Research Center "Informatics and Management" of the Russian Academy of Science, Moscow, Russia

Received 31 January 2019 Accepted 24 February 2019 Published 12 April 2019

Citation: Kuznetsova OV (2019) Settlement transformation and the problems of its adequate consideration in the spatial development strategy. Population and Economics 3(1): 53–62. https://doi.org/10.3897/popecon.3.e34777

Abstract

The article analyzes the discussion of the draft of the Spatial Development Strategy of Russia, related to the issues of transformation of the settlement system in the country. The results of sociological surveys, scientific research proving the advantages of the largest urban agglomerations as points of economic growth and places of residence of the population, are generalized. The author proves the inevitability of transformation of the settlement system as a result of the changes taking place in the economy and society. Correspondingly, she suggests improvements of the system of statistical accounting (increase of transparency of the territorial structure of expenditures of federal and regional budgets, formation of statistical accounting in the context of urban agglomerations) and federal spatial policy.

Keywords

spatial development strategy; settlement system; million-plus cities; urban agglomerations.

JEL Codes: R23, R50, O15

Introduction

In recent years Russia has been developing a system of strategic planning, one of the most important documents of which should be the spatial development strategy (SDS) of the country. By definition given in the Federal law "On strategic planning in the Russian Federation" (Federal law... 2014), SDS should not only determine priorities, goals and objectives of regional development of Russia, but also be aimed at maintaining the sustainability of settlement system throughout the country. Unfortunately, elaboration and discussion of the SDS draft showed that today in the expert community there is no consensus on what should

be a modern federal spatial development policy associated with possible transformations of the settlement system. One of the examples of the intensity of the discussions is the debate of the Association of Russian Economic Think Tanks, held in October 2018 at the Faculty of Economics of Lomonosov Moscow State University (List of meetings held...). The actual fate of the SDS is a formal proof of the contradictions of views on the prospects of spatial development of Russia. According to the original version of the mentioned Federal law, the SDS was to be approved by January 1, 2017, the current version — by January 1, 2019. In fact, the SDS was approved only in mid-February 2019. (Order... 2019), while during the finalization of the text of the SDS the composition of the territories – applicants for federal support was broadened as much as possible (i.e. the priorities of such support became less clear).

It seems to us that such a situation is due to a number of reasons, among which there are quite objective ones:

- a clear lack of statistical information allowing to make correct assessments of the current situation both in the processes occurring in the settlement system and in the federal regulation of the regional development;
- ambiguity and contradictiveness of the processes of transformation of the settlement system.

Further, the article analyzes these objective reasons.

Issues of the statistical framework

During the discussion of the SDS, the idea of a greater focus in the federal spatial development policies on the largest urban agglomerations was most criticized. The logic of this idea, which is at least partly embedded in the SDS draft, is that the State will first support the already established "growth points", thereby maximizing the impact of invested funds, while the reduction of territorial disparities will be achieved mainly through social policies (for which more resources will be allocated from them) and in the context of macroregions by creating growth points throughout the country, which would impede the outflow of population to the capital region (this issue is discussed in more detail in the article "Trade-offs of spatial development priorities choice" (Kuznetsova 2019)).

Various arguments against the largest urban agglomerations as a priority of federal spatial policy were expressed, one of them is the inadmissibility of degradation of other types of territories. It is difficult to disagree with this, and the SDS assumes the creation of conditions for social and economic development not only in the leading economic centers: the declared goal of spatial development policy is to ensure sustainable and balanced spatial development of the country. In our view, the key problem is that the debate on the priorities of spatial development cannot be conducted only at a qualitative level, and there is a need for very specific assessments and decisions regarding spending the federal budget. Regardless of which types of territories are selected as priorities (or priorities are not chosen at all, and funds are expected to be distributed evenly throughout the country), it is important to understand how this will affect the already established allocation of the budget system. For example, if major urban agglomerations become priorities, how much more budget will be allocated to them (and therefore less to other types of territories)? Where are the budgetary funds now allocated and how is it planned to redistribute them across the country?

Unfortunately, there are no answers to these questions, because in Russia there is still no practice of estimating the distribution of the total amount of federal budget funds

even to the subjects of the Russian Federation, not to mention the municipalities (considered, of course, the open part of the budget). We emphasize that it is about all the expenses of the federal budget, and not only about interbudgetary transfers (information on which is publicly available). Data for most of the federal expenditures, or so-called direct expenditures — funds coming from the federal budget to the recipients in the regions, bypassing regional budgets, in a consolidated form are not published or discussed. At the expert level, this problem has been discussed for at least two decades [The fiscal structure..., 1999], but due to the political complexity of the issue, the federal authorities hesitate to increase the transparency of the spatial structure of federal budget expenditures, attempts to assess the current situation continue only at the expert level, which requires solving the difficult task of accumulating disembodied data [Klimanov et al., 2018]. Along with the lack of information on direct expenditures of the federal budget in the regions, the lack of similar information on direct expenditures of regional budgets in the context of municipal entities, on expenditures of public companies and corporations is to be mentioned.

Another, no less significant gap in statistical support of managerial decision-making regarding the settlement system is the lack of data in official Russian statistics on the most important territorial units — urban agglomerations. Rosstat statistics are published only on official territorial units — municipalities (Database...) or on the population aggregated by types of settlements, but also within their official borders (Regions of Russia... 2018)¹. It has been spoken of the need for statistics on urban agglomerations in Russia for even longer — for almost half a century (Tkachenko and Fomkina 2014), but the situation also remains unchanged.

Of course, economic-geographers and regionalists have long experience in studying patterns of formation of urban agglomerations and the processes taking place in them. But in the broad expert community, as the discussion of the SDS shows, there is not always an understanding of the differences between the city in its official boundaries and urban agglomeration. It is often stated in discussions that people prefer to live in small/medium towns and even rural settlements rather than in large cities. However, the real attractiveness of such small settlements depends strongly on their geographical location: one matter is near suburbs, where there is a possibility of daily trips to the city to work (rural settlements on the Rublevsky highway in Moscow region formally are not Moscow), and quite another matter is a town or village on the periphery, where employment is possible only at the place of residence or in the form of seasonal out-work (Between the home... 2016).

It seems that often there is a substitution of concepts — the desire of citizens to live in a private house with all the advantages of its location, but to work in a large city, is regarded as the desire to live outside a large urban agglomeration. According to opinion polls (Home, sweet home... 2017), two-thirds of citizens would like to live in private houses — 66%, whereas, in fact, twice fewer people – 34% – live in their own houses. The desire to live in a private house is characteristic of inhabitants of all types of houses (apartment and others). But at the same time, according to sociological polls, Moscow is considered a city of educational opportunities (56% of respondents answered that in the capital city it is more likely to get

¹ In the statistical compendium [Regions of Russia... 2016], Rosstat gives data on urban districts and cities itself, but this rather reduces the quality of statistics, as part of the data is published by city, while the other part is published by city districts (both data are limited by size of population).

good education than in others regions of the country), work opportunities (52%) and material well-being (50%). At the same time, of course, respondents admit that outside Moscow, in other cities and regions of Russia, the comfort of life is by a number of parameters higher, for example, significantly more opportunities to live in conditions of personal safety and favourable environmental conditions, to solve problems with housing (Moscow — the city of opportunities... 2017).

Collection of statistical data on urban agglomerations is a difficult task, but quite solvable, there is such experience in other countries. For example, in the United States data are collected and published on the metropolitan statistical areas. Such habitats should have at least one core, an urbanized area with a population of 50,000 inhabitants or more, as well as an adjacent area characterized by a high level of social and economic integration with the core (measured by intensity and direction of labour trips) (Temirgaleev 2014). Although the system of metropolitan statistical ranges is not perfect either (ibid.), it is still better than the complete absence of estimates of situations in urban agglomerations.

Another solution is demonstrated by Germany, where it is not about urban agglomerations as such, but the level of urbanization is estimated by the population living in municipalities with different population density, which also shows the distribution of the population in space, and not in individual settlements (Kuznetsova 2018):

- with high density (densely populated) large/major cities or areas near them, where at least 50% of the population lives in densely populated clusters;
- with medium density towns of smaller size (small, medium), suburbs where less than 50% of the population lives in rural grid cells and less than 50% of the population lives in densely populated clusters;
- with low density (sparsely populated) rural areas where over 50% of the population lives in rural grid cells.

It is important to note that during the elaboration of the SDS, delimitation of agglomerations has been carried out, however, the issue of formally defining agglomerations borders for purposes of statistical accounting (or a similar approach to the German one) has not been raised, although it is necessary for the understanding of the real situation with the settlement system in Russia.

Factors of attractiveness of the largest cities for migrants

One of the most important arguments put forward against the choice of the largest urban agglomerations, especially cities, is the presence of not only of advantages for the development of the economy and residence of citizens, but also of serious problems. Of course, much is spoken of the problems, advantages and disadvantages of living in settlements of different types, in scientific research (Revich and Kuznetsova 2018) and already mentioned sociological surveys.

Thus, for example, the diversity of jobs results in their transport distance for the majority of residents, the need to spend more time travelling from home to work and back. The high average income level of the population is accompanied by a high level of social stratification — due to the objective demand for low-skilled and, as a result, low-paid work, because of lower purchasing power of budget payments at a high cost of living. While some problems may be exaggerated, for example, the environmental situation in major cities is not always

the worst²: the current shift towards services and high-tech industries has led to reduced industrial pollution, high budget revenues and relative well-being of enterprises that survive in major cities contribute to the introduction of environmentally sound technologies. Studies show that even though air pollution caused by transport is high, the highest level of atmosphere impact is characteristic of cities with a population of 0.5-1 million people with coal power and (or) heavy structure of industry, small towns where the State Regional Electric Plants are located, single-industry towns with environmentally "dirty" industries (Bityukova 2015).

This raises unavoidable questions as to which aspects of life in the largest city — positive or negative — are more significant, and which of them feed migration inflows into metropolitan regions. The research of the Institute of Sociology of the Russian Academy of Sciences gives a clear answer to the motives of citizens that inspired them to change their place of residence (Table 1). From the given data it is obvious that the main factor of intra-Russian migration is the desire to find a good job, and the importance of this factor has grown over 15 years, including for residents of St. Petersburg.

Table 1. Targets of intra-Russian migration in 2003 and 2017, % of responses

Types of settlements	Work		Personal circum- stances		Study		Other
	2003	2017	2003	2017	2003	2017	2017
Moscow	34	30	60	44	21	19	6
Saint Petersburg	46	69	62	47	20	10	6
Capital cities in the regions of the Russian Federation	57	56	58	50	18	28	1
District centers	55	67	53	46	30	25	1
Rural area		67		46		34	2

Source: compiled from (Gorshkov and Tikhonova 2018).

The fact that people have an opinion that good work can be found mainly in the largest cities is confirmed by the data of other sociological surveys (Table 2). Moscow and St. Petersburg are obvious leaders among cities called best for career; among non-million-plus cities, only Tyumen, the center of oil and gas production region, stands out (Krasnodar in autumn 2018 has already been recognized as a million-plus city (Krasnodar — a million-plus city..., 2018)).

² According to the already mentioned sociological survey, Moscow is the least attractive from the point of view of the environmental situation: 78% of respondents said that in other regions of the country the corresponding conditions are better, and only 4% of respondents — that such conditions are better in Moscow (the other answers are: equal conditions or found it difficult to answer) [Is Moscow a city of opportunities... 2017].

Response rate, %	Cities with a population of 1 million people and higher	Cities with a population of 500 thousand people and more			
Over 60%	Moscow (74%), St. Petersburg (72%)	Tyumen (66%)			
55-59%	Ekaterinburg (59%), Kazan (55%)	Krasnodar (57%)			
45–49%	Ufa (49%), Nizhny Novgorod (48%), Novosibirsk (48%), Rostov-on-Don (46%), Krasnoyarsk (46%), Samara (45%)	Irkutsk (45%)			
39-43%	Perm (42%), Voronezh (41%), Chelyabinsk (40%)	Yaroslavl (43%), Khabarovsk (41%), Vladivostok (41%), Ryazan (39%)			
34-35%	-	Izhevsk (35%), Naberezhnye Chelny (34%)			
25–31%	_	Barnaul, Kemerovo, Makhachkala, Penza, Tomsk (31% each), Orenburg (29%), Astrakhan (27%), Lipetsk (25%), Ulyanovsk (25%)			
20-25%	-	Saratov (23%), Kirov (20%), Novokuznetsk (20%)			
Under 20%	Volgograd (18%), Omsk (16%)	Togliatti (16%)			

Table 2. Proportion of respondents who answered positively to the question "Do you consider your city the best city for your career?", %

Notes. The survey was conducted on October 1-10, 2018; the studied population is economically active population of cities over 18 years of age; the sample size is 1500 respondents from Moscow and St. Petersburg, 900 respondents from other cities

Source: compiled from data of the Research center of the portal *Superjob.ru* [It is best to build a career..., 2018].

However, the dominance of responses on job as the main motive for the migration decision still leaves unanswered the important from a managerial standpoint question of whether migration to the capital city can be reduced, as the fundamental point remains unclear: whether citizens depart for work, which in principle cannot be outside the federal or at least the regional capital city (for example, people want to implement themselves in the federal ministry, they have ambitions to work in the best or most famous capital universities, clinics, theatres), or it is only in higher wages or, worse, simply in the absence of jobs. If the former motive is dominant, the ability to contain the growth of the largest agglomerations is extremely limited, while if the latter motive prevails, it is realistic to reduce migration inflows into capitals by creating "normal" jobs on the periphery.

Research shows, of course, that work is not the only factor of migration, but this is evident especially in small towns where the possibilities of obtaining vocational education (especially higher education) are objectively rather limited, where there are clearly problems with the provision of leisure activities (they are partly overcome, but there can objectively be no large variety of leisure activities)³. However, it is much more important to understand why

These features were identified in the course of a research project carried out at the Institute of Social Analysis and Forecasting of RANEPA in 2015. [Mkrtchyan 2017; Florinskaya 2017].

people leave middle-size and large cities, why they move from regional capital cities to federal ones (Moscow and St. Petersburg). It seems that sociological surveys would be important for federal and regional authorities, which would give answers to questions not about what forced people to change their place of residence, but about what would prevent them from leaving for a larger city.

If we turn to the question of what is predominant — the positive or negative aspects of life in the largest cities, then the answer is given by data on life expectancy in them. In terms of life expectancy at birth, according to Rosstat, the leaders include the republics of the North Caucasus (which is unlikely to make them attractive to migrants because of understandable reasons), as well as Moscow (2nd in 2017 with an indicator of 77.87 years) and St. Petersburg (7th with an indicator of 75.45 years)⁴. Therefore, poor ecology and other problems in capital cities are less significant than the opportunities offered by such cities, which supports migration inflow in them.

Reasons for the transformation of the settlement system

So, the attractiveness of the largest cities (more precisely, urban agglomerations), first of all Moscow, for the population is related primarily to the opportunity to find a good job. However, this does not eliminate the question of whether such an advantage is objective or whether it is a negative result of the imperfection of public administration in the country. The economic development of Moscow is definitely contributed by excessive centralization of power and concentration of financial resources in the capital, determined by the peculiarities of the Russian legislation, including its fiscal model [Zubarevich 2018].

At the same time, the continued concentration of population in million-plus cities and their agglomerations is a global trend (Revich and Kuznetsova 2018), typical not only for developing, but also for economically advanced countries, for example, for Germany, where the role of the largest cities has been growing for over a decade. Moreover, Germany is distinguished by the active regional policy of the federal authorities (the purpose of which at the level of the basic law of the country is to ensure equal living conditions throughout the country), and a deliberate policy of decentralized alignment of federal authorities. Thus, there are objective advantages of accelerated social and economic development of the largest cities, which are becoming points of growth due to a number of factors, the key of which at the present stage of economic development are the best conditions for innovative development (Kuznetsova 2018).

In such a situation, one of the urgent tasks is to find an answer to the question of which system of settlement is optimal at the present stage of development of Russia. During the discussion of the SDS, it became clear that for many experts the need to maintain the existing settlement system is an axiom. However, the system of settlement cannot but change in the course of development of the economy and society. The changes in the structure of

The average life expectancy of the entire population in Russia in 2017 was 72.70 years, for men — 67.51 years, for women — 77.64 years. In terms of life expectancy for men, Moscow and St. Petersburg were ranked 3d and 7th, respectively, with 74.39 and 70.94 years; in terms of life expectancy for women – 2d and 7th respectively: 81.11 and 79.35 years. The leading positions in all cases belong to the republics of the North Caucasus [Regions of Russia... 2018].

the economy, the emergence of new types of economic activity, the growth of labour productivity in traditional branches of the economy cannot but lead to a change in the ratio of population of different types of settlements. Moreover, social development can have the same consequences. For example, a priori, the emerging high-tech medical care cannot be distributed as evenly across the country as basic medical services.

An important example is agriculture, where one argument for maintaining the established settlement system was related to the need to ensure food security in the country. However, research shows that in recent years in Russia there was formation of agricultural holdings with advanced technical equipment compared to former agricultural enterprises. As a result, labour productivity has increased, wages in agriculture have increased, but the number of jobs has decreased, and "excessive" rural population have emerged in many regions (Nefedova 2017).

As in the case of the reasons of concentration of population and economic activity in Moscow, the shortage of jobs in rural areas is not only related to objective factors (including the growth of labour productivity), but also management problems: unfavourable institutional conditions for the development of small and medium-sized businesses in rural areas, over-centralized budgetary policies that deprive local authorities of the ability to invest in social and economic development (Nefedova 2018).

Therefore, in our opinion, it is not reasonable to set the task of preserving the existing system of settlement — it should change along with changes in economy and society. Artificial maintenance of the economy of particular settlements is justified only if it contributes to the solution of other, non-economic problems: if it is the optimal way for the moment to solve social problems (by ensuring decent living conditions for the entire population of the country) or geostrategic necessity. But, of course, there should be no artificial obstacles to the development of different types of settlements.

Conclusion

Summarizing the above mentioned, the following tasks in the area of spatial development, connected with the settlement system, are, in our opinion, relevant for federal authorities:

- a radical increase in the transparency of the territorial structure of expenditures of federal and regional budgets, which would allow to get an idea of the distribution of funds across the territory of the country;
 - formation of a statistical data collection system in the context of urban agglomerations;
- identification (with the help of sociological surveys) of the population's motives to stay in their native cities, first of all, to refuse to move from major and other largest cities to the capital region (with corresponding subsequent adjustment of spatial development policy);
- initiation of a broader expert discussion on the prospects of transformation of the settlement system in the country (in our opinion, a sufficiently broad expert discussion of the project of the SDS has not taken place), which would allow for a better assessment of the objective factors of such transformation and those associated with the imperfection of public administration.

Reference list

- Bityukova VR (2015) Environmental rating of cities of Russia. Ecology and industry of Russia. 3: 34–39. (in Russian)
- Database of indicators of municipalities // Rosstat. Access mode: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (reference date: 25.12.2018). (in Russian)
- Gorshkov MK, Tikhonova NE (Eds.) (2018) Capitals and regions in contemporary Russia: myths and reality fifteen years later. Whole world. Moscow (in Russian)
- The fiscal structure of the Russian Federation: Financial flows between the center and the regions. 2001. New York, London.
- Federal Law "On strategic planning in the Russian Federation" of 28.06.2014 № 172-FL (adopted by the State Duma of the Federal Assembly of the Russian Federation 20.06.2014, the first and current edition). (in Russian)
- Florinskaya YF (2017) School graduates from small towns in Russia: Educational and migration strategies. Studies on Russian Economic Development. Vol. 28, 1: 87-96.
- Home, sweet home: dreams and reality. 11.08.2017 // Russian Public Opinion Research Center. Access mode: https://wciom.ru/index.php?id=236&uid=3457 (reference date 20.12.2018). (in Russian)
- Is Moscow a city of opportunities? 08.09.2017 // Russian Public Opinion Research Center. Access mode: https://wciom.ru/index.php?id=236&uid=3577 (reference date: 20.12.2018). (in Russian)
- It is best to build a career in Moscow, St. Petersburg or Tyumen. 16.10.2018 // Research center of the portal Superjob.ru. Access mode: https://www.superjob.ru/research/articles/112137/stroit-kareru-luchshe-vsego-v-moskve/ (reference date 20.01.2019). (in Russian)
- Klimanov VV, Eremina DA, Mikhailova AA (2018) Analysis of the balance of financial flows between the center and regions in the Russian Federation. ECO. 9: 51–62. (in Russian)
- Krasnodar a million-plus city: Krasnodar became the 16th million-plus city // Rossiyskaya Gazeta. 24.09.2018. Access mode: https://rg.ru/2018/09/24/reg-ufo/krasnodar-stal-16-m-gorodom-millionnikom.html (reference date 15.01.2019). (in Russian)
- Kuznetsova OV (2018) The increasing role of million-plus cities: the experience of Germany in the context of Russian problems. Federalism. 4: 37–50. (in Russian)
- Kuznetsova OV (2019) Trade-offs of spatial development priorities choice. Economic issues. 1: 146–147. (in Russian)
- Leksin VN, Porfiriev BN (2017) Megapolises and Megapolisness Phenomenon in Russia. Region: Economics and Sociology. 1 (93): 42–77. (in Russian)
- List of meetings held at the Dispute Club "Nodes of economic policy" of the Association of Russian Economic Think Tanks. Access mode: http://www.arett.ru/ru/disput (reference date: 15.01.2019) (in Russian)
- Mkrtchyan NV (2017) The youth migration from small towns in Russia. Monitoring of public opinion: Economic and social changes. 1: 225–242. (in Russian)
- Nefedova TG, Averkieva KV, Makhrova AG (Eds) (2016) Between the home and... home. Return spatial mobility of the population of Russia. A new chronograph. Moscow. [in Russian] DOI: 10.15356/BHAH2016
- Nefedova TG (2017) Factors and trends of the structure of rural settlements in Russia. Socio-economic geography. Bulletin of the Association of Russian geographers and social scientists. 7: 1–12. (in Russian)
- Nefedova TG (2017) Twenty-five years of post-Soviet Russian agriculture: geographic trends and contradictions. Proceedings of the Russian Academy of Sciences. Geography series. 5: 7–18. (in Russian)

Order of the Government of the Russian Federation of February 13, 2019 № 207-r "On approval of the Strategy of spatial development of the Russian Federation for the period up to 2025". (in Russian) Regions of Russia. Socio-economic indicators of cities (2016) Stat. com. Rosstat, Moscow (in Russian) Regions of Russia. Socio-economic indicators (2018) Stat. com. Rosstat, Moscow (in Russian)

Revich BA and Kuznetsova OV (Eds.) (2018) A man in the megapolis: experience of interdisciplinary research. LENAND. Moscow (in Russian)

Temirgaleev RF (2014) Recent trends in U.S. urban agglomerations. Regional studies. 3(45): 100–107. (in Russian)

Tkachenko AA, Fomkina AA (2014) Agglomerated settlement: identifying and registering. Proceedings of the Russian Geographical Society. 146 (5): 48–56. (in Russian)

Zubarevich NV (2018) Economic and budgetary advantages of Moscow: how are they formed and used? Old and New Moscow: development trends and challenges: Collected articles. I.I. Matushkin Publishing House. Moscow. Pp. 25–36. (in Russian)