

Methodological Approach and Tools for Ensuring Region's Balanced Spatial Development*



**Damir A.
GAINANOV**

Institute for Socio-Economic Research of the Ufa Federal Research Centre of RAS
Ufa, Republic of Bashkortostan, Russian Federation

e-mail: 2d2@inbox.ru

ORCID: 0000-0002-2606-2459; ResearcherID: O-5141-2015



**Rinat F.
GATAULLIN**

Institute for Socio-Economic Research of the Ufa Federal Research Centre of RAS
Ufa, Republic of Bashkortostan, Russian Federation

e-mail: gataullin.r2011@yandex.ru

ORCID: 0000-0002-7459-9728; ResearcherID: 2338365



**Aisylu G.
ATAEVA**

Institute for Socio-Economic Research of the Ufa Federal Research Centre of RAS
Ufa, Republic of Bashkortostan, Russian Federation

e-mail: Ice_lu@mail.ru

ORCID: 0000-0002-2835-0147; ResearcherID: 2338389

* The research is carried out within the framework of the state assignment of the UFRC RAS no. 075-00504-21-00 for 2021.

For citation: Gainanov D.A., Gataullin R.F., Ataeva A.G. Methodological approach and tools for ensuring region's balanced spatial development. *Economic and Social Changes: Facts, Trends, Forecast*, 2021, vol. 14, no. 2, pp. 75–91. DOI: 10.15838/esc.2021.2.74.5

Abstract. Due to the concentration of labor, financial, and other resources in agglomerations and “denudation” of regions’ periphery, a number of significant problems are becoming more acute in the transformation process of spatial economic structure. Such problems threaten the balance of intra- and interregional development. One of them is an important differentiation of Russian regions’ municipalities in terms of socio-economic development level. There is a dilemma of choosing the regional spatial policy vector: either to support the growth points’ development (agglomerations, special economic zones, territories of advanced socio-economic development), or to reduce socio-economic inequality through additional support for the periphery development. Using the integration of the concepts of the reference frame and sub-regional approach, the research proposes a methodological approach to the balanced spatial development of the region. On the region’s territory, the research distinguishes natural sub-regions, which are the elements of the territory’s reference economic frame, and artificial sub-regions, which are based on inter-municipal cooperation. The essence of the approach is to establish balance between regulation of natural economic processes in the region (for example, institutionalization and reduction of agglomerations’ negative effects) and state support for depressed territories’ development (for example, program sub-regions’ formation). Its usage in the regional management practice allows forming methodological basis for working out strategic documents for the region’s spatial development, economic, organizational, institutional, and social instruments of regional policy. The work presents a set of tools for improving the spatial development balance of the Republic of Bashkortostan, related to the development of natural sub-regions which are already objective growth points in the region, as well as aimed at stimulating the economic self-development of depressed and peripheral territories of the Republic of Bashkortostan.

Key words: spatial development, reference frame, settlement frame, sub-regional approach, program sub-region, agglomeration, municipality, central place theory, theory of development poles.

Introduction

In recent years, almost all Russian regions have experienced qualitative shifts in spatial development. This also affected the Republic of Bashkortostan which is characterized by its territorial location between the largest cities with millions of inhabitants of the Volga and Ural Federal Districts. Due to the economic space contraction around the regional capital and resources outflow from the republic periphery to neighboring cities with millions of inhabitants, municipalities are segregated according to socio-economic development. In addition, the spatial development peculiarities of the Republic of Bashkortostan include fragmentation of the municipal division (the second place is in Russia in the number of municipalities including the second place in the number of rural settlements), a small

number of urban districts as economic development centers, presence of a significant area of depressed territories mainly on the region’s periphery, as well as stagnant single-industry towns. In addition, the inefficiency of the current regional spatial policy and investment decisions in the Republic of Bashkortostan increase disproportions of inter-municipal development.

The purpose of the work is to find a methodological approach to ensuring balanced spatial development of the region which would allow taking into account its features and creating a basis for the formation of sustainable management policy. The methodological approach implementation will be considered in the case of the Republic of Bashkortostan.

Research methodology

The article includes four components: theoretical approaches to the region's spatial development, an analysis of transformation nature of a number of spatial frameworks of the Republic of Bashkortostan, a methodological approach to the region's balanced development, directions for the practical implementation of the methodological approach.

First, we will specify the main categories that will be used in the work.

Agglomerations of the Republic of Bashkortostan. The types, composition and structure of agglomerations of the Republic of Bashkortostan are not officially approved in the regulations, so we will adhere to the agglomerations' composition according to the Territorial Planning Scheme of the Republic of Bashkortostan, but in relation to the grid of municipal divisions: Ufa monocentric urban agglomeration (the core is Ufa, Blagoveshchensk, Iglinsky, Karmaskalinsky, Kushnarenkovsky, Ufa and Chishminsky municipal districts); South Bashkortostan polycentric urban industrial agglomeration (Sterlitamak and Salavat urban districts, Ishimbaysky and Sterlitamak municipal districts); Neftekamsk monocentric small urban agglomeration (Neftekamsk and Agidel urban districts, Krasnokamsk and Yanaulsky municipal districts); Oktyabrsky – Tuymazy Oilfield Service polycentric small urban agglomeration (Oktyabrsky Urban district and Tuymazinsky municipal district).

Peripheral territories of the Republic of Bashkortostan. The peculiarity of the Republic of Bashkortostan is the capital location in the region's geographical center. In this regard, as peripheral regions, we have considered municipalities whose administrative centers are located at a distance of more than 200 km from the capital: Askin, Bakalinsky, Belokataysky, Beloretsky, Bizhbulyaksky, Burzyansky, Duvan, Ermekeyevsky, Kaltasinsky, Karaidelsky, Kiginsky, Krasnokamsky, Kuyurgazinsky, Meleuzovsky, Mechetlinsky, Tatyshlinsky, Fedorovsky, and Yanaulsky districts.

Program sub-regions are sub-regional economic areas within the framework of inter-municipal strategic cooperation, where programs are implemented to address common development challenges in integrated manner. Currently, two such sub-regions have been officially approved in the Republic of Bashkortostan: 1) Northeast of the Republic of Bashkortostan¹ (Askin, Belokatay, Duvan, Karaidel, Kiginsky, Mechetlinsky, Nurimanovsky, Salavatsky districts); 2) Trans-Urals of the Republic of Bashkortostan² (Abzelilovsky, Baymasky, Burzyansky, Zianchurinsky, Zilairsky, Uchalinsky, Khaibullinsky districts). These territories are traditionally depressing.

Theoretical and methodological research

From the point of view of the region's economic space research, there are the following major theoretical developments: central place theory, theory of development poles and growth centers, reference frame concept, and sub-regional approach.

The central place theory focuses on the settlements' role as service centers for population; in the conditions of an ideal plain, each center has its own hexagonal service area [1–3]. Of course, real settlement systems do not correspond to such a model, but the central place theory was the basis for constructing a hierarchical classification of settlements and their location theories.

The theory of the growth poles (the founder is Perroux F. [4]) defines the “growth pole” as industries, individual enterprises, and subsequently individual territories that create “development impulses” that affect the territorial economic structure and its dynamics. This theory is widely accepted among Russian researchers and

¹ On the medium-term complex program of socio-economic development of the Northeastern regions of the Republic of Bashkortostan for 2011–2015: Government Decree of the Republic of Bashkortostan no. 395, dated November 9, 2011 (as amended on July 16, 2015, no. 269).

² On the medium-term complex program of economic development of the Trans-Urals for 2011–2015: Government Decree of the Republic of Bashkortostan no. 38, dated February 24, 2011 (as amended on July 16, 2015, no. 269).

practitioners of regional planning [5–6]. Practice shows that such growth poles, especially in the modern conditions of territories' agglomeration, develop not so much at the expense of their own sources, as at the expense of "wealth redistribution" in favor of the most powerful economic foci [7], and building regional policy by stimulating growth poles' development is not only inefficient, but can also lead to significant territory's segregation.

The reference frame theory [8–9] presents another approach to spatial development. This approach is understood as a combination of the main focuses (on the national scale, we are talking about large cities and urban agglomerations, on the regional scale – about cities and large urban-type settlements [10]) of the economic, political and cultural life of the region and the main lines connecting them. In the practice of territorial planning, three types of framework are mainly used: urban, natural and ecological, historical and cultural [11]. However, if we consider the regional strategic planning documents, there are much more frames mentioned (in the course of analyzing the schemes of territorial planning of the Russian regions, S.I. Yakovleva identifies 15 types of frames). At the same time, each species is considered as an independent and self-sufficient structure, whereas in reality they are closely interrelated and form a single system [12].

Some authors have tried to synthesize all three theories. For example, I.P. Smirnov has formulated a new concept: "a reference center for territory's development" which means a locality that performs service functions in relation to the gravitating territory, has a stable economic base with propulsive activities, and is included in the territory's reference frame [7].

In the main part of modern studies, intra-regional spatial planning is considered either from the point of view of sustainability [13] or even "local self-sustainability" [14], or the territories'

specialization [15], or agglomeration, urbanization processes and their role in the region's spatial development [16–19].

I.A. Tazhitdinov proposes an economic and administrative sub-regional approach to spatial development [20], when within the region as an entity of the Russian Federation new forms of structural organization of the region's economic space are identified. It is the sub-regions which represent a zone of consolidation of powers, potential and resources for solving socio-economic problems of territorial development. Usually, municipalities with similar socio-economic development problems, stable economic ties, and presence of growth points or prerequisites for their creation are united in sub-regions. The sub-region has no signs of an administrative unit, no governing authorities, it is created for a limited period, and it is managed through a development program based on inter-municipal cooperation. There are similar sub-regions in the Republic of Bashkortostan (Trans-Urals and Northeast).

Basic provisions of all theoretical approaches are somehow manifested in the region's spatial development: the largest cities act as attraction centers for population, financial and other resources, forming agglomerations (centripetal flows directed from the surrounding territory to the city in the central place theory), while simultaneously transmitting economic effects to the agglomeration periphery (centrifugal impulses in the theory of growth poles). Inter-municipal and interregional integration is increasing (internal and external links of the nodes of the reference frame), and certain types of sub-regions are emerging in a number of regions (administrative districts in the Sverdlovsk Oblast, program sub-regions in the Republic of Bashkortostan). However, if the need to ensure inter-municipal balance is taken as the target of regional policy, it is impossible to apply these theories in their pure form in modern conditions.

Methodological approach to spatial development

We propose a **methodological approach to the balanced spatial development of the region**, based on the sub-regional approach convergence and the regional reference frame theory (Fig. 1).

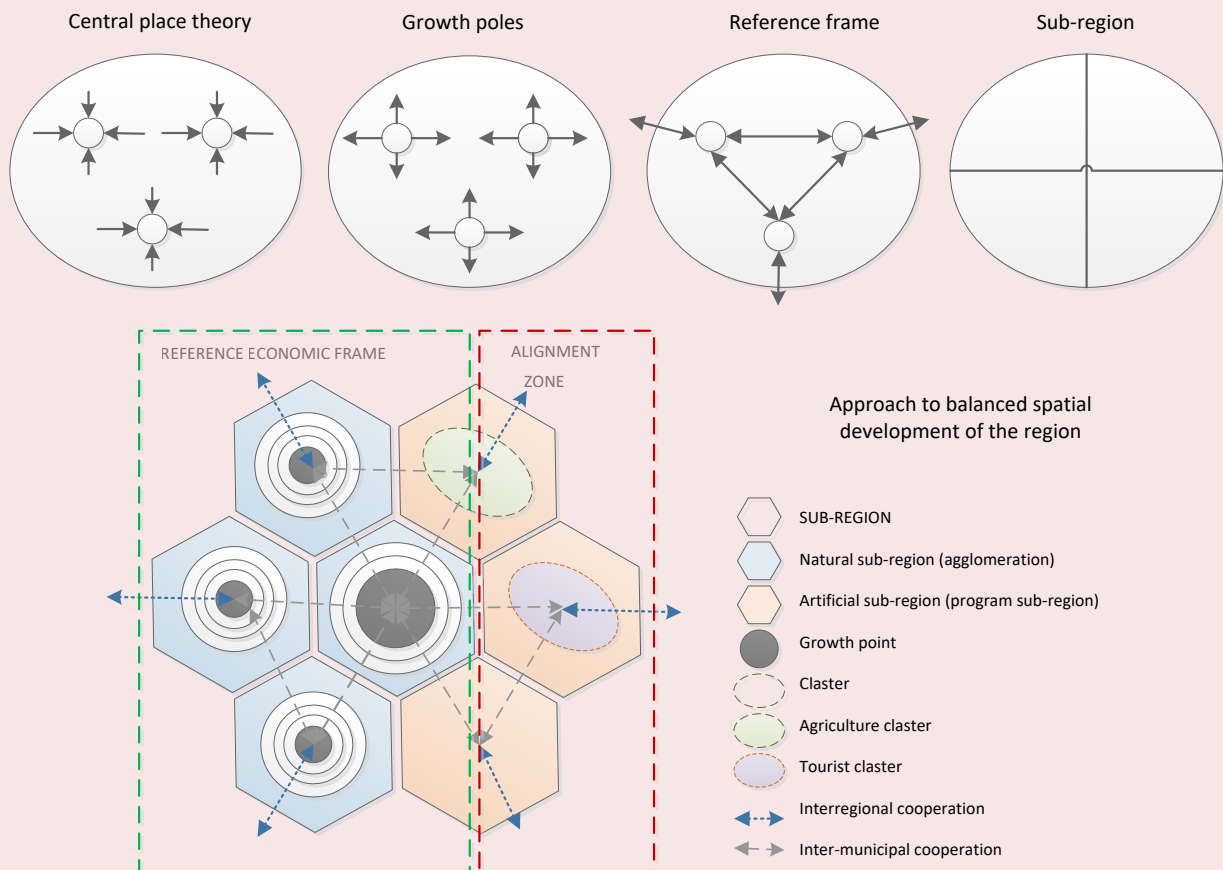
The essence of the approach is that the region’s territory is divided into sub-regions, some of which are reference economic frame, and some are leveling zone to ensure balanced spatial development. Moreover, a sub-region is not just a form of geographical or economic division of the regional territory into sub-regions, some municipalities may belong to two or more sub-regions, and some may not belong to any one at all.

The main provisions of the methodological approach include the following:

1. A sub-region is a form of municipalities’ integration within a region (agglomeration, cluster, special economic zone, territory of advanced socio-economic development, programmed sub-region, administrative district) which can be administrative and non-administrative. A sub-region can be formed “from below” for objective reasons – a natural sub-region (for example, an agglomeration), or “from above” to solve specific management tasks (a management district, a program sub-region). The key goal of forming a sub-region is to integrate the municipalities’ efforts for the integrated development or problems’ solution of a particular territory within the region.

2. Agglomerations act as the main region’s reference economic frame. This is an objective fact

Figure 1. Methodological approach to the balanced spatial development of the region based on sub-regional approach integration and reference frame theory



Source: own calculations.

that regional state authorities cannot ignore. Moreover, they should lead this process by creating conditions for agglomerations' institutionalization and organization of effective mechanisms for inter-municipal cooperation there. It will reduce the negative agglomeration effects on the surrounding areas and ensure their development balance. For this purpose, the paper proposes to perceive the agglomeration as a reference sub-region of regional development and to ensure its institutional design (for example, in the form of contractual form). Institutionalized agglomerations with clearly defined functional roles and the presence of effective forms of inter-municipal interaction are becoming the region's growth pole.

3. The region's territories, that are not included in agglomerations, should be an alignment zone (as well as increased regional attention and additional investment), and artificial sub-regions can be created there if necessary. The key issue is the sub-region's specialization which will allow a group of municipalities to develop purposefully and comprehensively. In this regard, a cluster development model (agricultural cluster, tourist cluster, etc.) is suitable for such sub-regions which will help determining the functional roles of the sub-region's municipalities, attract additional investment funds, and organize inter-municipal cooperation. In the absence of explicit specialization, the sub-regional form can be a programmed sub-region that is artificially formed within the framework of regional policy for municipalities' complex development (for example, depressed territories, peripheral areas, etc.).

4. The basis for the development of both natural and artificial sub-regions is inter-municipal cooperation. Any sub-region is a form of municipalities' association, and the long-term effectiveness of such an association is ensured not only by attention and investment of regional authorities, but also by the way inter-municipal cooperation is organized there.

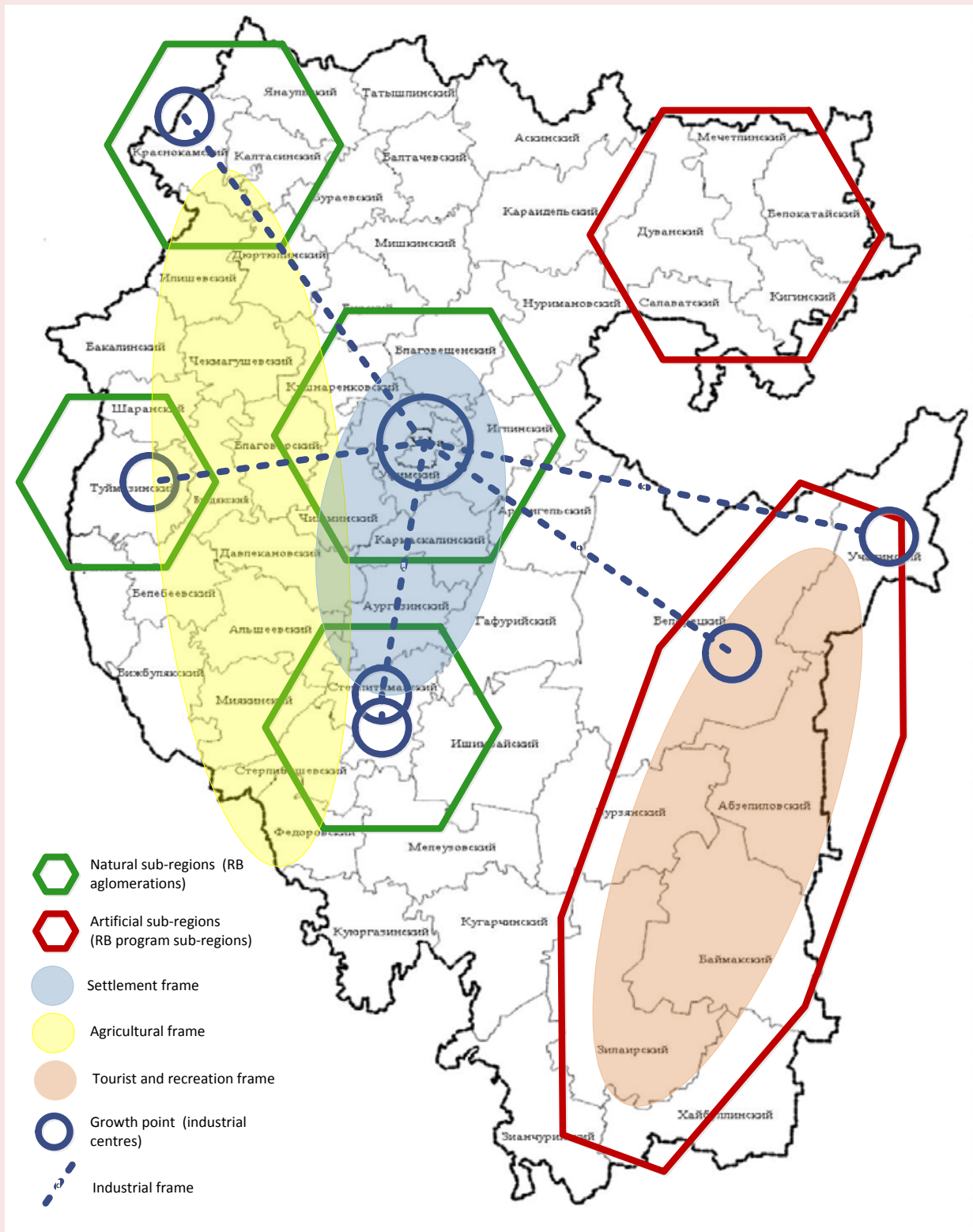
Figure 2 shows the approach implementation in the case of the Republic of Bashkortostan. The Republic of Bashkortostan peculiarity is the objective formation of four agglomerations (Ufa agglomeration; South Bashkortostan agglomeration; Neftekamsk agglomeration; Oktyabrskiy-Tuymazinskaya agglomeration) at a relatively long distance from each other forming in fact the "reference square" of the regional economic development in the center and in the west of the republic. Agglomerations concentrate the main part of industrial production, investment, and jobs, and their formation is an objective process.

The right side of the map presents traditionally depressing territories (see Fig. 2). In 2011, development programs were worked out and adopted for the two sub-regions of the Republic of Bashkortostan: the Trans-Urals and the northeastern regions which include the allocated territories. The goals of the programs were the creation of favorable conditions for the economy and social sphere with careful attitude to natural resources (Northeast) and sustainable socio-ecological and economic development of territories to improve the population's living standards (Trans-Urals). These programs were the first attempt to focus political attention on the problems of unbalancing the development of the territories of the Republic of Bashkortostan, and to create growth points.

We will look at how a number of the Republic's spatial frames have transformed over the previous 10 years.

Large and medium enterprises, which affect economic development, form the region's *industrial frame*. It can be estimated by the number of enterprises and by the results of their activities. The industrial frame of the Republic of Bashkortostan is increasingly "shrinking" around the capital every year. If in 2010, 56% of the total production volume was concentrated in the capital, then, in 2019, it was already 61%. The share of the Ufa agglomeration

Figure 2. Spatial development of the Republic of Bashkortostan



Source: own calculations.

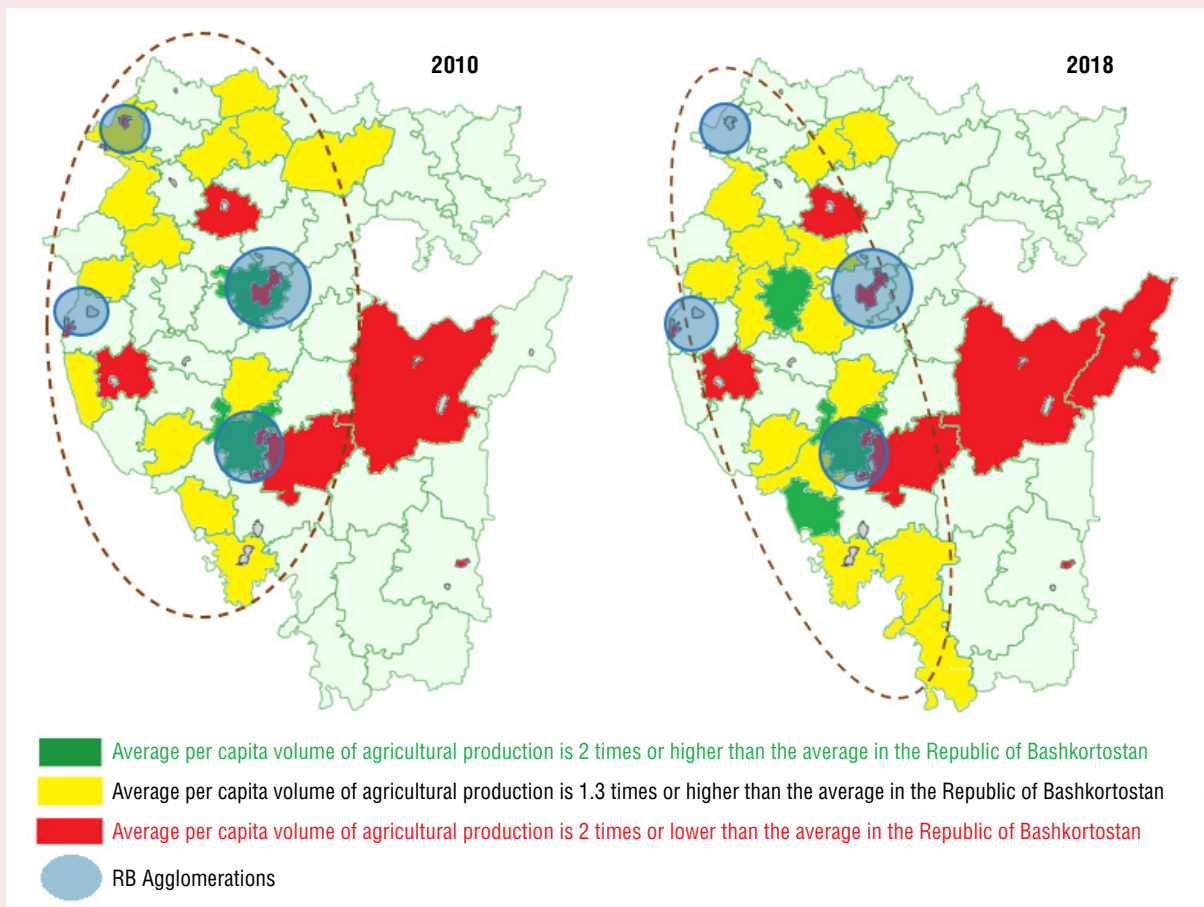
increased from 61.6% to 65.3%. In fact, all four agglomerations (including 17 municipalities) account for 90.2% of the total economic activity of the Republic. The share of the remaining 45 municipalities has decreased from 11.6% to 9.8% over the previous 10 years.

In addition, the situation with the territorial placement of investments increases inter-municipal imbalances. For example, an analysis of the largest investment projects, implemented in the Republic of Bashkortostan, shows that all of them fall either on the largest urban districts (5 out of 12 projects), or on the territories located near major cities. Such solutions for the territorial placement of the

largest investment projects are clear and obvious: the investor chooses territories with established infrastructure and more favorable conditions for business. But, nevertheless, it also affects the prospect of further territories' segregation according to the socio-economic development level.

The regional *agricultural frame* is characterized by the location within its boundaries of the distribution areas of various crops or agricultural production types [21]. The studies use different indicators of the region's agricultural specialization in statics and dynamics. In our case, we consider the territorial production of agricultural products, adjusted per capita for the Republic's municipalities (*Fig. 3*).

Figure 3. Agricultural production volume per capita by municipal and urban districts of the Republic of Bashkortostan



Source: according to information of the Rosstat Municipalities' Database. Available at: <https://rosstat.gov.ru/storage/mediabank/munst.htm>

The red zone of low values of agricultural production has not changed over the previous nine years. These are all urban districts of the Republic of Bashkortostan and industrially developed municipal areas, on the territories of which there are urban settlements. Leaders' spatial transformation of agricultural production in the republic is interesting. Figure 3 shows that the agricultural frame over the years has "stretched" along the largest agglomerations providing them with the production of agricultural goods.

The *settlement frame* is formed as a hierarchical system of locations, where the cores are agglomerations in which the largest and big cities play a leading role [22].

In the four agglomerations of the Republic of Bashkortostan in 2019, almost two thirds of the region's population lived (62.1%, in 2006 – 57.9%), including the Ufa agglomeration – 36.5% (32.7% in 2006) (*Table*).

At the same time, the number and share of residents of depressive territories decreased which indicates the flow of the Republic of

Bashkortostan population from depressive and border territories to the largest cities and agglomerations.

The regional migration flows can illustrate it. In 2010–2019, the total positive migration growth was typical only for 5 of the 54 districts of the republic; all of them are located near the largest cities (Ufa, Sterlitamak). In other districts, there was population's outflow, and the further the municipal district is from the capital, the greater the outflow is.

Spatial development directions of the Republic of Bashkortostan on the basis of methodological approach

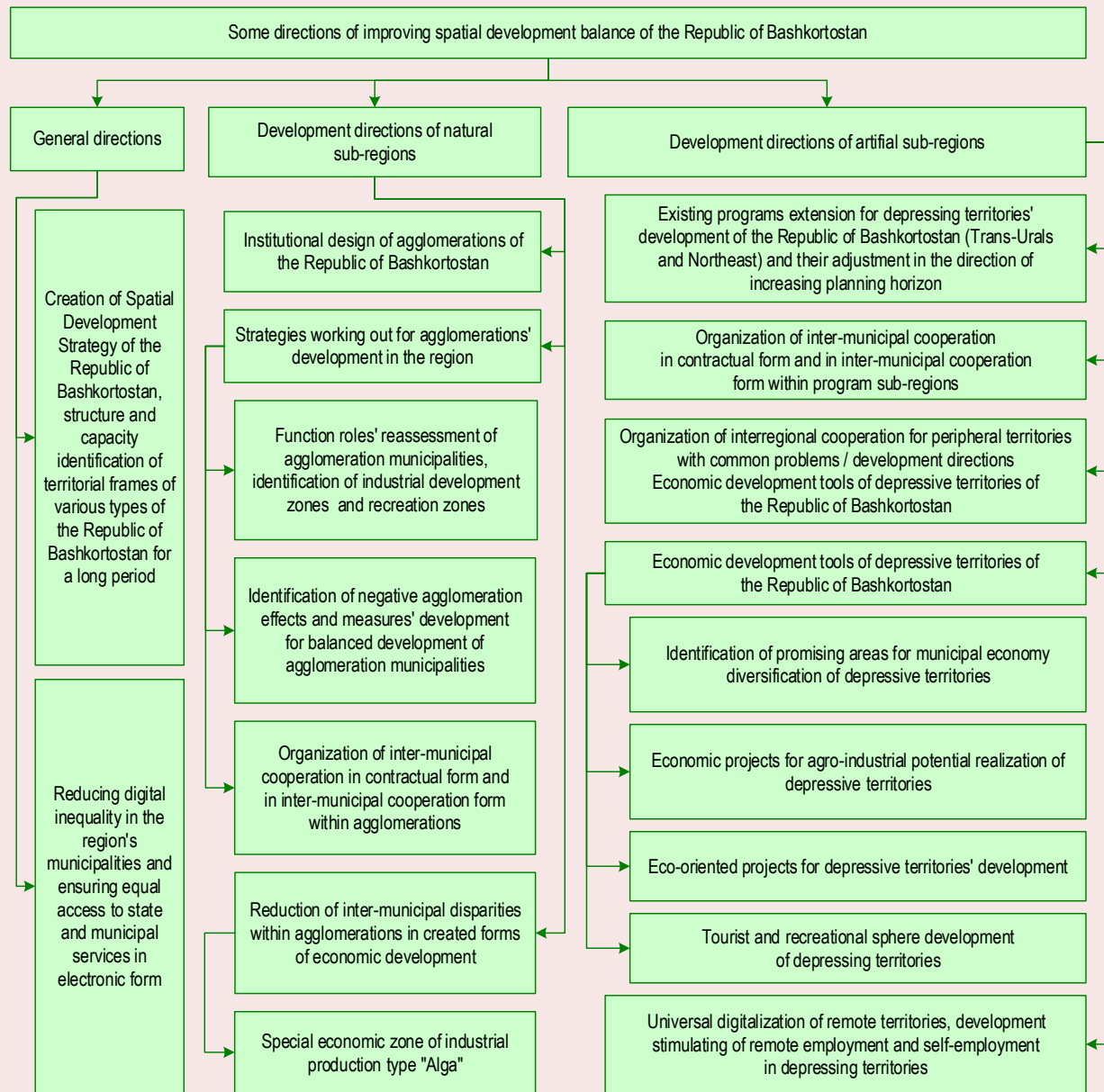
Let us consider the realization of the proposed methodological approach in relation to the Republic of Bashkortostan. The whole complex of general directions of spatial development is presented in *Figure 4*.

The whole complex of directions is divided into three parts: general directions, natural (agglomerations) and artificial (program sub-regions and depressing territories) sub-regions.

Population in municipalities' groups of the Republic of Bashkortostan, people

	2006	2010	2014	2019
Agglomerations				
Ufa agglomeration	1,323,510	1,331,367	1,415,783	1,472,800
<i>Share in the region's total population, %</i>	32.7	32.9	34.9	36.5
South-Bashkortostan agglomeration	552,797	554,384	563,236	559,280
<i>Share in the region's total population, %</i>	13.7	13.7	13.9	13.9
Neftekamsk agglomeration	224,922	227,146	225,811	225,529
<i>Share in the region's total population, %</i>	5.6	5.6	5.6	5.6
Oktyabrsky-Tuymazinsk agglomeration	236,990	240,764	244,302	246,531
<i>Share in the region's total population, %</i>	5.9	5.9	6.0	6.1
Depressing territories				
Trans-Ural (7 municipalities и 1 urban district)	339,962	344,271	329,253	320,572
<i>Share in the region's total population, %</i>	8.4	8.5	8.1	7.9
Northeast (8 districts)	200,123	198,640	184,050	174,500
<i>Share in the region's total population, %</i>	4.9	4.9	4.5	4.3
Peripheral territories – districts on the border of the Republic of Bashkortostan (18 districts)	623,643	615,958	578,134	548,267
<i>Share in the region's total population, %</i>	15.4	15.2	14.3	13.6
Source: according to information of the Rosstat Municipalities' Database. Available at: https://rosstat.gov.ru/storage/mediabank/munst.htm				

Figure 4. Directions for improving the spatial development balance of the Republic of Bashkortostan



Source: own calculations.

General arrangements

The Government Decree of the Russian Federation no. 207-r, dated February 13, 2019, approved the Spatial Development Strategy of the Russian Federation for the period through to 2025. It states that “the purpose of the country’s spatial development is to ensure sustainable and balanced spatial development of the Russian Federation,

aimed at reducing interregional differences in population’s level and quality of life, accelerating economic growth and technological development, and ensuring the country’s national security”³.

³ On approval of the spatial development strategy of the Russian Federation for the period through to 2025: Government Decree of the Russian Federation no. 207-r, dated February 13, 2019 (as amended on August 31, 2019).

It is quite logical that this purpose should be decomposed for regions whose spatial development should be aimed at reducing inter-municipal differences and ensuring their economic security.

In a number of federal entities, the spatial development directions are determined as a part of creation of socio-economic development strategies. The Socio-Economic Development Strategy of the Republic of Bashkortostan for the period through to 2030 does not describe the region's complex spatial development for the long term. There is a section "territories' balanced development"⁴ which lists the directions for reducing the differentiation of municipalities' socio-economic development which are of a general non-specific nature. The Strategy also specifies the prospects for development of only two agglomerations: Ufa and South Bashkortostan, and defines the need for inter-municipal cooperation and territorial planning schemes in them.

In general, a strategy (concept, program) is necessary for the region's spatial development which would take into account the economic development heterogeneity of the municipalities of the Republic of Bashkortostan and determine the development directions of the current functional (sub-regions, zones of territorial development, etc.), frame (support frame and axis of development, settlement system, transport hubs), cluster (industrial, tourist, innovative), and administrative (municipalities) models of spatial development of the Republic of Bashkortostan.

Development directions of natural sub-regions of the Republic of Bashkortostan

1. Institutional consolidation of agglomerations' status and composition.

Today, there are no specific regulations confirming the official existence of any of the

⁴ On the socio-economic development strategy of the Republic of Bashkortostan for the period through to 2030: Government Decree of the Republic of Bashkortostan no. 624, dated December 20, 2018.

republic's agglomerations. Separate documents mention Ufa (1 town and 6 districts) and South Bashkortostan⁵ (or Sterlitamak⁶) agglomeration (2 towns, 2 districts); all four agglomerations are named in the Territorial Planning Scheme of the Republic of Bashkortostan⁷.

It is necessary to adopt regulatory documents that fix the agglomerations' status which, in turn, would serve as a basis for concluding inter-municipal agreements, agreements between state authorities of an entity of the Russian Federation and local self-government authorities, between agglomeration authorities and economic entities. At the same time, the formation of agglomeration management authorities is not a prerequisite, but it increases effectiveness of inter-territorial interaction.

2. Formation of agglomerations' development strategy.

Federal Law no. 172-FZ, dated June 28, 2014 (as amended on July 31, 2020), "On Strategic Planning in the Russian Federation" does not provide for such a document as the "strategy for agglomeration's socio-economic development". However, it allows working out it as a strategy for territory's part development of the entity of the Russian Federation to which agglomerations can be attributed. Nevertheless, there are practically no strategies for agglomerations' development in Russia, and only some progress in this direction can be noted in a number of regions. For example, a series of strategic sessions was held in Saratov as a part of the preparation of the Strategy for the Development of the Saratov agglomeration

⁵ *Ibidem.*

⁶ Regional project passport "Road activities program of the Republic of Bashkortostan, Ufa agglomeration and Sterlitamak agglomeration": Government Decree of the Republic of Bashkortostan no. 1282-r, dated December 12, 2018.

⁷ On approval of the territorial planning scheme of the Republic of Bashkortostan through to 2020: Government Decree of the Republic of Bashkortostan no. 289, dated August 5, 2015 (as amended on August 2, 2019).

thought to 2030. At the same time, there are a number of documents that have the status of agglomerations' development concepts (Barnaul, Surgut, Samara-Tolyatti, Stavropol, etc.) which, in fact, are not strategic planning documents in the interpretation of federal legislation. Nevertheless, the very existence of such documents determines the agglomerations' development direction and their integration into the overall vision of the region's spatial development.

3. Within the framework of agglomeration strategies, it is necessary to re-evaluate the functional agglomeration's roles, and identify industrial zones and recreation.

If an agglomeration is formalized and effective inter-municipal cooperation is organized in it, there will be a comprehensive development of an entire agglomeration area taking into account the competitive advantages of each of the territories that make up the agglomeration, on the basis of common standards [23]. In this regard, one of the opportunities for economic development within an agglomeration can serve as a reassessment of its functional roles, for example, removal of industrial enterprises outside a city, organization of recreational areas within agglomeration, creation of transport and municipal infrastructure.

4. Organization of inter-municipal cooperation.

For agglomerations, it is expressed in the need to reduce the negative agglomeration effects. In particular, for the Ufa agglomeration, as a result of the suburbanization processes, neighboring Iglinsky district population grew by 133.1% (from 48.9 to 65.1 thousand people) in 2010–2019, while its tax and non-tax revenues increased by only 126% (in 2010 prices). Accordingly, population's budget security has decreased from 4.13 to 3.91 thousand rubles per person at the expense of their own tax and non-tax income of the Iglinsky district for 9 years. This suggests that, along with population growth, the social burden on the local budget has also

increased significantly, although the municipality's own funds have not increased in comparable figures. Therefore, capital needs to compensate for the additional costs of municipalities by organizing inter-municipal social projects.

Artificial sub-regions' development directions

1. Extension of the existing sub-regional programs of the Republic of Bashkortostan.

As we have already mentioned, in 2011, the Republic of Bashkortostan developed and adopted two programs for the sub-regions' development: the Trans-Urals and the Northeastern regions. One of the programs' shortcomings can be attributed to their medium-term nature. Within 4–5 years, we can not expect accelerated economic growth in territories, where there have been no opportunities and internal motivation for economic development for a long time. Such programs should be of long-term nature, and measures should have been implemented for 10 years or more. Such measures will allow qualitatively changing the situation on the territory. This was partially confirmed by the extension of these programs in 2015–2016 through to 2020.

2. Organization of inter-municipal cooperation.

For artificial sub-regions, inter-municipal cooperation is the development foundation. Usually, depressed and peripheral territories do not have sufficient own funds to finance large projects; they can only solve infrastructure problems together by consolidating the resources of several budgets.

For instance, Ufa income structure in the context of "tax income : non-tax income : non-repayable receipts" is expressed in the following figures: 36% : 12% : 52%; Ufa agglomeration districts excluding the capital 30% : 4% : 66%, while in the traditionally depressed districts of the Trans-Urals of the Republic of Bashkortostan the percentage ratio is 27% : 3% : 70%, Northeast 22% : 1% : 77%. Depressive territories cannot fulfill even a third of their spending

obligations at their own expense, they function mainly due to income redistribution from senior budgets. And inter-municipal cooperation can serve as an effective mechanism for solving joint development tasks.

First of all, this applies to inter-municipal cooperation; its purpose is to combine financial resources, material and other resources to solve local issues. In general, the need for inter-municipal cooperation among municipalities arises in the areas of municipal economy and provision of municipal services that require large investment amounts, as well as in areas where issues cannot be resolved at the local budget expense.

3. Economic tools for depressed territories' development.

There are many theoretical approaches, methodological and practical recommendations for all possible options for the economic development of underdeveloped territories. Regarding the Republic of Bashkortostan, it is important to determine the municipalities' development directions that are not a part of agglomerations, for example, by evaluating their specialization, comparing the structure of the volume of shipped products, works and services by type of economic activity, or by using other numerous methods of assessing specialization. The tools for depressive territories' development include economic projects for the development of agro-industrial potential, eco-oriented development projects, the development of the tourist and recreational sphere, etc.

Taking into account the existing natural and climatic potential and resources, the most promising development areas of the depressed territories of the Republic of Bashkortostan are agriculture development in the northeastern regions and tourist and recreational sphere improvement in the Trans-Urals of the Republic of Bashkortostan.

The agricultural sector of the Republic of Bashkortostan is one of the most promising in the region. In 2019, the republic ranked seventh in the

country in terms of agricultural production, second in terms of milk production, first in terms of honey production, third in terms of cattle, fourth in terms of gross potato harvest, etc. Currently, the share of agriculture in the republic GRP is 6.0%, but this figure is annually decreasing. Despite rather large investment volumes in depressed territories, the volume and cost indicators of agricultural development are decreasing there.

New directions in agriculture development in depressed areas should be focused on the new wave of import substitution, associated with the consequences of the spread of the coronavirus infection COVID-19, and industry adaptation to the modern requirements of universal digitalization.

With regard to the first, the authors should note that the situation with COVID-19 may be a chance to increase the supply of agricultural products within the country to regions with a lower level of self-sufficiency. However, in the republic, there are problems of having a full completed cycle; in particular, there are not enough enterprises for processing agricultural products in a "closed cycle", logistics centers of district and inter-district scale. In this regard, large-scale projects of regional significance, such as agro-industrial cluster creation in the northeastern regions of the Republic of Bashkortostan, where there is a great potential for agricultural development, but there are no domestic consumers, are particularly relevant. The cluster will bring together producers, processors, and trade sector, providing a cumulative effect of interaction between agribusiness and other related structures. The project will be developed only if interregional and inter-municipal cooperation is organized with neighboring regions of the Federation (Sverdlovsk and Chelyabinsk oblast) as consumers of agricultural products. Taking into account the realities on the world markets of agricultural products, the development of anchor projects for organization of large commodity markets in the presence of a significant potential of the republic is very promising.

As for the second one, there are no projects on agriculture digitalization in the region yet. Even the Strategy-2030 of the Republic of Bashkortostan only mentions the need to improve the industry efficiency through the introduction of innovative and high-tech technologies, in particular, the growth in the number of innovative developments in the industry from 5 to 50 in 2016–2030. But this requires a qualitatively different approach to management, it is necessary to solve the software problem for agronomists and the search for specialists who can apply IT technologies in agriculture. Personnel and resource support of the industry is also one of the primary tasks of the strategic industry development.

The second promising direction of depressive territories' development of the Republic of Bashkortostan is tourist and recreational sphere development. In general, the tourism industry of the republic is one of the most dynamically developing: over the 2010–2019 period, the number of collective accommodation facilities in the region 1.4 increased, the number of persons placed in them – by 1.7 times, recreation centers – by more than 2.0 times, tourist bases – by 5.0 times. In 2019, the Republic of Bashkortostan is the leader among the regions of the Volga Federal District in terms of the number of people who were treated and rested in sanatorium-resort organizations, recreation organizations and tourist bases.

For the republic, tourism and recreation development is very important tool for reducing the disparity of inter-municipal development. This is due to the fact that the most attractive, from the point of view of tourism development, are not municipalities in the vicinity of the largest cities, but municipalities of traditionally depressed sub- regions of the Republic of Bashkortostan: Trans-Urals and Northeast, as well as territories with natural parks and other natural attractions. For example, it is tourism, and not agriculture, that becomes the “lifeline” of the economic development of the second depressing zone of the

republic – the Trans-Urals. The presence on this territory of the Bashkir and South Ural state nature Reserves, the Shulgan-Tash Nature Reserve, the Iremel Nature Park, state nature reserves, more than 30 natural monuments, dozens of tourist routes, the largest sanatoriums, ski resorts and other attractions make this territory very promising in terms of tourist attractiveness.

Certain actions on the part of the region on this issue have already been initiated, and documentation is currently being prepared for the creation of a special economic zone of the tourist and recreational type “Ural”.

However, there are problems of providing tourist facilities with necessary infrastructure (transport, hotels, and entertainment), a lack of qualified personnel, and developed business and legal environment in the territory. The formation of these conditions is the basic requirement for attracting residents and tourists.

4. Universal digitalization of remote territories, stimulating development of remote employment and self-employment of population. Separately, it is worth noting the special importance of territories' digitalization of remote from large economic centers (the republic's periphery, depressed territories). For depressed municipalities in conditions of differentiation and uneven intraregional development, digitalization is an important factor in leveling their socio-economic situation.

The problem of lack of jobs in depressing territories is partially reduced if a municipality has the capacity (primarily digital accessibility) to provide remote work. A specialist with available knowledge and skills (which can also be obtained remotely) does not have to go to the capital or major cities (even to the administrative centers of municipal districts), when it is possible to develop professionally without leaving a rural settlement. At the same time, he will receive a salary that may be below wages in a capital, but not less than average wages in a municipality.

As a result, in depressing territories, a layer of the solvent population may appear, ready to purchase goods and services. In turn, following the demand that has arisen in depressed municipalities, supply will begin to appear, shops and service enterprises will open which will create new jobs. Naturally, this depends on digitalization of remote territories, availability of Internet technologies for population, and ability to purchase funds for working on the Internet. Economic consequences for the territories will not arise immediately, but, in general, this trend is positive and may lead to the fact that some depressing areas will no longer be such, and there will be more attractive places to live in the Republic of Bashkortostan.

Conclusion

The idea of identifying the support frame / points / growth poles of the region and the alignment of the rest of the territory is not new, and, theoretically, it is implemented in one way or another in each subject. But, practically, it is much more profitable both the region and private investors to support growth points' development: agglomerations, special economic zones, territories of advanced socio-economic development, etc., as they bring particular economic results and ensure the region's competitiveness. Policies reducing socio-economic inequality are not as effective, or their results are long-term, slightly exceeding the horizons of political planning. However, nevertheless, territories' development equalization is necessary, as economic segregation directly affects the equality of population's social opportunities.

In this regard, allocation of natural and artificial sub-regions and implementation of specific regional policy measures will help balancing region's spatial development. Of course, it is necessary to take into account the peculiarities and problems of a particular entity of the Federation which determines the use of various tools and state influence methods.

The article presents regional policy tools that can be used to ensure territories' balanced development within natural sub-regions that are objective growth poles (agglomerations, special economic zones, territories of advanced socio-economic development). On the other hand, they stimulate the economic self-development of depressed and peripheral territories and, as a result, the solution of population's social problems.

In general, the scientific significance of the study consists in the development of theoretical and methodological provisions on improving the spatial policy of the region in terms of ensuring a balance of intraregional development. Of practical importance is the justification of promising directions of the regional policy of spatial development of the Republic of Bashkortostan, which can be used by state and municipal authorities as an information and methodological base in the development of strategic and program documents for the development of the Republic of Bashkortostan and its municipalities. It could also be applied in other regions taking into account their own spatial development peculiarities.

References

1. Christaller W. *Central Places in Southern Germany*. New Jersey: Prentice Hall, Englewood Cliffs, 1966. 154 p.
2. Berry B.J.L., Garrison W.L. Alternate explanations of urban rank size relationships. *Annals of the Association of American Geographers*, 1958, no. 48, pp. 83–91.
3. Toyne P., Newby P. *Techniques in Human Geography*. Macmillan, 1971. 187 p.
4. Perroux François. *L'Économie du XX siècle. Presses Universitaires de France*, 1961. 598 p.

5. Kuznetsova O.V. *Ekonomicheskoe razvitiye regionov: teoreticheskoe i prakticheskoe aspekty gosudarstvennogo regulirovaniya* [Economic Development of Regions: Theoretical and Practical Aspects of State Regulation]. Moscow: URSS, 2002. 309 p.
6. Nosonov A.M. Spatial development theories in socioeconomic geography. *Pskovskii regionologicheskii zhurnal=Pskov Journal of Regional Studies*, 2011, no. 11, pp. 3–16 (in Russian).
7. Smirnov I.P. *Srednie goroda Tsentral'noi Rossii* [Middle Cities of Central Russia]. Tver: Tver. gos. unit, 2019. 165 p.
8. Khorev B.S. *Problemy gorodov (urbanizatsiya i edinaya sistema rasseleniya v SSSR)* [Problems of Cities (Urbanization and Unified Settlement System in the USSR)]. Moscow, 1975. 355 p.
9. Lappo G.M. The concept of the supporting frame of the territorial structure of the national economy: Development, theoretical and practical significance. *Izvestiya AN SSSR. Seriya geograficheskaya=Izvestiya Rossiiskoi Akademii Nauk. Seriya Geograficheskaya*, 1983, no. 5, pp. 16–28 (in Russian).
10. Kudryavtsev O.K. Settlement framework in the USSR: Genesis and form. *Izvestiya AN SSSR. Seriya geograficheskaya=Izvestiya Rossiiskoi Akademii Nauk. Seriya Geograficheskaya*, 1982, no. 2, pp. 12–23 (in Russian).
11. Chistobaev A.I., Krasovskaya O.V., Skatershchikov S.V. *Territorial'noe planirovanie na urovne sub"ektov Rossii* [Territorial Planning at the Regional Level in Russia]. St. Petersburg, 2010. 296 p.
12. Yakovleva S.I. Wireframe in regional schemes of territorial planning. *Pskovskii regionologicheskii zhurnal=Pskov Journal of Regional Studies*, 2013, no. 15, pp. 15–25 (in Russian).
13. Faulkner J.-P., Murphy E., Scott M. Developing a holistic 'vulnerability-resilience' model for local and regional development. *European Planning Studies*, 2020, no. 28 (12), pp. 2330–2347. DOI: 10.1080/09654313.2020.1720612
14. Albrechts L., Barbanente A., Monno V. Practicing transformative planning: The territory landscape plan as a catalyst for change. *City, Territory and Architecture*, 2020, vol. 7, no. 1. DOI: 10.1186/s40410i019i011i2
15. Koguti Jaworska M., Ociepai Kicińska E. Smart specialisation as a strategy for implementing the regional innovation development policy. Poland case study. *Sustainability (Switzerland)*, 2020, vol. 12 (19), no. 7986, pp. 1–21.
16. Tao, M., Huang, Y., Tao, H. Urban network externalities, agglomeration economies and urban economic growth. *Cities*, 2020, vol. 107, pp. 102–882.
17. Muroishi M., Yakita A. Agglomeration economies, congestion diseconomies, and fertility dynamics in a two-region economy. *Letters in Spatial and Resource Sciences*, 2021. DOI: 10.1007/s12076-020-00264-z
18. Fu Y., Zhang X. Mega urban agglomeration in the transformation era: Evolving theories, research typologies and governance. *Cities*, 2020, vol. 105, no. 102813. DOI: 10.1016/j.cities.2020.102813
19. Islam T.M.T. The impact of population agglomeration of an area on its neighbors: Evidence from the USA. *Annals of Regional Science*, 2020, vol. 65 (1). DOI: 10.1007/s00168-019-00971-6
20. Tazhitdinov I.A. Subregion as a particular element of the territorial-economic system: Essence, features, and management functions. *Vestnik UGATU. Ekonomika i upravlenie narodnym khozyaistvom=Vestnik USATU*, 2013, vol. 17, no. 1 (54), pp. 191–197 (in Russian).
21. Gataullin R.F. Formation of a new framework model of spatial development as a result of transformation of multi-level territorial systems. *Vestnik Evraziiskoi nauki=The Eurasian Scientific Journal*, 2020, no. 2. Available at: <https://esj.today/PDF/32ECVN220.pdf> (accessed: 15.01.2021). DOI: 10.15862/32ECVN220 (in Russian).
22. Gainanov D.A., Tazhitdinov I.A., Zakirov I.D. Methodological aspects of strategic management of municipal formation development. *Izvestiya UFITS RAN=Proceedings of the RAS Ufa Scientific Centre*, 2011, no. 2, pp. 76–82 (in Russian).
23. Mavlyutov R.R. *Prostranstvennoe razvitiye krupnykh gorodov Rossii v period postindustrial'nogo perekhoda* [Spatial Development of Large Cities in Russia during the Post Industrial Transition]. Volgograd: VolgGASU, 2015. 161 p.

Information about the Authors

Damir A. Gainanov – Doctor of Sciences (Economics), Professor, Director, Institute for Socio-Economic Research of the Ufa Federal Research Centre of the Russian Academy of Sciences (71, October Avenue, Ufa, 450054, Republic of Bashkortostan, Russian Federation; e-mail: 2d2@inbox.ru)

Rinat F. Gataullin – Doctor of Sciences (Economics), Professor, Head of Sector, Ufa Federal Research Centre of the Russian Academy of Sciences (71, October Avenue, Ufa, 450054, Republic of Bashkortostan, Russian Federation; e-mail: gataullin.r2011@yandex.ru)

Aisylu G. Ataeva – Candidate of Sciences (Economics), Senior Researcher, Ufa Federal Research Centre of the Russian Academy of Sciences (71, October Avenue, Ufa, 450054, Republic of Bashkortostan, Russian Federation; e-mail: Ice_lu@mail.ru)

Received January 22, 2021.