

The role of the Moscow agglomeration for the socio-economic development of central regions of Russia (Part 2)

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Abstract. The article aims to comparative analysis of strategies of socio-economic development of Kaluga and Smolensk regions, scenarios of development with regard to influence of Moscow agglomeration. The authors consider strengths, weaknesses, opportunities and threats related to the proximity of the regions to Moscow and the Moscow region, as reflected in the SWOT analysis of the regions. Article deals with the benefits of inter-regional infrastructure projects for each region.

Keywords: region's competitiveness, competitive advantages of the region, integration resource of the region, strategy of socio-economic development of the region, SWOT-analysis, Moscow, Moscow region, Moscow agglomeration, Kaluga region, Smolensk region.

JEL codes: C82, M10, O18, R50, R58

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Introduction

The object of the study is Moscow – city, Moscow region and two regions of the Central Federal District (CFD) close to the Moscow agglomeration – Kaluga and Smolensk regions. A previous article (Berendeeva & Korobova, 2021) examined the strengths, weaknesses, opportunities and threats associated with the proximity to Moscow and Moscow region of 4 regions, such as Vladimir, Ivanovo, Ryazan and Yaroslavl regions. Recent years Moscow, Moscow Region and Kaluga Region are donor regions, while the remaining constituent entities of the Russian Federation are subsidised.

Next to Moscow and Moscow region Kaluga one is the leader of the CFD RF in terms of industrial growth rates, real income, the amount of investment per capita (Novosadov, 2018), and is in the top 10 Russian regions for innovative development (was ranked 7th in 2018) (Gerasenkova & Kostina, 2019).

Obviously, Moscow will have a decisive influence on the development prospects of the surrounding regions. Thus, the proximity of the Moscow agglomeration will lead to population migration from neighbouring regions, where indicators of living standards and quality of life are significantly below those in the capital (Odegov & Razinov, 2021; Khramova & Manshin, 2021).

Moscow, the capital of the Russian Federation, is rapidly changing its development from a traditional economy to a service economy, which directly affects the situation in the neighbouring regions. The development of the service system is accompanied by the closure of outmoded factories and their relocation to nearby regions. The regions adjacent to Moscow are becoming attractive for international companies to locate production facilities, which depends directly on the capacity of the consumption markets. This is a factor

influenced on the investment activity and production outsourcing processes in the territories surrounding Moscow. Locating enterprises (most often, assembly plants) within the emerging new market is advantageous to the investor due to lower labour costs, tax benefits and other preferences outside of Moscow (Strategy of socio-economic development of Kaluga region until 2030, 2020).

Production and logistics centers are being withdrawn from the Moscow metropolis to a distance of 100 to 200 km during next 5-10 years.

The Moscow factor will have a key impact on the changes in settlement systems in neighbouring regions next 10-20 years. "New settlement" associated with the formation of a qualitatively new environment around the Moscow metropolitan area at a distance of up to 150-200 km (with a transport isochrony from Moscow up to 2.5 hours) (Ministry of Economic Development of the Russian Federation, 2020). The main process will be the rapid resettlement of people from Moscow to the surrounding regions. This process leads to the formation of a "Greater Moscow" (by analogy with "Greater London", "Greater Paris", etc.). Urbanization and the formation of satellite cities were replaced by "rurbanization". It is a process of settlement of urban residents into 150-200 km surrounding mega-cities rural area. The evolution of this type of settlement is as follows: "house in the countryside (dacha) – second home – family residence". The urban housing is changing from "family residence" to seasonally used "urban residence". By global practice the main investors of infrastructure development (along with private business) are the new residents of the area. By expert assessments, dacha residents significantly increase the population of near and far Moscow suburbs in summer. The population of Kaluga region (Borovsky, Zhukovsky, Maloyaroslavets, etc.) also increases more than 3 times (Strategy of socio-economic development of Kaluga region until 2030, 2020).

The proximity to Moscow and Moscow region plays an important role for the socio-economic development (SED) of the central Russian regions, including Kaluga and Smolensk. It is a competitive advantage of these regions. At the same time, there is interregional competition for resources (labour, investment and innovation, financial, etc.); for Smolensk region as a border one, it is the competition and integration with Belarus. On the other hand, the neighbourhood of Moscow and Moscow region gives regions the opportunity to develop their own potential and design cluster development programmes. The purpose of the article is to assess the new refined strategies of 2 regions (Kaluga and Smolensk) on the development of socio-economic relations with the Moscow agglomeration and pros and cons of such geographical and economic interaction.

Methodology

One of the methods for assessing the socio-economic development of regions and regional policies is the analysis of regional development strategies and programmes, their development potentials, and the stated cluster policies. The methodological basis of the study was a comparative analysis of regional strategies (Regions of Russia. Socio-economic indicators, 2020), including competitive advantages, strengths, weaknesses, opportunities and threats (SWOT analysis).

Results

The analysis shows the significant differences in population, wages, unemployment and migration between the Moscow agglomeration and two regions (Kaluga and Smolensk). By Table 1, the population in the studied regions is declining. As a result, in 2019 the population of Kaluga region was 98% of the 2005 level, while in Smolensk region it was 91%. The average monthly nominal salary of employees is lowest in Smolensk region (3 times lower than in Moscow and 1.8 times lower than in Moscow region). The most favourable situation with salaries and unemployment is in Kaluga region: the unemployment rate, according to sample surveys of the labour force in the pre-settlement economy, was lowest in Moscow (1.4%) and Moscow region (2.7%), and highest in Smolensk region (5.4%) and in Kaluga region (3.7%).

Population migration plays an important role as an indicator of the socio-economic prosperity of the region. By Table 2, the Moscow agglomeration had stable migration growth in 2013-2019. In Kaluga region in 2019 the positive in previous years' migration increase changed into a negative one (i.e. migration loss). There was a negative migration balance in Smolensk region.

Table 1 – Indicators of socio-economic development of the regions

	Population at the end of the year, thousand people		Average monthly nominal salary of employees (RUB)	Unemployment rate , as a % of the labour force ¹
	2005	2019	2019	2019
Moscow	10924	12678	94294	1.4
Moscow region	6784	7691	55555	2.7
Kaluga region	1023	1003	41442	3.7
Smolensk region	1025	935	31269	5.2

Source: *Regions of Russia. Socio-economic indicators, 2020*

Table 2 – Migration rates per 10,000 population²

Year	2013	2014	2015	2016	2017	2018	2019
Moscow	90	57	92	24	89	79	38
Moscow region	140	149	120	141	111	140	144
Kaluga region	24	94	17	77	16	19	-11
Smolensk region	-18	21	-6	2	24	-2	-4

Source: *Regions of Russia. Socio-economic indicators, 2020*

By Table 3, during the pandemic migration to Moscow and Moscow region decreased significantly, but increased in Kaluga region. The highest migration loss in 2020 was in Smolensk region. By experts, the reasons are closure of state borders during the pandemic, the departure of foreign labour and students outside Russia (due to closures and job losses), restrictions on entry into Russia, the restrictions on movement within Russia, distance work and education mode (Babushkina, Bulanova & Gruzdeva, 2021; Odegov & Razinov, 2021).

Table 3 – Migration increase (+) / decrease (-) of population, persons

Year	2019	2020
Moscow	+47,584	+1 614
Moscow region	+110 198	+51,250
Caluga region	-1073	+6861
Smolensk region	-361	-4289
Tver region	+654	-1514
Tula region	-569	-186

Source: *Main indicators of the socio-economic situation of the constituent entities of the Russian Federation in 2020*

Strategies of the socio-economic development of regions. The connection between the regional economy and Moscow macro-region can be seen most clearly in the Kaluga region strategy. Bordering on Belarus, the Smolensk region strategy emphasises on the development of the region's external economic potential towards the West.

SWOT analysis of Kaluga region considers the proximity to the Moscow agglomeration as:

– advantages (the largest consumer market in the Russian Federation; an industrial outsourcing center; an investment centre in the Russian Federation; a research and development center; location in line with major transport corridors – proximity to Moscow agglomeration airports (Vnukovo, Domodedovo);

1 according to sample labour force surveys, annual average

2 the sign (-) indicates a decrease

– disadvantages (differences in the quality of life with Moscow and Moscow region; competition for human resources, more attractive working and living conditions in the metropolitan region, the growing gap in the quality of urban environment) (Ministry of Economic Development of the Russian Federation, 2020).

Kaluga region, due to the proximity of large markets in the metropolitan area, successfully uses the processes of production outsourcing and technological modernisation and attracting significant foreign investment – in the automotive industry (Factory "Volvo", LLC "VOLKSWAGEN Group Rus", French autoconcern "PSA Peugeot Citroen" and Japanese company "Mitsubishi Motors"), food and pharmaceutical industry ("AstraZeneka", "NovoNordisk" and "NIARMEDIK PLUS", "PHARM-SYNTHESIS" and "Sphera-Pharma", Serbian concern "Hemopharm"), other industries (LLC plant "Samsung Electronics Rus").

The Kaluga region Strategy notes that the region has good preconditions for realising development objectives. First of all, this is related to the prospects of settlement in the Moscow agglomeration, which provides prospects for involving territories into industrial growth phase. The establishment of new residential areas is directly related to the presence of ecologically favourable large green areas and waterways, developed or having the prospects for development infrastructure: trade, medical, educational, recreational, accessibility of major transport routes (Strategy of socio-economic development of Kaluga region until 2030, 2020).

Kaluga region tries to form a "new economy", focused on systematic land development combined with active support for innovation centres and high-tech medium and small businesses. The "new settlement" means real competition for a new population which is capable significantly increase the competitiveness of the region because of its competences and requirements for quality of life.

The effectiveness of attracting new residents to Kaluga region will also depend on the presence of "Moscow settlers" in the area – first as owners of "second residences" and, in the longer term, as permanent residents of the region. At the first stage the priority areas are the north-eastern and central districts of Kaluga region (Borovsky, Zhukovsky, Maloyaroslavets, Medynsky, Dzerzhinsky, Tarusky, Yukhnovsky).

The assessment of land resources should include several sequential and interdependent steps:

1. Updating the territorial planning schemes to include processes:

- outsourcing and technological modernisation (for a period of up to 5-15 years);
- settlement of the Moscow agglomeration (for a period of up to 5-25 years);
- new scheme of the tourist area development including the neighbouring entities;
- prospects for the agro-industrial cluster development (use of agricultural land, etc.).

2. Infrastructural and legal preparation of areas for the location of new outsourcing industries and innovative enterprises.

3. Infrastructural and legal preparation of areas for quality low – rises (in low, medium and high price niches).

4. Public and private support for high-tech livelihood infrastructure and services, both for new settlement areas and for "old" zones, using efficient technical solutions provided by the regional innovation sector.

5. Supporting a modern humanitarian infrastructure (educational, informational, sports, medical, recreational) with the standards of quality of life in an urbanised environment. The priority of organization and integrated development of territories can be considered key to achieving the strategic goal of quality of life growth and protect other socio-economic components of quality growth – health, education, social welfare, environment, security, etc. (Strategy of socio-economic development of Kaluga region until 2030, 2020) (see Table 4).

The Kaluga region Strategy adopts the cluster approach as a basic model for regional development. Implemented in the region for more than 13 years the cluster policy made the region a leader by many economic indicators (Grankov & Burtseva, 2020).

Clusters which development is directly linked to the Moscow agglomeration. There are four territorial industrial and innovation clusters in the region: transport and logistics; automotive industry; pharmaceutical industry; and aerospace technology of polymer composite materials and structures (Novosadov, 2018).

Kaluga region has high interregional transit potential. But, there is an insufficient level of development

of transport and logistics potential due to irrational distribution of commodity flows coming to the region from the adjacent regions with distribution via Moscow.

Development of Kaluga region's transport and logistics potential is envisaged, including through the further development of Kaluga International Airport (Grabtsevo) – due to the process of new settlement and the increasing intensity of pendular migration between Moscow and Kaluga region; creation of transport and logistics centers (TLC), which should become terminal and warehouse infrastructure facilities of interregional importance (see Table 4).

The prerequisites for the formation of a tourism and recreation cluster in Kaluga Region are, among other things, a favourable external situation. By the Kaluga Region Development Strategy, "it (Kaluga region) is located close to Moscow, which generates a powerful flow of tourists... Moscow is the source of settlement flow, which will be the consumer of almost the entire range of tourism and recreational services of the cluster" (Strategy of socio-economic development of Kaluga region until 2030, 2020).

On the other hand, the formation of the cluster takes place in competition with the Golden Ring tourist territorial brand, as well as with the currently emerging recreational areas of the Moscow macro-region. A unique advantage of Kaluga region is the presence of innovation zones / cores. For example, the art park "Nikola-Lenivets" in Dzerzhinsky district – a multifunctional complex consisting of creative residences, workshops, working and educational spaces, located in the ecological area of the National Park "Ugra" and adjacent territories) (Strategy of socio-economic development of Kaluga region until 2030, 2020) (see Table 4).

The development of Kaluga Region's agri-food cluster is linked to the proximity of Moscow as a major consumer center; the Strategy notes that "the most promising markets for Kaluga Region's agri-food cluster products in Russia are those of Moscow and Moscow Region, as well as those of Tula and Bryansk regions... Given its competitive advantages, Kaluga Region could become a major supplier of dairy products for Moscow and other cities of central Russia.

Interesting projects are planned in the Kaluga region's services sector. The construction and development of the student campus of the Kaluga branch of Bauman Moscow State Technical University – "Centre for Applied Education" is planned. The aim of the project is to increase the supply of qualified human resources in key occupations and in growing sectors of the region's economy, providing high-quality vocational education that meets the needs of commercial organisations. The Kaluga branch of Bauman Moscow State Technical University is a part of the educational infrastructure of the region's automotive cluster.

The establishment of the "Scientific Medical Radiation Medicine Centre" is aimed at improving the quality and life expectancy of the population on the basis of the potential and innovative developments of scientific institutions in Obninsk (Strategy of socio-economic development of Kaluga region until 2030, 2020).

The development of the pharmaceuticals, biotechnology and biomedicine cluster is connected with the formation of a new and sufficiently large market for medical cluster products and services due to the processes of "new settlement" and increasing tourist and migration flows of population through its territory (see Table 4).

The Life Support and Environment Development Cluster is the potential cluster of the Kaluga Region.

It includes enterprises for creating and maintaining environmentally friendly livelihood systems (local electricity supply, water supply and sanitation, cleaning and disposal systems, alarms, communications, etc.); specially protected natural areas of federal, regional and local importance; a transport system involving railways, road and air transport, associated service networks – shopping, education, etc.

By the Strategy the developing and relying on sector market, Kaluga region can participate in the markets of neighbouring regions, in particular the Moscow market. The activity of all cluster participants should be done within the framework of public-private partnerships.

Thus, by Strategy 2030, the regional economic network of Kaluga region is "a major source of growth and development in the context of the expanding Moscow agglomeration. To use the type of the 'Moscow process' is an undeniable factor, but while maintaining one's own socio-economic and cultural (regional) identity" (Strategy of socio-economic development of Kaluga region until 2030, 2020).

Table 4 – Development projects in Kaluga region related to proximity to the Moscow agglomeration

Project	Project implementation and benefits for the region itself and for neighbouring regions
Settlement of the Moscow agglomeration for a period of 5 to 25 years	<ul style="list-style-type: none"> - prospects of involving territories were not among the economic leaders in the industrial growth phase; - attracting "The Moscow settlers" as owners of "second residences" as permanent residents of the region; - formation of settlement "cores" with high environmental quality (in the first stage the priority is given to the north-eastern and central districts of the region). By 2030 new population with higher requirements to the quality of life can significantly increase the competitiveness of the region as a whole; - new scheme for the tourist development; - development of low-rise construction (in low, medium and high price niches); - development of modern social infrastructure by the standards of quality of life in an urbanised environment; - development of public-private partnership mechanisms; - establishment of the sectoral territorial development, including construction and territorial development. It will be equivalent of the industrial-technological sector of the economy in terms of GRP share next 12-15 years; etc.
Development of transport and logistics capacity	<ul style="list-style-type: none"> - establishment of transport and logistics centres (TLCs) in the Sukhinichi and Borovka districts as terminal and warehouse infrastructure facilities of interregional importance; - further development of Kaluga International Airport (Grabtsevo) - construction of the Central Ring Road (CRR); - the ability to manage cargo and passenger flows; - development of inter-regional transport infrastructure facilities in the CFD (Smolensk, Tula, Bryansk, Orel and Moscow regions) as a part of synchronisation with the development of the TLC in the Kaluga region; - providing accessibility of air transport for the inhabitants of the region in connection with the process of new settlement and the increasing intensity of communication between Moscow and Kaluga region, etc.
Development of the agri-food cluster	<ul style="list-style-type: none"> - development of the region's agri-food cluster, increasing its efficiency and competitiveness; - production of dairy and other products for Moscow, etc.
Development of a pharmaceuticals, biotechnology and biomedicine cluster	<ul style="list-style-type: none"> - establishment of a new and sufficiently large market for medical cluster products and services due to the processes of "new settlement" and increased tourist and migration flows of the population; - eligibility for subsidies from the federal budget in connection with the cluster's designation as a pilot innovative territorial cluster; - establishment of private medical institution networks: specialized clinics, centers, treatment and prevention sanatoria and recreation centers offering modern medical services using innovative developments will be relevant; - eliminating staffing shortages in healthcare organisations in Kaluga region by providing qualified employees; - development of the material and technical base of medical organisations; - improving the quality of primary health care by ensuring optimal accessibility to the population (including in remote areas), etc.
Tourism and recreation cluster	<ul style="list-style-type: none"> - development of a macro-region and its brand(s); - development of innovation zones/cores (Nikola-Lenivets Art Park in Dzerzhinsky District, Etnomir Cultural and Educational Centre in Borovsky District, Grachi Business

Project	Project implementation and benefits for the region itself and for neighbouring regions
	Park, etc.) - the development of the region's small towns; - to create a new image of the region - as an innovative and investment-attractive one; - solving the problem of brain drain, etc.

Source: Strategy of socio-economic development of Kaluga region until 2030, 2020

Smolensk region occupies a beneficial economic, geographical and transport position; it is crossed by transport routes connecting the western border of Russia with Moscow, and has access to neighbouring and distant foreign countries. It is a border region (Vitebsk and Mogilev regions of the Republic of Belarus). Smolensk is the shortest route from Central Russia to Western Europe. "Smolensk region is very important in the west of Russia". Smolensk region is a remarkable one, occupying a beneficial transit position of the European part of Russia, characterised by its proximity to regions with high population density and Western European countries (Kozlova, 2020; Mironkina & Egorova, 2018).

Strategy considers the competitive advantages of the region in terms of potentials and clusters. The main clusters of Smolensk region are machine-building, composite, transport and logistics, agro-food, tourism, information technology (Strategy of social and economic development of Smolensk region until 2030, 2020).

Smolensk region has a remarkable transport and logistics potential. The region is directly related to the major agglomerations of the Eurasian Economic Union: Moscow and Minsk. There are 8 customs posts in Smolensk region. The scientific studies concerns the problems of the Russian-Belarusian borderland, the development of Dnieper-Dvina regions – Smolensk, Vitebsk and Mogilev, proves the high interconnection between the economies of Smolensk region and Belarus (Kuzavko, 2019; 2020).

The part of the second Pan-European Transport Corridor (PE2 "East-West": Berlin-Poznan-Warsaw-Brest-Minsk-Smolensk-Moscow-Nizhny Novgorod), which provides a significant part of the commodity turnover between Russia and the European Union states, passes through Smolensk region. The transport infrastructure of the North-South Transport Corridor (Shanghai-Hamburg Expressway) is expanding and planning in 4 districts of the region.

The region's largest transport hubs are Smolensk, Vyazma and Roslavl. They are located at the intersection of railways and motorways and have powerful logistics complexes with access roads and sorting hubs. Smolensk region ranks 3rd in the CFD after Moscow and Tver regions in terms of the railway tracks length. The main electrified railway Moscow-Minsk-Brest passes through Gagarin, Vyazma, Safonovo, Yartsevo and Smolensk.

The region has the federal highways:

- M1 "Belarus" – from Moscow to the border with the Republic of Belarus (to Minsk, Brest);
- R120 Bryansk-Smolensk to the border with the Republic of Belarus (via Rudnya, to Vitebsk);
- A130 Moscow-Maloiaroslavets-Roslavl to the border with Belarus (to Bobruisk, Slutsk).

Smolensk region also has the high-voltage power bridge Russia-Republic of Belarus-Western Europe, the worldwide fibre-optic telecommunication backbone, the Yamal-Europe gas pipeline and four strands of the Northern Lights transit gas pipeline.

It is planned to build new logistic corridors between the European Union and China through Smolensk region (for example, the transcontinental highway Shanghai-Hamburg as part of the Chinese project "Silk Road Economic Belt") (Strategy of social and economic development of Smolensk region until 2030, 2020).

The region's strengths in terms of its investment attractiveness include the presence of a close business centre (Moscow) and access to the export market. The small domestic market size, low population size, the outflow of human resources from the region, etc. are the weaknesses of the region (Shakolin & Gnezdova, 2020).

Smolensk region has high territorial accessibility for citizens of the Republic of Belarus. This creates prerequisites for the development of both cross-border and international tourism. The proximity of Belarus and the availability of a developed communications network on its territory contribute to turning Smolensk

into a stronghold of cross-border tourism for Russians to Belarus and Eastern European countries.

As noted in the Strategy, "the beneficial environmental situation, aesthetic attractiveness of the landscape, cultural heritage objects, transport and geographical location of the Smolensk region can cause a mass tourism and made it the recreational area for the metropolitan region, other leading Russian agglomerations and industrial centers" (Strategy of social and economic development of Smolensk region until 2030, 2020).

Over 280,000 tourists visit Smolensk region every year, most of them from Moscow and Moscow region. Traditionally, tourists from Moscow and Moscow region visit Smolensk region at weekends or on holidays with cultural, informative and entertaining purposes. The goal is to establish and develop modern tourism infrastructure in Smolensk region, to enter the metropolitan tourist market, to actively promote the region's tourist potential in regional tourist markets and to make wide use of weekend tourism opportunities (Strategy of social and economic development of Smolensk region until 2030, 2020).

The special territorial features of the region associated with its metropolitan location determine two promising directions of the tourism industry development. They are business tourism, combining business events with high-quality tourist and sightseeing services, and gastronomic tourism with a focus on traditional Smolensk cuisine.

Classical types of tourism, such as natural recreational, cultural and educational, have traditionally been a priority for Smolensk region and are represented by eventual, historical, religious tourism and pilgrimage, etc.

By the regional Strategy, the strategic aim of the tourism cluster is to create a competitive highly developed tourism industry on the territory of Smolensk region. One of the tourism cluster development objectives is to "increase the tourist attractiveness of Smolensk region as an atmospheric and innovative tourism region in the Russian and international tourism markets" (Strategy of social and economic development of Smolensk region until 2030, 2020).

The Strategy of Smolensk region (unlike the strategies of Vladimir, Ivanovo, Ryazan and Yaroslavl regions) does not mention about the influence of the Moscow agglomeration. Two key factors were chosen to build scenarios of external environment development affecting Smolensk region. They are the world energy market conditions and the quality of the institutional environment (the level of development of political and social institutions) in the Russian Federation.

The Smolensk region Strategy emphasises the development of the region's foreign economic potential and the export of goods and services. Smolensk region has high ratings among Russian regions by such indicators of export potential as "number of non-resource export goods", "number of customs posts in the subject of the Russian Federation", "number of customs representatives (brokers) in the subject of the Russian Federation", "number of registered small and medium enterprises engaged in export activities", "volume of non-resource export of small and medium enterprises" (Strategy of social and economic development of Smolensk region until 2030, 2020).

Export is the crucial condition for the development of key sectors in Smolensk region. As noted in the Strategy, the prospect of textile industry depends on the growth of solvent demand of the population and supply of products for export. The development of the agro-industrial complex is aimed at meeting the full needs of the region's population for basic foodstuffs and increasing the export potential of Smolensk region. The agro-industrial sector as an important tool for building the region's export potential. The main goal of the agro-industrial sector is to enter the foreign markets with flax fiber, rapeseed oil, potatoes, rabbit meat, dairy products and milk powder.

Additive goals are the development of ecofriendly products and technologies market, promoting the competitiveness of products and the sales market, which has an "exit" to the Moscow region as well.

Smolensk region has a high potential for service export development. It includes professional and consultancy management services (legal, auditing, accounting, tax optimisation, consultancy services, advertising, marketing, public opinion research), technical, trade and intermediary services, research and development services.) In 2018, the region ranked 3rd in the CFD after Moscow and the Moscow region in terms of exports of other business services named above (Strategy of social and economic development of

Smolensk region until 2030, 2020).

In educational sector Smolensk region can claim to be an inter-regional centre of competence for promising professions:

-development of the mechanical and composite clusters for federal-level expert platform and national standards of expertise;

-foundation of the high-tech energy cluster.

The development of promising high-tech services of the HealthNet market (preventive medicine, sports health, medical genetics, information technologies in medicine, biomedicine, etc.), EnergyNet market (market of equipment, software, engineering and services for multi-scale integrated smart energy systems and services; an ecosystem of energy producers and consumers that integrate into common infrastructure and exchange energy).

The main goal is to form a territory of comfortable living with high human potential in the region. For achieving "it is necessary to provide quality jobs, a competitive education system, high level medical care, developed infrastructure for sports and leisure, a comfortable urban environment and high social security" (Strategy of social and economic development of Smolensk region until 2030, 2020).

By the Strategy, "in conditions of competition, Smolensk region should become a competitive region attractive to Russian and foreign companies, where they have access to modern production infrastructure, a favourable investment climate, a developed innovative environment and support infrastructure. The region's strengths, such as industry clusters, a progressive labour market, the availability of all key transport modes and access to markets in Eastern Europe, will also play a significant role". Globally, Smolensk region can play role of a key transport hub connecting Europe and Asia and a unique center for recreation and tourism.

Smolensk region is a significant participant of the economic growth, the development of science, education and industry, as well as a center of competence in the machine-building and agro-food sectors of the CFD.

Section 9 of the Strategy "Main directions of development of interregional and external economic relations of Smolensk region" provides the development of cooperation between the Smolensk region Administration and the Moscow City Government, including attracting interbudgetary transfers for solving urgent social and economic problems. The development of investment potential of Smolensk region is connected with the foundation of enterprises in the neighbouring territories Moscow region, oriented on the markets of the megalopolis, the establishing of the industrial park in Gagarinsky district and the formation of a network of industrial and agro-industrial parks on the basis of existing investment ones (Strategy of social and economic development of Smolensk region until 2030, 2020).

A special economic zone (SEZ) is planned for Smolensk region. In terms of urban planning, the area has a favourable transport and geographical location to the major industrial and business centers of the other Russian regions, as it is close to the M1 federal road and to the Russian-Belarusian border. Many industrial enterprises can be located on its territory. The creation of SEZ in Smolensk region should produce a multiplier effect. The development of industrial production, all forms of economic activity (construction, logistics, real estate activities, hotel business, etc.) will intensify, and therefore, modernisation and creation of new jobs throughout the region will take place.

Discussion

By results of our study, Smolensk region has faster population decline, higher unemployment and lower average wages for the employees in compare with Kaluga one. In 2019 there was an outflow of population from both Kaluga and Smolensk regions to the Moscow agglomeration, where were the more attractive working and living conditions for young people and qualified personnel. Before COVID-19 pandemic there was an increasing pendular migration of the population from Belarus to Smolensk region. The labour shortage in the border region is exacerbated by competition for highly qualified personnel of Russia and Belarus.

The Moscow region is not so important for the Smolensk Strategy. The development of cooperation with Eastern Europe, CIS countries, BRICS, SCO, strengthening of cross-border cooperation of Smolensk region

with neighbouring regions of the Republic of Belarus (in scientific and technical, social, ecological spheres, tourism) are in priority. The economic development of Smolensk region's foreign economic potential and image, active work to promote exporters, and the development of exports of goods and services are highlighted. The activity of the Smolensk Region Export Support Centre, an autonomous non-profit organisation (since 2017) has shown that "foreign trade activity contains a huge potential for the development of industrial production in Smolensk region" (Strategy of social and economic development of Smolensk region until 2030, 2020).

The Kaluga Region Strategy is built in terms of its socio-economic interaction between the Moscow agglomeration.

The rurbanisation is directly connected with the formation of a new economic type close to post-industrial one. The service economy is growing rapidly in the metropolitan area, with a direct impact on neighbouring regions. The regions of Central European Russia are characterised by the development of production outsourcing by foreign companies (e.g. in Kaluga region – production of car components and cars, pharmaceutical products). The regions having significant innovation potential are preferred. Moscow's standards of living and consumption will determine the function and specifics of Moscow-oriented businesses from the territories neighbouring the capital's metropolis.

The neighbouring to Kaluga regions also withdraw production and logistics centers to a distance of 100 to 200 km in the nearest 5-10 years as Moscow region does. The "new settlement" is appearing around the Moscow metropolitan area to a distance of 150-200 km.

Conclusion

There are increasing demands on the quality of infrastructure and the way of life in neighbouring regions. Establishing of high quality of life zones in the regions will be a decisive development factor. New settlement may lead to the formation of new markets for services (educational, medical, tourism, housing and utilities, etc.). The development of areas oriented towards the qualitatively new living environment by urban standards will provide an additional incentive for the growth of the market of building materials and services, the production of modern life-support equipment and the growth of social infrastructures.

These socio-economic development trends require a transition to inter-sectoral ways of managing regional development. The management of new settlement processes may include housing construction, the production of building materials and the extraction of raw materials, the development of agribusiness, services and subsistence industries.

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