

The Concept of the Regional Industrial Park Development

Pavel A. Kanapukhin

Department of Economics, Marketing and Commerce
Voronezh State University
Voronezh, Russia
E-mail: kanapukhin@econ.vsu.ru

Anton A. Prachenko

Department of Economics
Voronezh State University
Voronezh, Russia
E-mail: anton-prachenko@mail.ru

Abstract—The article proposes a concept of “Maslovsky” industrial park development in Voronezh region. The concept takes into account institutional preconditions for industrial park development represented by federal and regional legal and regulatory acts. Socio-economic conditions for further industrial park development are also analyzed in the article. The directions, goals and tasks of the industrial park in the context of implementing strategic planning documents of Voronezh Region and the city district of Voronezh are formulated. A complex of financial and organizational tools for industrial park development is introduced.

Keywords—*innovation infrastructure; industrial park; region; means of development; strategic planning*

I. INTRODUCTION

Industrial parks creation and development in the Russian Federation has been declared one of the directions of the country’s re-industrialization and increasing its innovativeness at the highest levels of the government.

The subprogram “Industrial parks” is introduced by the Ministry of Industry and Trade of the Russian Federation in the state program “Industry development and increasing its competitiveness”. The envisaged financing of industrial parks is over 1.0 trillion roubles. By 2020, a major shift in industrial parks creation and development is expected. Their number is projected to grow by six times compared to 2014, up to 250–300 units [1]. The industry development program adopted in 2014, laid down the principles for the development of industrial parks as an important direction, ensuring the growth and modernization of manufacturing industries in the Russian economy. The implementation of its subprogram “Industrial parks” allows enhancing the country’s competitive advantages in the global economy, decoupling of economic growth from the volume of natural resources extraction and prices of hydrocarbon, and ensuring the development of the regions with a high share of processing industry focusing on the defense industry [2].

While assessing the prospects of creating industrial parks and their influence on regional socio-economic systems, it should be assumed that the basic levels of industrial and innovative development of the regional administrative and territorial units differ significantly and are influenced by

various factors [3], [4]. A number of researchers note that among the regions attractive for investors are those, where local authorities carry out the consistent policy aimed at supporting industrial parks development [5]. Many scientists emphasize the need to identify geographical priorities in industrial parks development, which is especially important for large countries, the Russian Federation in particular [6].

Within the regions, industrial parks are designed in order to promote solving a range of social and economic problems. It is essential to mention a significant aspect of industrial parks creation - regardless of their types, practically all of them are focused on the potential of major cities. Such an approach is justified by the development of socio-economic and innovative environment of the regions of the Russian Federation. In particular, in the period of its formation, the actually functioning industrial system of the country was likely to appear in the places of high labor resources concentration.

Presently, the high mobility of the factors of production (material, labor) is changing the vectors of interrelation between industrial complexes (in these case, parks) and administrative and territorial units. The third industrialization was aimed at labor resources mobilization - their accumulation, distribution throughout a limited area and the subsequent development of industrial and social areas. Industrialization 4.0 focuses on regional development in a number of directions. The most significant of them include:

- “De-industrialization” of the residential area of a large city, relocation of manufacturing enterprises outside the city, creation of industrial complexes aimed at introducing technological and engineering innovations, in close proximity to large cities (regional centres, as a rule).
- Focus on solving social problems of the territories, primarily of large cities, characterized by the prominent transformational capacity.
- Increasing cash inflows in consumption sphere (increasing the overall level of effective demand and diversity of goods and services), rather than in the budgets (as a rule, these assignments to budget are not significant for a large city and region).

- Modernization and spatial development of social and engineering infrastructure.
- Creating spatial and functional cumulative effect, ensuring the demand for business services, including the provision of goods and services by small enterprises.
- Creating agglomeration effect due to the consolidation of contacts between the population and the business structures of a large city with the adjacent areas, previously quite autonomous in terms of places of work and receiving social services.
- Creating high-tech lines of production, which involve production units operating in the region. This involves not only the production of the nearest large city, but also other administrative and territorial units. Ideally, a large industrial park should extend its technological influence beyond the region, forming a highly developed multifunctional, vertically and horizontally integrated network.

The “demonstration effect” of industrial parks is essential; by its virtue business structures, both residents and non-residents of industrial parks see the broad interest of regional authorities in raising capital. It can be said that industrial parks have a profound influence on the investment climate. The positive impact of the “demonstration effect” extends as follows: the resident enterprise — regional non-resident enterprises — outer regional enterprises — all-Russia ratings — new non-resident enterprises.

II. STRATEGIC CONTEXT OF “MASLOVSKY” INDUSTRIAL PARK CREATION AND DEVELOPMENT IN VORONEZH REGION

The development of “Maslovsky” industrial park is integrated into the system of strategic planning of Voronezh region [7] and city district of Voronezh [8]. The development of industrial park system in Voronezh region, with “Maslovsky” park being the first, is grounded in the need to re-industrialize Voronezh, one of the major industrial centres of Russia, distinguished by its diversified industrial structure in the format 4.0. The city’s structure of manufacturing is mainly represented by the following industries: engineering and metal working production, chemical and petrochemical industries, electronic, aircraft, rocket and space industries, construction materials and food processing industry, primarily meat and dairy industry. Voronezh has a developed network of research and educational institutions that provide conducting fundamental and applied research in the fields of innovation technologies and modern engineering systems.

III. CONCEPTUAL FRAMEWORK OF “MASLOVSKY” INDUSTRIAL PARK DEVELOPMENT

In order to develop the industrial park on the territory of Voronezh region in accordance with the Resolution of the Government of Voronezh region No. 269, dated 6 April 2010, a land area of 598 hectares, the territory of “Maslovsky” industrial park was allocated. The development of “Maslovsky” industrial park is prescribed by the Strategies of socio-economic development of Voronezh region and the

city district of Voronezh to 2035. The implementation of the project “Development of “Maslovsky” industrial park” is aimed at achieving the main goals and solving the regional problems within the Program for socio-economic development of Voronezh region for 2016-2020, approved by the Law of Voronezh region 134-OZ, dated 24 December, 2014. The implementation of this project envisages the establishment of a specially organized territory to locate new industrial enterprises, provided with engineering and service infrastructure, necessary administrative and legal environment.

The initial preconditions for further development of the industrial park include traditional competitive advantages of the region, formed throughout the period of 3.0 format industrialization. Voronezh region is one of the most populous parts of the country — it ranks 22nd among the regions of the Russian Federation. The labor force accounts for 1414.6 thousand people (61.8% of the total population of the region). The region has one of the leading positions in Russia in the number of students, which is the third place out of 18 regions of the Central Federal District, after Moscow and Moscow region. It results in one of the most essential competitive advantages - both traditional and new industries are well provided with high-quality specialists. The competitive environment that supports a high level of labor activity is of equal importance.

Apparently, the attention of regional authorities to creation and development of the industrial park and providing favourable investment climate has positive value.

By the time the industrial park was created, a developed industrial-agricultural complex had actually been formed, with numerous enterprises located within the borders of the city of Voronezh and in close proximity to the developed industrial areas.

Further development of the established industrial park presupposes structural, technical and organizational modernization of the regional manufacturing complex (primarily, within Voronezh agglomeration). The resolution of this issue involves the development of integration processes, including the following: creation of an integrated science and education and innovative technology centre, interconnected with the real economy sector; spatial and functional development of the transport and logistics centre to solve national and regional issues; formation of effective financial flows.

The tasks of the highest priority, which affect the intensity of domestic and foreign investors attracted to the industrial park, include: restitution of state or municipal ownership of land areas, within the borders of which the infrastructure facilities are planned to be built that ensure functioning of the industrial park; increasing utility lines capacity on the industrial site and in its immediate vicinity; and developing transport infrastructure in the regional centre.

To date, some issues have not yet been fully resolved, such as the issues of clean title to land, intended for the development of engineering, transport and social

infrastructure and the issues of the availability of engineering surveys results on the specified land areas.

The compatibility of neighboring industries and their integral environmental impact have not been entirely defined. Authorisation procedures, from making project implementation decisions to launching industrial enterprises and infrastructure construction, require substantial amount of time.

In this regard, state and local government units should undertake focused and systemic activity to expand technical and institutional capacity of the industrial park to locate production facilities.

Making use of traditional competitive advantages of Voronezh region and solving the above-mentioned problems will contribute to significant increase of the investment potential of the regional industrial sector and related areas.

An important circumstance in creating “Maslovsky” industrial park is the use of a public-private partnership scheme. Thus, the authorities of Voronezh region assumed a commitment to create engineering and transport infrastructure. It greatly reduces the investment risks of creating industrial capacities and attracting small and medium-sized businesses to develop associated industries (food, consumer services, retail, legal and accounting services). It is exactly implementation of public-private partnership mechanisms that results in achieving maximum synergetic effect of industrial park activity on the economy of Voronezh region and neighboring areas.

The participation of regional authorities in the development of the industrial park helps to provide positive effect on business structures, property and finance of the region.

Among the effects significant for business structures are the following: the time for the approval of manufacturing enterprises location is drastically reduced and the procedure of land lease to purchase is simplified.

Beside enterprise production activity of the industrial park, the following is important for the region: keeping ownership rights on land and real estate, transferred to the management of administration company; availability of an effective mechanism to attract investors for business and telecommunications infrastructure; the ability to make and implement long-term territory development plans; attracting investment and lending resources for infrastructure development; and consistency of industrial and infrastructural construction terms, contributing to reducing the burden on the regional budget.

Special attention should be paid to the opportunities to attract resources from federal financial institutions (the Investment Fund of the Russian Federation, the European Bank for Reconstruction and Development, the Federal targeted investment program, etc.) in order to develop infrastructure in the areas of regional property.

IV. FINANCIAL AND ORGANIZATIONAL MECHANISMS OF INDUSTRIAL PARK DEVELOPMENT

For the purpose of financing the development of “Maslovsky” industrial park, it is reasonable to use a wide range of public and private sources:

- financial resources, received in the process of realization of the rights to land, provided to investors of the industrial park by regional authorities, at prices covering the expenses of the administration company for the industrial park infrastructure development;
- regional budget resources of Voronezh region, allocated for the industrial park infrastructure development;
- borrowed funds (including bank loans), asset-backed financing arrangements of Voronezh region and/or administration company (including land rights);
- financing from private investors, directed to share participation in the development projects of the industrial park infrastructure;
- funding from the establishment of subsidiaries and joint companies by an authorized company, including selling their shares to persons interested in projects for the industrial park infrastructure development;
- financial resources from the Investment Fund of the Russian Federation, attracted (borrowed) funding from investors, net profit of administration company.

To ensure the growing reproduction of state property (engineering and transport infrastructure objects), it is necessary to preserve them as property of Voronezh region. It is recommended to direct the profits from their use and the payment for the state guarantees provision to create new infrastructural objects, thereby expanding the opportunities for further development of the industrial park and the scope of external effects.

It is justified to create a number of infrastructure facilities on a share basis, defining the ownership share of Voronezh region in the amount equal to the cost of land areas and the rights, necessary for the creation of these objects.

Critical for the industrial park development is a set of marketing activities, for the implementation of which it is advisable to create a modern congress and exhibition centre. The availability of such a centre will significantly increase the number of international events to attract foreign and domestic enterprises to the industrial park and, consequently, increase the region’s investment attractiveness. It can be assumed that the business activity of the following neighboring regions will also increase Belgorod, Kursk, Lipetsk, Orel, Rostov, Saratov, Tambov regions.

V. CONCLUSION

Concluding on the above-mentioned facts, the concept of “Maslovsky” industrial park development in Voronezh region includes:

- institutional framework represented by a set of policy documents developed at the federal level;
- regional institutional framework, represented by strategic planning documents of Voronezh region and the city district of Voronezh;
- traditional competitive advantages of the region, formed throughout the period of industrial revolution 3.0;
- goals and tasks of socio-economic environment transformation in the region and the city of Voronezh due to the creation of the industrial park;
- a public-private partnership mechanism as a basic economic and organizational mechanism of industrial park creation and development;
- a set of financial instruments for expanded reproduction of the industrial park and socio-economic environment of the regional centre;
- organizational tools implementing marketing activities aimed at increasing the investment attractiveness of the industrial park, the city of Voronezh, Voronezh region and neighbouring regions.

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