Development of Eastern Russia: Experience of Research, and Current Tendencies

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Abstract—Territorial development is one of the determining economic-geographical processes for the east of Russia. A brief overview of the history of development of eastern Russia is presented. The main inherent characteristics of the eastern territories of today's Russia are presented.

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Man is constantly changing the environment, adapting it to his needs. While mankind early in its history introduced minor changes only in some of the surrounding territories, a further evolution of society was accompanied by an enhancement in human possibilities and necessities, which required development of new territories and new kinds of resources. Thus, the economic turnover was incorporating increasingly more new territories, and their development assumed a scientific approach and began to rely on experience gained by preceding generations.

From the perspective of economic geography, a comprehensive study of the process of development was begun only in the 20th century. It is likely that the term "territorial development" itself was borrowed by Russian geographical terminology from Englishlanguage terminology where it referred primarily to settlement of a territory. Also, the term "successive settlement" was coined and introduced, and the attributes of the degree of development were defined, with a change in primary pristine landscape becoming prominent among them. It is such an understanding of the process of development that can be found in publications of specialists from the State Colonization Research Institute, known in the 1920s (later it was renamed the State Research Institute of Land Utilization and Settlement) [1]. The initial evolutionary stage of the treatments of the process of territorial development continued till the end of the 1960s and included the studies reported by S.V. Slavin [2] (industrial and transport development), V.V. Pokshishevskii [3] (settlement), N.N. Kolosovskii [4] (integral utilization of natural resources, and economic regionalization). In this case, the term "territorial development" itself as used as the synonym of the term "economic development".

This subject was elaborated further by K.P. Kosmachev, who investigated development as an

economic-geographical process [5]. Such a view triggered a new wave of research efforts, including theoretical ones, with a focus on the definition of the content of the notion, the interrelation of development with the other socioeconomic and geographical processes, and on assessments of effectiveness of development, namely the degree of development of a territory in this case [1, 6, 7]. At that period the definition of territorial development itself was given several treatments; nevertheless, they failed to result in a unified notion.

Thus, K.P. Kosmachev treats development as the "saturation of a territory with inputs of material means and human labor of different per capita power consumption and of a different degree of mechanization, as a result of which the natural basis of a territory is modified and enriched with engineering structures of a particular king and with systems thereof". Also, territorial development is "a social process whose intensity and trend change with a particular socioeconomic and natural setting" [5, p. 9].

N.B. Kultashev opposes the view maintained by K.P. Kosmachev: a territory is not always "enriched by engineering structures and by systems" if it is developed extensively (nomadic livestock husbandry, and agriculture in earlier stages), no such saturation occurs [8, p. 25]. According to N.B. Kultashev, "... development of territories implies a set of socially organized kinds of human activity with a focus on the utilization of resources of complexes of natural environment (in its natural or human-altered state), their transformation in the interests of satisfying the needs of people living on this territory, and (via the social division of labor) a steady growth of the necessities of man and society, while a critical condition for its development lies in an increase in productivity of social labor. A key feature for understanding the characteristics of territorial development is the growth of the necessities leaving behind in its pace the population increase" [9, p. 12].

In the view of E.B. Alaev, "One of the forms of proliferation of productive forces is territorial development, or the inclusion in the national economy (territorial division of labor) of territories which have had natural, invariable topography previously" [10, p. 204].

According to M.Yu. Prisyazhnyi, territorial development implies "a continual process of economic development in a particular territory in its steady renewal... the process of man–environment interaction, the process by which man is fitting into the natural environment of a territory, into nature as a whole, with the ongoing process involving a gradual intensification of the utilization in production, of an ever increasing number of components of a territory's natural-resource potential, including the technological and economic results from previous stages of development, and the uniqueness of its geographical location" [11, pp. 217–218].

The 1970s-1980s witnessed a flourishing of the theory of territorial development, involving the publication of collected scientific articles, multiauthor books, and investigations of individual authors [12–14], with the research done by K.P. Kosmachev's followers standing out fairly prominently among them. The theory of development had been almost completed by that time, specifically the system of notions and terms was generated to include such notions as pioneer development, redevelopment, and new development: the stages of development (the information, infrastructure, subintegral and integral stages) were suggested; the cycles of development were described, etc. Also, a great deal of attention was paid to working out approaches and techniques related to assessments of the degree of development: more than 50 of them were proposed [7].

In elaborating the theory of territorial development, A.A. Sysoev looked into the questions of the creation, functioning and growth of bases and routes forming the framework for the areas of new development [12]. Yu.S. Nikul'nikov set up the economic-geographical foundations for the analysis of the process of territorial development, including the definition of the notions of relative and absolute territorial development [15], and V.P. Mosunov assessed the influence of the boundaries and of the entire system of normative division of a territory upon development [16]. An important element of the process of development in the form of settlement of a territory by newcomers without any participation of the State was considered by S.V. Dudenko [6].

The transition of Russia to market relations did not entail cessation of scientific research in the theory of territorial development. Thus, M.Yu. Prisyazhnyi was engaged in research on the issues related to economic development of Yakutia in the post-Soviet era [17]. Investigations were continued by D.A. Voinov, A.N. Gunya, D.M. Vinokurova and Yu.A. Ashurkova [18– 22]; however, the number of their studies reduced dramatically when compared with earlier decades.

Radical restructuring of the country's economy, disappearance of the Soviet state planning system for economic development, and cessation of support of research did not eliminate the need for territorial development in eastern Russia. Across most of the Far East and Eastern Siberia, a full cycle of development (from the information to integral stage) was completed only at the level of intensive development in the first half of the 20th century: agriculture and forestry, hunting of fur animals, gold-mining, and fishery constitute one of the few sectors which were promoted in this territory at different times. In general, however, the information stage of development has not yet been completed with respect to many types of natural resources (investments in geological prospecting have begun to be increased only over the last decade), while the infrastructure stage requires immense capital investments.

In Siberia and the Far East, the last decade again saw emergence of large construction projects with a focus on territorial development. Previous publications, using the Baikal region as an example, examined the influence of the implementation of such large-scale projects on the processes of development and territorial advancement [23, 24], which, together with the analysis of the realization of the other major investment projects from recent years, suggests some conclusions regarding the evolution of the process of development in today's Russia.

Integration of production processes and the settingup of territorial-production complexes (TPC) became a key form of industrial development of territories in Soviet times. This concept was included in most Soviet planning documents at that period, and the principle itself was declared as the most system-based and reasonable and was opposed to the Western capitalist practices of industrial and territorial development. Currently the place of TPC in the economics literature and in state programs is occupied by other terms, such as "cluster" and, to a somewhat lesser degree, "project approach". And many researchers do not oppose the cluster to TPC; instead, they present it as some continuation or similarity [25]. On the other hand, it cannot be said that a frequent usage of the term by policy makers and executives led to the creation and stable functioning of a large number of major clusters on a Russian scale. Conceivably this is because the State used to pay much more attention to project approach [26, 27] which, we believe, is characteristic for Russian policy, more specifically in the sphere of territorial development. Essentially, this implies a set of a limited number of major investment projects whose implementation is facilitated by the State calculating on the economic multiplier effect for economic sectors and territories [28]. Project approach is therefore the principal current tool of the State for territorial development.

The distinguishing features of the contemporary process of development may well include the following tendency characteristic for selection of projects: the plans that were prepared as early as Soviet times enjoy

priority implementation in most cases. Almost all of them remained frozen for years. The Soviet projects are adjusted to today's realities: priority is given not to integral use of resources (and this goal was also not achieved in full measure under Soviet conditions) but to economic expediency. For instance, the major Kovykta gas and condensate field has not been developed for many years not because of lack of funds to be invested in extraction of resources but because the export price of gas was not agreed upon with China. It is exportation to foreign markets which is a high priority for a state company, whereas gas supply and installation of gas service for human settlements and production facilities in the Baikal region (including for a further development of gas chemistry) seems to be entirely unrealistic. This tendency is characteristic for the post-Soviet economy of the Far East in general: the economic sectors that had been supplying resources to the domestic market, underwent a reorientation to the external consumer, which made the economy even more dependent on the situation in the world markets.

Taking into consideration the market-based set-up of the Russian economy and the emergence of a large number of private companies, financial instruments and legal regulations, a large number of new economic patterns and legal forms were added to implementation of projects with a focus on territorial development. Thus, the State can provide budgetary financing (implying all forms of support from the federal budget of Russia: financing of the Investment Fund (as per Decree of the RF Government of November 23, 2005, No. 694, it is part of the federal budget), under federal targetoriented programs and other budget expense items)). Credit backing is provided, which implies granting direct credits of Vnesheconombank (a Russian state corporation) or credit guarantees of the State (or any state structures, corporations, etc.) from state, private or foreign banks (such as the China Development Bank). Privileges are granted, mainly by the Federal Government, but also by regional authorities: a reduction of the rate of different taxes and deductions into budgets (a decrease in severance tax to 0%, a decreased rate of export duty, a decreased assets tax for organizations, assignments of woodlots by a simplified procedure without an auction, etc.). Among the forms of backing is also funding by corporations, such as JSC Rosnano. It is pertinent to note that backing from such corporations also offers a broad gamut of opportunities ranging from co-investment and credit guarantees and redemption of shares owned by a company to acquisition of full control over a company with possible subsequent sale of the package of stocks of a successful enterprise.

The role played by the bases and routes of development, which are among the workings of this process, has somewhat changed to date. To cite an example, the Baikal-Amur Mainline (BAM) that was constructed specifically for development of the largest region never fulfilled its role. On the contrary, almost the entire territory along the BAM turned into a long-lasting extremely depression-stricken area, with very harsh conditions for the population living there. Development of the resources along the BAM is stagnated as previously: the relevant cost is extremely large as are the possible economic risks. Without these projects, however, the BAM is merely a transport route for exporting raw materials from western Russian regions. There is little likelihood that the situation will be remedied by the planned investments in enhancing the traffic capacity of the BAM and Transsib: the new capacities are intended for increasing the traffic in transit to the ports of the Far East. The other examples of the construction of the infrastructure (not numerous per se) are not always suitable for the role of the routes of development. The Chita-Khabarovsk motor road failed to facilitate economic grows in the adjacent territories. Perhaps the situation will change for the better in the future, but the first years of operation showed that the route attracts mainly the transit traffic flows. A similar situation occurs with the Eastern Siberia-Pacific Ocean oil pipeline (ESPO pipeline): its main purpose implies a diversification of export deliveries of oil; the development of the petrochemical sector in the Far East is postponed until some future date. Of course, what has been said above does not invalidate the role of the existing and future transport infrastructure in territorial development; however, while the construction of routes of development was a prime consideration in the past, the shift of emphasis toward transit and export of raw materials to other countries is evident to date.

A change in the economic structure, coupled with the absence of unified state planning, influenced also the distribution of functions between the bases of development of different types. While the role played by the focal and zonal bases (as the territorially nearest to the place of project implementation) changed to a lesser extent, the interzonal bases of development (Krasnovarsk, Irkutsk, Khabarovsk, and Vladivostok) reduced considerably their influence upon the process of development in general. Crucial functions, such as regional research, prospecting and project planning, were assumed in most cases by higher-rank bases of development: orders for these kinds of work are placed by head offices of major corporations with regional scientific centers only in very rare cases. The function of training of personnel in the aforementioned cities has also suffered: as a result of changes in the system of higher and professional education, majoring in particular disciplines and the level of knowledge of graduates do not meet the requirements of development projects; hence, regional migration of specialists increased considerably. Shutdown of a large number of Soviet production facilities led to a reduction in the manufactory of special equipment in the interzonal centers, so that a large share of such equipment is imported from other regions or even from other countries. A similar situation concerns also the supply and distribution

of the necessary resources: in this sphere, too, the significance of the interzonal centers is not as large as at Soviet times. Also, the need no longer arises for the creation of high-capacity construction bases, because the development of new assets and manufacturing facilities is capable (via an increase in transportation costs) of relying on pre-existing bases of development. In fact, the place of origin of building materials is not the deciding factor for contemporary development, as the projects themselves are single in nature and do not imply the former scales of integration.

The last but perhaps one of the most important differences of the present-day process of territorial development implies the living conditions of the population in the east of Russia. The problem of mass outflow of inhabitants brought about the priority of keeping the population stable through improvement of the quality of life as the primary goal of the Concept of the state migration policy of the Russian Federation into 2025 [29] and the State Program "Socioeconomic development of the Far East and the Baikal region" [30]. In spite of the declared goals, however, the actual process of development has little effect on the quality of life of the local population; moreover, in most of the territory of the Far East and the Baikal region there is taking place a backward process (all production was stopped, the infrastructure is becoming unfit for use, etc.). This problem is becoming increasingly acute: a concentration of the population continues in relatively more densely populated and developed areas, rather than settling the territories, which leads to a significant clustering of the population in some places, and to an almost total depopulation of other localities. On the one hand, inhabited territories change to a category of undeveloped ones and, hence, spaces with large territories drop out of the country's general socioeconomic field. On the other hand, there are emerging areas with a high population and transport density thereby worsening he ecological situation across the most populated territories. Furthermore, in such population centers (usually, they are administrative centers of districts), an increase in population clustering is also attended with a plethora of other problems: scarcity of the power, transport, social and other types of infrastructure as well as a significant rise in prices of land, in the cost of construction, etc., which eventually causes outflow of the population even from these, relatively developed, areas in the east of Russia.

In summary it may be said that the changes in the political-economic conditions that have occurred in this country since the 1990s served as the mechanism that interrupted a next (generally successful at the beginning) 1970–1980 stage of development of eastern Russia. As is known, it resulted in a comeback of the development process to the initial position for many territories involved in development at that period. It is hard to predict the time and the extent to which these territories will be covered by redevelopment or new development processes. For the time being, however,

the Government of Russia is oriented towards a point approach, or a project approach in the organization of the economy in the country's eastern regions.

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REFERENCES

- Mosunov, V.P., Nikul'nikov, Yu.S. and Sysoev, A.A., Territorial Structures of Areas of New Development, Novosibirsk: Nauka, 1990 [in Russian].
- Slavin, S.V., Industrial and Transport Development of the North of the USSR, Moscow: Izd-vo Ekon. Lit-ry, 1961 [in Russian].
- Pokshishevskii, V.V., Settling of Siberia (Historical-Geographical Essays), Irkutsk: Irk. Obl. Gos. Izd-vo, 1951 [in Russian].
- 4. Kolosovskii, N.N., *The Foundations of Economic Regionalization*, Moscow: Gospolitizdat, 1958 [in Russian].
- 5. Kosmachev, K.P., *Pioneer Development of the Taiga* (*Economic-Geographical Problems*), Novosibirsk: Nauka, 1974 [in Russian].
- 6. Dudenko, S.V., Settling of the Territory in Areas of New Development, Moscow: Nauka, 1990 [in Russian].
- 7. Nikul'nikov, Yu.S., Concerning Assessments of Integral Economic Development of the USSR Territory, *Geogr. Prir. Resur.*, 1982, no. 3, pp. 13–21 [in Russian].
- 8. Kultashev, N.B., Processes of Development and the Degree of Development of a Territory, *Vestn. Mosk. Univer., Seriya Geogr.*, 1972, no. 2, pp. 22–29 [in Russian].
- 9. Kultashev, N.B., Introduction to the Theory of Territorial Organization of Society. Initial Problems: Lecture Summaries, Tver: Izd-vo Tver. Univer., 1993 [in Russian].
- Alaev, E.B., Socioeconomic Geography: Glossary of Terms and Definitions, Moscow: Mysl', 1983 [in Russian].
- Prisyazhnyi, M.Yu., Transformation of the Regional Nature Management System of Yakutia, in *Regional Nature Management and Fundamental Problems in Future Geography*, V.A. Snytko and B.M. Ishmuratov, Eds., Irkutsk: Izd-vo IG SO RAN, 2001, pp. 217–227.
- Theory of Economic Development of a Territory, K.P. Kosmachev, Ed., Irkutsk: Izd-vo In-ta Geografii Sibiri i Dal'nego Vostoka SO AN SSSR, 1979 [in Russian].
- 13. Industrial Growth and Economic Development of New Areas of Siberia, B.P. Orlov, Ed., Novosibirsk: Izd-vo In-ta Ekonomiki i Organizatsii Promyshlennogo Proizvodstva SO AN SSSR, 1985 [in Russian].
- Antipov, A.N., Blanutsa, V.I. and Govorushko, S.M., Environmental Impact Assessment of Economic Development of a Territory, Novosibirsk: Nauka, 1992 [in Russian].
- 15. Nikul'nikov, Yu.S., The Economic-Geographical Fundamentals of the Analysis of the Territorial

development Process: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Irkutsk: Izd-vo In-ta geografii Sibiri i Dal'nego Vostoka SO AN SSSR, 1979 [in Russian].

- Mosunov, V.P., Economic-Geographical Analysis of Socioeconomic Boundaries: Special Elements of Territorial Systems: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Irkutsk: Izd-vo In-ta geografii Sibiri i Dal'nego Vostoka SO AN SSSR, 1980 [in Russian].
- 17. Prisyazhnyi, M.Yu., Economic Development of the Sakha (Yakutia) Republic During Reforms of a Transitional Period: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Irkutsk: Izd-vo In-ta Zemnoi Kory SO RAN, 2000 [in Russian].
- 18. Voinov, D.A., Role of the Natural-Resource Factor in Economic Development of the Far-Eastern Territory, *Geogr. Prir. Resur.*, 2007, no. 4, pp. 117–120 [in Russian].
- Gunya, A.N., Regional Trends in Development of Territories and Landscapes: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Moscow: Izd-vo In-ta Geografii RAN, 2005 [in Russian].
- 20. Voinov, D.S., Improvement of the Management Systems for Territorial Integral Development Based on principles of Public-Private Partnership, Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Moscow: Izd-vo Ros. Ekonom. Akad. im. G.V. Plekhanova, 2010 [in Russian].
- 21. Vinokurova, D.M., Migration of the Population During Industrial Development of a Territory: Causes and Character: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Moscow: Moscow: Izd-vo Mosk. Univer., 2001 [in Russian].

- 22. Ashurkova, Yu.A., Economic-Geographical Characteristic of Transport and Settling Development of the Territory of Irkutsk Oblast: Extended Abstract of Cand. Sci. (Geogr.) Dissertation, Irkutsk: Izd-vo IG SO RAN, 2003 [in Russian].
- 23. Syssoeva, N.M. and Dets, I.A., State Strategic Planning and Spatial Development in the Siberian Regions, *Quaestiones Geographicae*, 2011, vol. 30, issue 2, pp. 71–79.
- 24. Dets, I.A., Project Approach in Russian Regional Policy Through the Example of the Baikal Region, Proc. Int. Conf. on "Regions and Their Socio-Economic Growth" (September 2–4, 2012, Poznan), Poznan: Bogucky Wydawnictwo Naukowe, 2013, pp. 157–160.
- 25. Anisova, N.A., *The Model of a Cluster*, Ekspert-Ural, 2013, no. 38(571), pp. 30–35 [in Russian].
- Gryzlov, B.V., Project Approach as the Basis for United Russia. URL: http://www.erdv.ru/index.php/news/1613l-r. Accessed March 20, 2014 [in Russian].
- 27. Misharin, A.S., Increasing the Role of the Regions in Modernization of the Economy of Russia, in *Reports for the State Council of the Russian Federation, Khabarovsk*, Moscow: Gossovet RF, 2011 [in Russian].
- Dets, I.A., Project Approach in Russian Regional Policy, *Izv. Irk. Univer., Seriya "Nauki o Zemle"*, 2010, vol. 3, no. 2, pp. 61–68 [in Russian].
- 29. The Concept of the State Migration Policy of the Russian Federation Into 2025. URL: http://www.fms.gov.ru/upload/iblock/07c/kgmp.pdf. Accessed March 3, 2014 [in Russian].
- 30. State Program "Socioeconomic Development of the Far East and the Baikal Region". URL: http:// minvostokrazvitia.ru/upload/iblock/152/programma. pdf. Accessed February 2, 2014 [in Russian].