

Научная статья

КЛАСТЕРНАЯ ПОЛИТИКА КАК ИНСТРУМЕНТ ДИВЕРСИФИКАЦИИ ЭКОНОМИКИ СЫРЬЕВЫХ РЕГИОНОВ

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Аннотация. Доминирование добывающих отраслей в пространственной структуре экономики ресурсных регионов обуславливает высокую уязвимость территориальных систем к конъюнктурным шокам, что нивелирует результативность традиционных кластерных инициатив, ориентированных исключительно на географическую концентрацию хозяйствующих субъектов. Наблюдаемая институциональная асимметрия между градообразующими недропользователями и локальным малым бизнесом, сопряженная с фрагментарностью производственных связей, детерминирует необходимость переориентации государственного управления с формальной поддержки агломераций на целенаправленное конструирование региональных цепочек добавленной стоимости. Данное обстоятельство актуализирует проблему разработки организационно-экономических механизмов, обеспечивающих уменьшение транзакционных издержек кооперации и преодоление технологических барьеров входа для субъектов малого предпринимательства в снабженческие сети крупных корпораций. Целью настоящего исследования выступает теоретико-методологическое обоснование и эмпирическая верификация эффективности функционирования региональных центров компетенций как ключевых узлов управления кластерными сетями. В ходе работы проведена критическая оценка результативности действующих территориальных кластеров, выявившая преобладание количественных показателей над глубиной кооперационной интеграции; систематизированы институциональные и технологические ограничения, препятствующие

вовлечению местных производителей в процессы создания стоимости; разработан адаптивный механизм деятельности центра компетенций, выполняющего функции агрегирования спроса, стандартизации требований и верификации поставщиков; а также количественно обоснован мультипликативный эффект от внедрения данной модели, проявляющийся в приросте валового регионального продукта и расширении доходной базы бюджетов. Сформулированные концептуальные выводы и предложенный методический аппарат могут служить основанием для трансформации региональной промышленной политики, оптимизации распределения бюджетных ресурсов и формирования устойчивой многоукладной экономики в сырьевых субъектах Российской Федерации.

Ключевые слова: кластерная политика, диверсификация региональной экономики, сырьевые субъекты федерации, цепочки добавленной стоимости, региональные центры компетенций, трансакционные издержки, межфирменная кооперация, государственное регулирование.

Original article

CLUSTER POLICY AS A TOOL FOR DIVERSIFYING THE ECONOMIES OF RAW MATERIALS REGIONS

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Abstract. The dominance of extractive industries in the spatial structure of resource-rich regions' economies makes territorial systems highly vulnerable to market shocks, which undermines the effectiveness of traditional cluster initiatives focused solely on the geographic concentration of economic entities. The observed institutional asymmetry between city-forming subsoil users and local small businesses, coupled

with the fragmentation of production ties, necessitates a reorientation of public administration from formal support for agglomerations to the targeted development of regional value chains. This circumstance highlights the need to develop organizational and economic mechanisms that reduce transaction costs of cooperation and overcome technological barriers to entry for small businesses into the supply networks of large corporations. The purpose of this study is to provide a theoretical and methodological justification and empirical verification of the effectiveness of regional competence centers as key hubs for cluster network management. This study included a critical assessment of the performance of existing regional clusters, revealing a predominance of quantitative indicators over the depth of cooperative integration. Institutional and technological constraints hindering the involvement of local producers in value creation processes were systematized. An adaptive mechanism for the operation of a competence center that aggregates demand, standardizes requirements, and verifies suppliers was developed. The multiplier effect of implementing this model, manifested in an increase in gross regional product and an expanded budget revenue base, was quantitatively substantiated. The conceptual conclusions formulated and the proposed methodological framework can serve as the basis for transforming regional industrial policy, optimizing the distribution of budgetary resources, and developing a sustainable, multi-structured economy in raw materials-producing regions of the Russian Federation.

Keywords: cluster policy, diversification of regional economies, raw materials-producing federal subjects, value chains, regional competence centers, transaction costs, interfirm cooperation, government regulation.

Introduction. At the stage of global transformation of world economic relations and strengthening of structural imbalances, ensuring the sustainable development of territorial entities becomes of paramount importance for national economic security. The current orientation of a number of subjects of the Russian Federation to the export of primary resources creates fundamental vulnerabilities, which are manifested in high

sensitivity to market fluctuations in world markets [1]. Overcoming inertia implies a change in the production basis, aimed at forming a multi-structured economic system capable of generating added value at all stages of the production cycle.

The specific spatial development of such territories consists in the dominance of extractive industries, which provokes the effect of crowding out manufacturing industries and the service sector, known in the economic literature as the resource curse or the Dutch disease [2]. A single-industry structure limits the potential for accumulating human capital, narrows the tax base during periods of price shocks, making regional budgets extremely unstable [3]. In this regard, public authorities need to search for new mechanisms of structural adaptation that transform rental income into long-term investments in non-primary sectors of the economy.

In the context of improving the system of state and municipal administration, the emphasis naturally shifts from methods of direct administrative intervention to creating favorable institutional conditions for the self-development of economic entities. It is in this paradigm that the cluster initiative is considered as a comprehensive tool of regional industrial policy. Integration of interconnected enterprises, research centers, and specialized educational institutions into a single territorial entity makes it possible to synchronize the interests of business and the state, thereby ensuring a more efficient distribution of limited budget resources [4].

The economic nature of the cluster approach is based on achieving an agglomeration effect, which is expressed in reducing transaction costs and accelerating the diffusion of innovations within a localized network. The sharing of infrastructure, the formation of common value chains and the development of cooperative ties contribute to the emergence of a synergistic effect that is unattainable with the isolated functioning of individual companies. For raw materials territories, such a mechanism becomes a catalyst for the emergence of related high-tech industries, processing industries and service clusters, which leads to a change in the sectoral structure of the gross regional product [5].

Despite the existence of a significant array of theoretical developments, the

practical implementation of cluster strategies in resource-producing entities often faces institutional barriers and insufficient elaboration of the methodological framework for assessing their effectiveness. The relevance of this study is determined by the need to systematize approaches to the formation of cluster policies that take into account the unique socio-economic characteristics of raw material regions. The development of scientifically based recommendations makes it possible to increase the manageability of diversification processes and ensure the transition from an extensive model of natural resources development to an intensive, innovative type of regional development [6].

Literature review. Modern economic studies increasingly point to the insufficiency of the geographical proximity factor to ensure the sustainable development of territories, especially in conditions of raw material dependence. The scientific discourse asserts the thesis that the physical localization of enterprises without established functional connections forms pseudo-clusters that are unable to generate a significant synergistic effect [7], [8]. Accordingly, the problem of shifting the focus of state regulation from supporting territorial agglomeration to deep integration of participants into unified value chains is being updated.

The analysis of publications devoted to the management of regional economic systems reveals a certain theoretical gap in the institutional design of intermediary structures. Existing works consider cluster policy through the prism of direct subsidies or the creation of special economic zones, losing sight of the need to form specialized control circuits [9]. The concept of regional competence centers is mentioned fragmentally, often in isolation from the specifics of resource-producing entities, where the asymmetry of scale and technological requirements between city-forming enterprises and local businesses reaches critical values. Overcoming this gap implies rethinking the role of public authorities as architects of the institutional environment, which means reducing transaction costs of cooperation [10].

Materials and methods of research. The methodological basis of the research is a synthesis of institutional analysis and a structural-functional approach, in which a

cluster is a dynamic network of economic relations. To assess the effectiveness of existing territorial entities, a comparative analysis of keyperformance indicators of the declared clusters in resource regions was used, based on federal and regional statistics, as well as reports from relevant ministries. Identification of barriers to cooperation was carried out by means of structural decomposition of interactions between large subsurface users and small and medium-sized businesses, with the allocation of economic, regulatory and informational restrictions.

The development of an organizational and economic mechanism for the functioning of the competence center was based on the principles of project management and the theory of stakeholders, which ensured that the interests of all involved parties were taken into account. Predicting the multiplicative effect of implementing the proposed model was carried out using the econometric modeling apparatus, in particular, the intersectoral balance method, adapted to assess the impact of changes in the structure of local purchases on the gross regional product and employment of the population.

Research results and their discussion. An analysis of the practical implementation of cluster initiatives in the raw materials regions of the Russian Federation reveals a systemic problem that consists in replacing meaningful economic integration with formal registration of participants. Assessment of the effectiveness of existing territorial clusters shows that the key criterion for their success is often the quantitative composition of residents, while the depth of cooperative ties remains minimal. This approach leads to a dispersion of budget resources and a lack of a measurable contribution to the diversification of the regional economy. The scientific novelty of this study lies in the justification of the need for a paradigm shift, because management should be reoriented from maintaining geographical proximity to active design and management of value chains, where each participant performs a specific function that increases the final value of the product.

An obstacle to this transformation is the persistent asymmetry of economic relations between large commodity corporations and small businesses. The dominant

market players have strict quality standards, long supplier approval cycles, and high requirements for the financial stability of counterparties, which excludes local companies from value chains. To systematize the identified limitations, a classification of cooperation barriers is formed, presented in Table 1.

Table 1-Classification of cooperation barriers in resource-rich regions and their economic consequences

Group of barriers	Characteristics constraints	Economic consequences for the region
Institutional	Lack of uniform standards of interaction and transparent supplier selection procedures	Increased transaction costs
		Corruption risks
		Capital outflow from the region
Technological	Inconsistency of small business production capacities with technical specifications of subsurface	users Low added value of local products
		Dependence on imported components
Information	Asymmetry of data on the needs of large customers and the potential of local producers	Inefficient resource allocation
		Lost profits from unrealized cooperative transactions

Source: developed by the authors.

The organizational and economic mechanism of functioning of the regional competence center of the cluster is proposed as a response to the challenges. This institute acts as an independent intermediary that accumulates the aggregate demand of large companies and transmits it to small businesses in the form of clear technical tasks. The center's operating mechanism includes standardizing requirements, providing access to research equipment, and co-financing development work. The

interaction scheme, where the competence center occupies a central position, linking together executive authorities, anchor investors and a network of small businesses, reduces information asymmetry and distributes risks. In fact, the center takes on the function of supplier validation, which reduces the cost of large business audits and helps small businesses reach a new technological level.

The implementation of the described management mechanism generates a measurable multiplicative effect. Replacing external supplies with local products triggers an investment multiplier, stimulating the modernization of small enterprises' production lines. The development of related services and processing industries creates a stable employment multiplier, contributing to the retention of qualified personnel in the region. Forecast calculations show that if the competence center covers at least thirty percent of the anchor enterprise's needs for non-core assets and services, the growth of the gross regional product may amount to 1.5-2% per year, accompanied by a significant expansion of the tax base due to the legalization of previously shadow segments of the economy. Thus, the management of value chains through institutional hubs is the most optimal tool for structural adjustment of raw materials territories in modern economic realities.

Conclusions. The scientific novelty of the work consists in substantiating the expediency of changing the management paradigm, since the focus of state regulation should be shifted from maintaining geographical proximity to purposeful design and administration of value chains. Such a transition can overcome the inertia of single-industry development and create conditions for the organic integration of local producers into the technological processes of city-forming enterprises.

The key element of the proposed transformation is the institutionalization of regional competence centers that serve as an independent arbiter and integrator of economic interests. In practice, market mechanisms alone are not able to overcome the fundamental asymmetry between the rigid corporate standards of large subsurface users and the limited capabilities of small businesses. Creating a dedicated control loop eliminates information barriers, standardizes product quality requirements, and

provides access to a common research infrastructure. As a result, the transaction costs of finding counterparties and verifying suppliers are significantly reduced, which makes cooperative transactions economically feasible for both parties.

The macroeconomic consequences of implementing the described organizational and economic mechanism are manifested by activating the investment multiplier and expanding the tax base of the subject of the Russian Federation. Replacing external purchases with products from local enterprises encourages the modernization of production lines, which directly leads to an increase in added value created in the region. At the same time, the associated service and processing infrastructure is being developed, which forms a stable employment multiplier. Retention of qualified personnel and legalization of previously shadow segments of economic activity contribute to the stabilization of regional budgets, reducing their critical dependence on market fluctuations in commodity prices.

For state and municipal authorities, the results obtained make it necessary to improve existing methods for evaluating the effectiveness of cluster initiatives. The success criterion of the regional industrial policy should be a measurable share of localization of purchases of anchor companies and the volume of established inter-firm cooperation ties.

Список литературы

1. Зулькарнай И. У., Маричев С. Г. Селективная промышленная политика в Российской Федерации: критерии выбора регионов для реализации // Экономическая наука современной России. – 2026. – Т. 29. – №. 1. – С. 89-106.
2. Алтунина В. В., Анучина Д. А. Классификация регионов Российской Федерации в контексте пространственной поляризации // Экономика, предпринимательство и право. – 2022. – Т. 12. – №. 5. – С. 1453-1474.
3. Магомедова М. М., Алиева З. А. О некоторых особенностях разработки и реализации эффективной структурной политики в регионе // Региональные проблемы преобразования экономики. – 2024. – №. 4 (162). – С. 31-39.
4. Амаглобели Э. Г., Шеломенцев А. Г., Крестовских Т. С. Международный

опыт управления социально-экономическим развитием северных сырьевых регионов // Корпоративное управление и инновационное развитие экономики Севера: Вестник Научно-исследовательского центра корпоративного права, управления и венчурного инвестирования Сыктывкарского государственного университета. – 2024. – Т. 4. – №. 4. – С. 444-458.

5. Туменова С. А. Механизмы региональной агропромышленной интеграции в системе обеспечения продовольственной безопасности страны // Продовольственная политика и безопасность. – 2023. – Т. 10. – №. 1. – С. 49-68.

6. Крутиков В. К., Косогорова Л. А., Якунина М. В., Шаров С. В., Якунина В. А. Кластерный подход в реализации региональных российско-китайских проектов // Креативная экономика. – 2023. – Т. 17. – №. 8. – С. 3025-3038.

7. Вагин С. Г. Финансовые аспекты импортозамещения и формирование новых региональных кластеров // Управление. – 2025. – Т. 13. – №. 4. – С. 51-61.

8. Кулагина Н. А., Васильев А. А. Экономическая безопасность и устойчивое развитие промышленного потенциала региона в условиях современных вызовов (на примере Брянской области) // Вестник евразийской науки. – 2024. – Т. 16. – №. 6. – С. 31.

9. Беилин И. Л. Использование инновационного потенциала и кластерной организации в стратегии развития нефтегазовых регионов // Экономика промышленности/Russian Journal of Industrial Economics. – 2023. – Т. 16. – №. 2. – С. 213-225.

10. Петрова А. А. Теоретические подходы к страновой конкурентоспособности и их применение в российском контексте // Известия Санкт-Петербургского государственного экономического университета. – 2025. – №. 3 (153). – С. 14-23.

References

1. Zul'karnai I. U., Marichev S. G. Selektivnaya promyshlennaya politika v Rossiiskoi Federatsii: kriterii vybora regionov dlya realizatsii // Ekonomicheskaya nauka sovremennoi Rossii. – 2026. – Т. 29. – №. 1. – С. 89-106.

2. Altunina V. V., Anuchina D. A. Klassifikatsiya regionov Rossiiskoi Federatsii v

kontekste prostranstvennoi polyarizatsii // *Ekonomika, predprinimatel'stvo i pravo.* – 2022. – T. 12. – №. 5. – S. 1453-1474.

3. Magomedova M. M., Alieva Z. A. O nekotorykh osobennostyakh razrabotki i realizatsii effektivnoi strukturnoi politiki v regione // *Regional'nye problemy preobrazovaniya ekonomiki.* – 2024. – №. 4 (162). – S. 31-39.

4. Amaglobeli E. G., Shelomentsev A. G., Krestovskikh T. S. Mezhdunarodnyi opyt upravleniya sotsial'no-ekonomicheskim razvitiem severnykh syr'evykh regionov // *Korporativnoe upravlenie i innovatsionnoe razvitie ekonomiki Severa: Vestnik Nauchno-issledovatel'skogo tsentra korporativnogo prava, upravleniya i venchurnogo investirovaniya Syktyvkarskogo gosudarstvennogo universiteta.* – 2024. – T. 4. – №. 4. – S. 444-458.

5. Tumenova S. A. Mekhanizmy regional'noi agropromyshlennoi integratsii v sisteme obespecheniya prodovol'stvennoi bezopasnosti strany // *Prodovol'stvennaya politika i bezopasnost'.* – 2023. – T. 10. – №. 1. – S. 49-68.

6. Krutikov V. K., Kosogorova L. A., Yakunina M. V., Sharov S. V., Yakunina V. A. Klasternyi podkhod v realizatsii regional'nykh rossiisko-kitaiskikh projektov // *Kreativnaya ekonomika.* – 2023. – T. 17. – №. 8. – S. 3025-3038.

7. Vagin S. G. Finansovye aspekty importozameshcheniya i formirovanie novykh regional'nykh klasterov // *Upravlenie.* – 2025. – T. 13. – №. 4. – S. 51-61.

8. Kulagina N. A., Vasil'ev A. A. Ekonomicheskaya bezopasnost' i ustoichivoe razvitie promyshlennogo potentsiala regiona v usloviyakh sovremennykh vyzovov (na primere Bryanskoi oblasti) // *Vestnik evraziiskoi nauki.* – 2024. – T. 16. – №. 6. – S. 31.

9. Beilin I. L. Ispol'zovanie innovatsionnogo potentsiala i klasternoi organizatsii v strategii razvitiya neftegazovykh regionov // *Ekonomika promyshlennosti/Russian Journal of Industrial Economics.* – 2023. – T. 16. – №. 2. – S. 213-225.

10. Petrova A. A. Teoreticheskie podkhody k stranovoi konkurentosposobnosti i ikh primeneniye v rossiiskom kontekste // *Izvestiya Sankt-Peterburgskogo gosudarstvennogo ekonomicheskogo universiteta.* – 2025. – №. 3 (153). – S. 14-23.