

## **DEVELOPMENT OF THE ECONOMY OF A RESOURCE REGION BASED ON THE «SMART SPECIALIZATION» MODEL**

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The raw material factor, interpreted in the scientific literature [1-3] as the “resource curse” of transition countries of the economy and rich in mineral resources, has a dominant effect on the socio-economic development of the country. Institutional transformations are hindered in the raw material economy [4], since the presence of the raw material factor in the economy contributes to the non-transparency of the distribution of natural resource rent in society. An inefficient institutional environment impedes the growth of the economy, reducing quality indicators, which, in turn, has a negative impact on the standard of living of the population, which manifests itself in an increase in the stratification of society and an increase in socio-economic inequality.

Raw material specialization predetermines regional imbalances in the level of economic development. Commodity regions attract mobile and skilled labor resources,

attract investment, thereby becoming leading centers for certain socio-economic indicators. At the same time, difficult climatic conditions and the high cost of maintaining infrastructure become an obstacle to their sustainable socio-economic development.

Currently, in the domestic economy, science, one of the key areas of support for the export of non-primary goods is cluster policy. The cluster model of regional development as an instrument of state policy, the conditions for its formation and implementation, the conceptual structure are widely represented in the domestic scientific literature. According to the current legislation of Kazakhstan, regional development is supported by the initiative of either republican or regional government bodies or industrial enterprises. The ideas of innovative development of the regions of Kazakhstan have always been important and regularly raised in state strategic and program documents

In a message dated January 10, 2018, of the First President of the Republic of Kazakhstan - the Leader of the nation N.A. Nazarbayev announced to the people of Kazakhstan that "the first priority is industrialization, which should become the flagship of the introduction of new technologies". Moreover, an important provision is that "industrialization should become more innovative, take advantage of the technological structure 4.0".

It should be noted that the experience of the formation of cluster-network structures in developed and rapidly developing countries confirms the need for a preliminary thorough typology of the country's regions to determine possible cluster localization territories.

In the practice of typologizing the regions of Kazakhstan, it is not customary to single out "commodity regions". To conduct a comprehensive analysis of socio-economic development, develop mechanisms for managing the innovative development of Kazakhstan's primary regions, the key criterion in the project will be such an indicator as the share of gross value added from the extraction of mineral resources in the structure of the gross regional product (during 2009-2019 over 30%). According to this indicator, 4 commodity regions of Kazakhstan (Atyrau, West Kazakhstan, Mangistau and Kyzylorda regions) can be distinguished in the socio-economic development where oil and gas production dominates over the extraction and export of other types of natural resources.

- preferential localization of natural resources in areas with adverse climatic conditions;

For the selected regions, the common features are:

- High security of the region in natural resources that are in demand on the world market;

- preferential localization of natural resources in areas with adverse climatic conditions;

- underdeveloped regional infrastructure (social, industrial, transport, innovative);

- the inland geographical position of the region, increasing transport and logistics costs;

- low population density and underdevelopment of the resettlement system;

- technological weakness of regions.

In this regard, the commodity regions of Kazakhstan were selected as the object of study in the project.

In modern economic conditions, the growing influence of scientific and technological progress on the development of regional ecosystems attests to the importance and relevance of strategic innovation management at the regional level. A strategic guideline for the commodity regions of Kazakhstan is the formation of new rapidly developing sectors of the economy (“knowledge economy”, digital economy).

Strategic management based on innovative changes focuses on transformations in the ecological, social and economic subsystems of the region. At the same time, successful experience of innovative development of the regions indicates that when developing mechanisms for introducing innovations and innovative processes in the region, a number of serious managerial problems arise. In this regard, the key goal of developing mechanisms for managing the innovative development of the raw material regions is to increase the volume of produced and sold innovative products.

In the conditions of increasing competition in the technological sector of the economy and the intensification of innovation, innovative management tools are needed to facilitate the effective planning, organization, stimulation and control of the introduction and implementation of innovations in the resource regions of Kazakhstan. Consequently, new scientific approaches are required to manage the innovative development of the commodity region, which will increase the effectiveness of regional socio-economic systems.

At present, the “*smart specialization*” model is an advanced tool in the field of determining the localization of clusters, which is an individual scientific approach to the formation of regional clusters. The “smart specialization” model emphasizes the need to search and select areas of activity that are able to make the maximum contribution to the socio-economic development of the region by supporting and stimulating innovative research and development in the identified areas of regional specialization. An important condition for regional economic progress is the identification of potential poles of innovative growth in the development of the region based on an analysis of their own potential and best international practices.

The idea of “smart specialization” was first proposed in 2009 by research economists Foray D., David P. and Hall B. [5]. However, this concept already underlies the formation of clusters in many countries of the European Union (EU), being part of the Europe 2020 Development Strategy [6]; it is gradually gaining the status of an official regional policy in developing economies.

The significance of the “smart specialization” model is determined by the following factors: prioritizing the innovative development of regions, attracting a wide range of investors and stakeholders, developing mechanisms for managing innovative development of regions.

The methodology for the formation of the EU Structural Fund forms the foundation of the “smart specialization” model, which has been formed over 15 years on the basis of experience in supporting innovative development strategies, research experience of the World Bank, the International Monetary Fund, and the Organization for Economic Co-operation and Development (OECD). The regulatory framework that

defines the essence of the concept of “smart specialization” is the order of the Council and the Parliament of Europe No. 1301/2013 of 12/17/2013 [7].

Currently, the “smart specialization” model has gained its popularity outside the EU and is used in the development of the UN [8, 9] and the OECD [10]. A number of principles of the “smart specialization” model are reflected in the strategies of regional innovative development of South Korea and Australia [10]. As part of the Polos de Competitividad project, Brazil, Argentina, Mexico, Chile have already created a database of 157 areas of specialization in 24 regions using smart specialization tools.

The “smart specialization” model as an instrument of regional innovation policy, the conditions for its successful implementation and the conceptual structure are widely represented in foreign scientific literature. It should be noted that in the domestic economic science devoted to the issues of innovative development of the regions, the problems of forming management mechanisms based on the “smart specialization” model have not received due attention. However, many studies conclude that Kazakhstan has the necessary innovative potential, which so far has not been possible to implement in world-class projects. Among the reasons, the following are noted: the raw materials orientation of the regions, excessive bureaucracy, underdeveloped partnerships of the education system, science and the real sector, low innovative activity of the enterprise, inefficient management mechanisms, etc.

Since the “smart specialization” model is a new scientific direction in the field of regional innovation policy, the scientific and methodological basis for this problem is currently at the initial stage of formation, especially for such an object of study as a raw material region. It should be noted that the methodological base is being developed more actively in relation to developed economic systems. This is mainly due to the fact that developed EU countries have long-term experience (about 30 years) in the formation and implementation of cluster policies. This accumulated experience became the objective reason for the transition of the EU countries' policies to the “smart specialization” model, when the national governments of a number of countries were faced with the shortcomings of previous innovative concepts:

- copying innovations without taking into account the analysis of their own potential and capabilities;
- weak interaction at different levels of management;
- lack of interregional and international perspectives;
- frequent cases of inconsistency of the selected areas of specialization with the economic and industrial structure of the region.

Thus, the “smart specialization” model is designed to improve the processes of formation and development of regional cluster structures. The main feature of the “smart specialization” model is the process of “entrepreneurial innovation”, which involves the involvement of entrepreneurial structures to identify promising areas of specialization in the region. Having practical experience and knowledge of the necessary resources to start innovative activities, representatives of the business community act as an integral element that can increase the competitiveness of regional cluster structures. In addition, the “smart specialization” model implies the participation of research organizations, universities, government and civil society in the process of identifying areas of regional specialization. According to the “smart

specialization” model, the “triple helix” model should expand with the participation of investors and civil society. Thus, civil society plays an important role in the process of creating innovation by increasing consumer demand.

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