

Theoretical Aspects of Managing the Innovative Development of Bioeconomic Branches

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Annotation: This study examines the theoretical aspects of managing the innovative development of bioeconomy industries. At the present stage, the innovative development of bioeconomy sectors is an important component in the transition from an economy with a raw material orientation to an economy of an innovative type. As prerequisites for the formation of a bioeconomy, one can note an increase in the use of renewable sources of raw materials, the introduction of new methods of deep processing and the biologization of the human environment.

Keywords: bioeconomics, innovations, biotechnologies, management system, innovation process.

Introduction. According to the expert data of the BioTech Technological Platform 2030 in a number of areas, the biotechnology market is increasing annually by 5-30% and by 2025 it can reach 2 trillion rubles. dollars, while the share of Uzbekistan in the global volume is almost zero. According to the forecast of the Organization for Economic Cooperation and Development until 2030, the share of biologization in such areas as the chemical and pharmacological industries, agricultural production will significantly increase. Colossal reserves of natural resources are concentrated in our country, which allows us to maintain the current level of development of the bioeconomy, in addition, a significant potential of biotechnologies has been formed in Uzbekistan, but there are practically no effective mechanisms for managing and forming economic relations within the framework of the innovative development of bioeconomy sectors, and therefore there is a risk of loss markets for biotech products and the ability to compete with imports.

This trend necessitates the innovative development of the bioeconomy of Uzbekistan and sets the task of improving management approaches.

The problems of formation and implementation of programs for the diversification of the national economy, as a way out of the "oil needle" with a simultaneous transition to an innovative economy (knowledge economy), are currently devoted to a significant number of works. No less significant for research topics today are the solution of issues of diversification of the economy at the regional level. Solutions within the framework of such problems are offered in a wide range, the most popular of which are the following: diversification up to full-fledged re-profiling of the main industrial products of these enterprises in accordance with current market conditions, participation in clustering programs and other types of cooperation, which will give a new breath to the development of the enterprise, disaggregation of giant enterprises, including through the introduction of outsourcing processes for non-core assets, which in theory should allow them to become self-sufficient in the post-industrial era, programs for the development of industrial tourism at such enterprises, as well as a number of other initiatives that require only a brief mention of them.

In a period of high, and even relatively high oil prices, this phenomenon for managers at the regional level may seem more like an advantage that does not require changes in the medium or even long term, however, as the global rejection of hydrocarbon raw materials accelerates, the problem may emerge. in a very complex form already in the next 5-7 years, therefore, deep programs for the diversification of the regional economy of industry must begin here today. In recent years, several interesting scientific papers and publications have been published

on this issue. Programs of this kind, in the analyzed region, take place today and in practice, and not only in scientific research.

As part of the text of this program, it was formulated that the development of the timber industry complex in accordance with the Strategy for Socio-Economic Development for the period up to 2030 is considered as an important task for modernizing and diversifying the region's economy. In this regard, the main attention within the framework of the subprogram for the development of the timber industry complex is aimed at the development of industries focused on the introduction of the most economical and popular technologies, among which the development of a bioeconomy based on the use of wood fuel is mentioned. In order to solve the problems that have arisen in the investment sphere, the government in 2021-2023 implemented a target program of the region for the development of the timber industry complex. During the implementation of the target program, it was not possible to completely solve the problem of intensifying investment activities in the timber industry.

In this regard, this program should have become a logical consequence and continuation of the previous program and is aimed at further development of the results achieved and acceleration of the processes of modernization and technical re-equipment of the organizations of the timber industry complex.. The implementation of this event is aimed at creating conditions for the development of the pellet market and supporting manufacturers.

The official wording in this report of the decline in production since 2017 of this product is “The decrease in the production of fuel wood pellets (pellets) is associated with a drop in demand for products.” If the construction of the bio-economy all over the world were built according to the logic of supply and demand curves classical for economic theory, then there would be no question at all about this formulation. However, the formation of the bio-economy around the world, whether in Germany, China, the United States or Saudi Arabia, is carried out through government incentives, so this wording in the official report raises questions.

One of the main declarations about the departure of many economically developed countries from the use of hydrocarbon raw materials is the desire to reduce greenhouse gas emissions into the atmosphere. Such a transformation of the resource raw materials of the world economy is supposed to be carried out primarily through renewable energy sources, which include biofuels. Today, up to 60% of all biofuel products in the world are far from innovative in nature, because account for firewood and dried manure, which are used for heating houses and cooking, which are used by up to 40% of the world's population.

If in the coming years, these huge volumes can be transferred to a more efficient production of fuel pellets and briquettes. In Uzbekistan during the 2020s. the production of such an innovative product of this industry as pellets (fuel wood pellets) has been steadily growing, most of which (~ 85%) were exported. In particular, for the period 2017-2022. pellet production in the country increased 3 times. The main reason for the growth in the production of pellets in 2018, according to market participants, is associated with an increase in the export potential of products due to the growth in the exchange rate.

Uzbekistan market of fuel pellets in 2017-2022 continues to grow by about 100 thousand tons per year. In 2017, from 0.9 to 1.2 million tons of pellets were produced. According to Faostat forecast, wood pellet production in Uzbekistan reached 4 million tons by 2020 and will reach 8 million tons by 2025, however, the Ministry of Energy of the Russian Federation predicts a more moderate growth rate of 10-15% annually. According to the authors of this article, decision makers in our country should stimulate the pace of market development to a greater extent, according to the forecast indicators of the above organization, rather than focus on the modest indicators of the domestic Ministry of Energy, which looks at the question regarding the situation and those very “invisible hands of the market”, when in the same period the rest of the world is building the Bioeconomy according to the Keynesian "stimulation" of development.

Management of innovative development involves a set of measures based on the principles and approaches to decision-making, taking into account the criteria for the effectiveness of such decisions. Yu.O.Baklanova emphasizes that the management of innovative development should take into account openness and flexible adaptability to dynamically changing environmental conditions. A. Wiskofa believes that openness either creates conditions for a transformation for the better, which can be expressed in increased competition in the biotechnology market, or for the worse, creating the risk of interference in business processes, which will negatively affect the industry. According to the OECD, the openness of innovation activity is directly related to its attainability and accessibility.

The basis of the study was the works in the field of innovation management problems and the study of the experience of developing bioeconomy abroad. Results. In countries with a high level of biologization, the initiator of stimulating the bioeconomy is the state, by taking measures of administrative and economic impact, therefore bioeconomy belongs to a number of scientific and practical priorities. The greatest development in terms of consumption and production of biotechnological products was achieved by Japan, the EU, the USA, Korea, Canada, in addition, over the past ten years, China, India and Brazil have entered the race for innovative development of the bioeconomy, they are implementing large-scale biotechnology development programs and modernizing existing traditional production. Large-scale modernization of production and stimulation of the development of the bioeconomy in foreign countries takes place through direct financing of biotechnologies, since the accumulated resource potential in the form of competencies, technologies, technology parks and other elements cannot be realized without the direct participation of the state, as evidenced by several frozen projects in the field of biotechnology in Uzbekistan.

The process of managing the bioeconomy must be built based on setting a goal and coordinating it with the main forces of the region; developing a strategy for the development of bioeconomy in the region with the involvement of external experts and monitoring its implementation. Favorable conditions for the innovative development of bioeconomy sectors are implemented through an effective management system that allows initiators to interact with consultants, funds, investors and other participants in the process. The model of the bioeconomy management system is mainly based on traditional approaches and reflects the system of institutions and the formation of infrastructure to ensure the integration of science and industry. The process is built from setting a goal to monitoring implementation, with the launch of an innovative process, the result of which is the implementation of biotechnologies.

Interacting participants in the process of creating and using innovations form an innovation system embedded in the innovation policy. The effectiveness of innovation policy and the expected progress depend on the approaches to the interaction of all participants, which determines the need to improve the management tools used in the process and the formation of a bioeconomy development strategy.

Uzbek and foreign scientists have proposed many approaches to solving the problem of strategic development. A number of scientists believe that a strategy of catching up modernization will be acceptable for Uzbekistan, others believe that it is worth using a mixed strategy of innovative development, since in this case the opportunities for practical activities and the use of their own innovations are expanding. In our opinion, a mixed strategy in the innovative development of bioeconomy sectors is more acceptable for Uzbekistan, since it is necessary to take into account the multifariousness of technological potential, differentiation of levels of development of territories and their innovative capabilities. Discussion. The use of bioresources from plants and insects to molecules for industrial purposes is based on the main principle of bioeconomics - biologization.

The innovative development of bioeconomy sectors is largely determined by the introduction of biotechnologies into traditional sectors of the economy and the growing interest in the commercialization of research and modeling of biological systems. The importance of biotechnologies in the modern world is also determined by the fact that

interest in them is on the same level as nano and information technologies. Biotechnologies are the driving force behind many industries, agriculture, agriculture, oil refining, waste management and other industries that shape the innovative development of the bioeconomy.

Biotechnologies make it possible to replace established traditional technologies, and are classified as "disruptive" technologies, bring completely new products and services, gradually crowding out supporting innovations, followed by a fundamental change in the entire innovation system. In our opinion, the innovative development of bioeconomy sectors implies an effective system of economic relations for the use and growth of the territory's innovative potential, ready for transformation to new market trends.

In general, the bioeconomy is most often defined as the knowledge of the intensive exploitation of biological resources, biological processes and principles for the sustainable production of goods and services in all sectors of the economy. It should be noted that bioeconomic issues is one of the promising areas of development both at the regional, national and international levels.

Conclusions.

The management of the innovative development of bioeconomy sectors should be based on the introduction of biotechnologies into traditional industries, which will solve a wide range of social, environmental and economic problems, create a competitive environment capable of asserting itself in the world market, ensure the independence of the state in the high-tech sector, and strengthen interstate ties.

References

1. Niyozova, I. (2021). The Transition To The Green Economy And The Importance Of Strategy. Центр Научных Публикаций (Buxdu. Uz), 8(8).
2. Niyozova, I. (2021). Mechanism Of Implementation Of Mandatory Health Insurance In Uzbekistan Under Conditions Of Increasing Integration Processes. Центр Научных Публикаций (Buxdu. Uz), 7(7).
3. Усманова, А. Б. (2019). Квалификация Кадров В Туристической Сфере. Мировая Наука, (4), 471-473.
4. Bakhodirovna, U. A., & Pkhomovna, Z. M. (2021). Tourist Potential Of The Bukhara Region. Researchjet Journal Of Analysis And Inventions, 2(04), 243-246.
5. Olimovich, D. I., Bakhtiyorovich, T. M., & Salimovna, N. G. (2020). Improving Of Personnel Training In Hotel Bussines. Academy, (2 (53)).
6. Усманова, А. (2020). Prospects For Development Of Rural Tourism In Uzbekistan. Центр Научных Публикаций (Buxdu. Uz), 4(4).
7. Abdullayevna, Q. Z., Anvarovich, Q. A., & Muxtorovna, N. D. Theoretical Foundations Of Enhancing The Competitiveness Of The National Economy. Gwalior Management Academy, 87, 54.
8. Усманова, А. (2021). Tourist Potential Of The Bukhara Region. Центр Научных Публикаций (Buxdu. Uz), 6(6).
9. Rakhimova, I. I., Berdikulova, G. N., Axmedova, Z. J., & Sayitova, U. H. (2022). Positive Aspects Of The Communicative Psychological Effect Of Social Networks On The Individual. Asian Journal Of Research In Social Sciences And Humanities, 12(1), 349-353.
10. Niyozova, I. (2021). Innovative Ways Of The Management System Of A Family Enterprise. Центр Научных Публикаций (Buxdu. Uz), 8(8).

11. Mukhammedrizaevna, T. M., & Bakhriddinovna, A. N. (2020). Requirements For Quality, Logistics And Safety When Growing Agricultural Products. *Достижения Науки И Образования*, (10 (64)).
12. Rakhmatullaeva, F. M., & Nishonova, Z. A. (2017). Agrotourism And Its Influence On The Economy Of Agro-Industrial Complex. In *Современное Экологическое Состояние Природной Среды И Научно-Практические Аспекты Рационального Природопользования* (Рр. 1918-1919).
13. Sharopova, N. (2019). The Role Of Marketing Research In Determining The Effectiveness Of Preschool Education In Child Development. *Journal Of Critical Reviews*, 7(2), 2020.
14. Radjabovna, S. N. (2023). Possibilities Of Using Methods And Digital Technologies Of Data Analysis In Entrepreneurial Marketing Research In The Conditions Of Uzbekistan: A Conceptual Framework. *International Journal Of Social Science Research And Review*, 6(5), 262-270.
15. Subanova, B. (2022). Competence And Key Factors Of Competence Innovative Approach. *European International Journal Of Multidisciplinary Research And Management Studies*, 2(06), 41-45.
16. Tairova, M. M., & Kayimova, Z. A. (2016). Foreign Experience In Managing Higher Education. In *The Collection: Scientific And Practical Support For The Integration Of A Modern Learning Environment: Problems And Prospects. Materials Of International Scientific And Practical*, 72-77.
17. Абдуллоев, А. Ж., Таирова, М. М., & Аминова, Н. Б. (2020). Environmentally Friendly And Sustainable Supply Chain Management In The Platform Economy. *Economics*, (3), 23-25.
18. Kayimova, Z. A., & Tairova, M. M. (2016). Investment Activity Of Commercial Banks Of The Republic Of Uzbekistan.
19. Abdullaevna, K. Z., & Alievna, M. O. (2020). Innovation Policy Of The Country And Its Mechanism. *Достижения Науки И Образования*, (2 (56)).
20. Sharopova, N. (2019). Analysis Of Parents' Satisfaction With Pre-School Education In Uzbekistan. *International Journal Of Scientific & Engineering Research*, 10(9), 829-840.
21. Sharopova, N. (2021). Marketing Strategies For The Development Of The Market Of Preschool Education Services In Uzbekistan. *Berlin Studies Transnational Journal Of Science And Humanities*, 1(1.1 Economical Sciences).