Advances in Research on Russian Business and Management
ISSN: 2578-725X, e-ISSN: 2578-7268

Problems and Prospects of Green Economy Development in Russia in the Context of Regionalization and Academic Leadership

Evgeniy S. Popov[1]

[1]Platov South-Russian State Polytechnic University (NPI), Novocherkassk, Russia

Author Note

Evgeniy S. Popov

ORCID: 0000-0002-3474-4994

Platov South-Russian State Polytechnic University (NPI), 132, Prosveshcheniya Str., Novocherkassk, 346428, Russia

e-mail: povove@mail.ru

Abstract: The research aims to analyze the historical problems and prospects of green economy development in Russia in the context of regionalization and the orientation of educational policy toward academic leadership. The author employs a combination of methods to achieve this goal, including the theory of environmental crises, the consumer-value approach in economic development, the concept of academic leadership in higher education, and the institutional approach. It is demonstrated that the environmental crisis in Russia emerged in the 20th century. The positive resolution of environmental issues lies in developing the green economy within the regionalization framework and in collaboration with higher education institutions. Based on the analysis of Russia's environmental problems, it is shown that a way out of the current situation lies in developing a green economy based on the consumer-value approach. The advantage of this approach lies in its focus on saving labor and natural resources in the context of increasing consumption levels. Additionally, for further development of the green economy, it is necessary to expand the involvement of the state and industrial enterprises. Moreover, the academic leadership of higher education institutions contributes to developing the green economy within the framework of the university's third mission.

Keywords: academic leadership, use value, environmental crisis, wastewater treatment plants, green economy

JEL codes: A19, I20, P11, P18, Q01, Q53, Q57

The 20th century was a century of escalating environmental crises for the territory of Russia, including the republics that were part of the Soviet Union. The Kulak strike of 1925, followed by the War Alarm of 1927 with the threat of war with the British Empire and Poland, provided an understanding of the vector of economic development for the Soviet government and the All-Union Communist Party (Bolsheviks). The rapid industrialization and collectivization of the 1930s required methods of natural resource utilization that directly began to impact the state of the environment and the health of the Soviet people.

For instance, the accelerated development of the chemical, mining, and metallurgical industries was based on the method of maximal extraction and utilization of resources. The

tasks of reproducing a range of labor objects were set by the state leadership and economic entities to the extent that it ensured their prolonged resource use. The consequence was significant air pollution, especially in cities, and a decrease in the quality of water and soil resources.

The first attempt to resolve the environmental crisis in the Soviet state was undertaken after the Great Patriotic War based on a long-term strategy within the framework of Stalin's plan for nature transformation. As is known, periodically occurring droughts and soil salinization led to mass famine, increased morbidity, and worsening natural conditions in the country's territories. Accordingly, with the implementation of the strategy from 1948 to 1953, Soviet leaders sought to address socially significant problems by positively changing the ecosystem of natural communities and improving the zone of ecological disaster to a favorable level.

Following Nikita Khrushchev's rise to political power, there was a deviation from Stalin's plan for nature transformation and a shift towards developing virgin lands. The result of this policy was the exacerbation of the ecological crisis in agriculture, leading to a reduction in the yield of certain crops cultivated for food production. This phenomenon, to some extent, influenced the events of 1962 in Novocherkassk, the Rostov Region, specifically the spontaneous emergence and shooting of a workers' demonstration demanding a reduction in planned prices for food, an increase in wage rates, and provision of the city with food.

Ultimately, after the dissolution of the USSR and the restoration of capitalism in the Russian Federation in the 1990s, a modern ecological crisis of various natural resources became firmly established. This served as the premise for the objective of this work – to analyze the ecological crisis in Russia and the prospects for overcoming it within the framework of a green economy, considering various regional aspects and in the context of the emergence of academic leadership.

Materials and Method

D. I. Lyury (2004) and V. S. Fridman (2017) studied the features and specifics of the emergence of an ecological crisis of natural resources in the regional space.

D. W. Pearce, A. Markandya, and E. Barbier (2007), H. B. Dulal, R. Dulal, and P. K. Yadav (2015), and others examined the green economy, viewed as a system of continuous renewal and continuation of appropriation of natural objects within a specific system of social relations, where natural components are sustainably reproduced, and their condition does not negatively impact the population's health.

In our view, the presented analysis of the green economy is based on a value paradigm, which leads the aforementioned authors to develop and propose a range of financial instruments to support the development of the green economy through the redistribution of part of the surplus value (profit), including in the form of resource extraction tax, restoration, and maintenance of a favorable state of the environment, and taxes on emissions of pollutants into the atmosphere and water resources.

However, in reality, natural resources for humans are external objects with useful properties. Therefore, they serve as consumer values. Accordingly, they reveal their significance in the context of the green economy in the consumer-value paradigm, analyzed in the works of V. Ya. Elmeev (2007), V. G. Dolgov (1988), O. A. Mazur (2009), and others.

Furthermore, since one of the factors in any economy is the human being as a labor force carrier, and their reproduction is a crucial aspect in developing the green economy, it is necessary to analyze the emerging academic leadership of higher education institutions in Russia. This phenomenon in the higher education system encompasses aspects of the university's third mission. In the space of Russian educational discussion, academic leadership is studied in the works of K. V. Vodenko (2022), O. S. Ivanchenko (2020), and others.

Simultaneously, to implement a green economy in the regional space, it is necessary to employ an institutional approach. This approach makes it possible to identify interested parties and the methods of their participation and influence on regional structures to develop this economic system.

Additionally, attention should be paid to the environmental state of the regions and how the national program for restoring the natural environment to an environmentally favorable level is being implemented. This issue is addressed in the economic works of O. A. Khalturina (2022) and others.

Results

In the territory of today's Russia, it historically unfolded that the activation of public consciousness regarding environmental issues and targeted actions for preserving the natural environment began in the late 1980s. The struggle of various social groups and layers of the Soviet population in 1989 to stop the pollution of Lake Baikal by the pulp and paper mill is well-known.

However, the beginning of the 1990s and the critical situation in the country primarily defined the economic direction as ensuring the reproduction of society. Environmental protection activities had secondary importance. Furthermore, deindustrialization with the mass closure of environmentally polluting enterprises did not resolve the problems in the field of environmental preservation, but rather reinforced the trend of the environmental crisis.

This situation is linked to the fact that the resource-utilizing activities of bourgeois Russian society have been and continue to be carried out within the framework of the "nature-partner" system. To be more specific, to reproduce natural resources within a market economy, a certain level of capital investment is necessary, which will ensure their sustainable preservation at a qualitative level.

However, the closure of environmentally polluting enterprises in the regions fails to improve the environmental situation. Moreover, it has become one of the factors contributing to the development of the environmental crisis. This is because these enterprises had wastewater treatment facilities in their technical structure, allowing for environmental safety and reducing the concentration of pollutants to permissible levels. Therefore, the closure of environmentally polluting enterprises without prior multi-year measures to restore the eco-

resource potential created conditions for the development of an environmental crisis for a number of labor objects, primarily water and air resources.

The second significant factor that affected the regional environmental crisis was that the new private owners who managed to retain environmentally polluting industrial enterprises reduced capital expenditures on environmental safety to achieve superprofits through savings in constant capital. As noted by the Russian ecologist V. S. Fridman (2017), Russia's return to a market economy determined this vector of resource-utilizing activity, characterized by maximal extraction and utilization of natural resources and the transfer of all necessary measures for restoring the eco-resource potential to natural systems.

Furthermore, from the 2000s to the present, the country's economic orientation towards the use of a wide raw material base and the export of natural resources to other countries provided conditions for the gradual transformation of the state into a "resource appendage." It was only the cultural legacy of the Soviet Union in the form of developed productive forces and a range of economic and political entities that prevented Russia from becoming a country entirely dependent on Western states.

It is important to note that the political leadership of Russia initiated a real attempt to create a green economy by implementing an environmental agenda within the framework of the national project "Ecology." However, as economic studies on the issues and prospects of the "Ecology" project show, despite the increase in funding from the federal budget for the implementation of planned activities within the national project from 2019 to 2024, the utilization of these funds, on average, reaches only 50%. (Khalturina, 2022).

The lack of utilization of funds, especially for implementing the best environmental technologies in polluting enterprises, which negatively affects the environment, leads to the conclusion that the goals and objectives of the national project will be unattainable in the regions. The consequence will be further increases in the incidence of population diseases, particularly malignant neoplasms.

It is known that in the value paradigm of the economy, environmental safety for private enterprise owners is a direct deduction from profits. Therefore, as Russian economist O. A. Mazur (2009) rightly points out, there is a need to transition to the opposite method of evaluating the efficiency of treatment facilities based on the consumer-value paradigm. This method should be focused on the criterion of exceeding time savings as a result of reducing the duration of diseases in individuals, along with an increase in life expectancy in relation to labor (time) spent on treating the population.

Thus, in the regional space, entities focused on the development of a green economy receive a qualitatively different criterion for the efficiency of treatment facilities and the green economy. This transforms costs into a production condition, and future time savings for individuals become the ultimate goal – a social effect.

Furthermore, treatment facilities, as consumer value, preserve a range of natural resources at a qualitative level. This consequently leads to the saving of a larger amount of social labor. Accordingly, natural resources, as objects of labor, which are consistently

maintained at the required qualitative level for the production process, contribute to savings in their preparation, use, and treatment.

As mentioned earlier, the underutilization of funds for the purpose of technological upgrades of enterprises within the national project "Ecology" is a problem that affects the development of the green economy in the Russian Federation. The large-scale privatization of environmentally polluting production and water treatment facilities in the housing and utilities sector has reduced the role of state and municipal participation in environmental safety issues.

In our opinion, for Russia's development in the field of the green economy, there should be a partial return of state and municipal participation as economic entities within their regions. In other words, direct management of polluting production and facilities in the housing and utilities sector should be based on the organized activities of workers who seek to improve the working conditions within which their labor activity takes place.

These conclusions are related to the fact that, on the one hand, although there are environmental public associations in the country, their actions have little influence on the activities of industrial enterprises in terms of greening production, as they represent an external factor that cannot truly impact this process. On the other hand, workers in enterprises constitute an internal factor, and their actions directly affect the activities of industrial enterprises.

However, currently, in Russia, trade union activity aimed not only at improving working conditions but also at raising wages to the level of the cost of labor is only starting to revive. It is important to note that improving working conditions for workers and preserving the environment are interconnected factors. This is because a qualitative change in the factors of the production environment, which contributes to the preservation of health and the reduction of the duration of illnesses, implies the introduction of environmentally friendly technologies in the field of treatment facilities.

However, environmental issues in workers' minds begin to take hold at a certain level of consumption, as the under-reproduction of labor determines the satisfaction of personal life needs as primary, while the fight for environmental preservation becomes a secondary need. Therefore, through an increase in real wages and an elevation of the workers' needs, it is possible to activate the necessary activity directed towards environmental safety as a requirement for living in favorable environmental conditions in the public consciousness.

We believe that to achieve the set tasks, which are capable of influencing the process of the formation of a green economy in the regional space, a certain interaction between various stakeholders interested in the development of the environmental and social aspects of regions is necessary. In Russia, there are legislatively established tripartite commissions for regulating socio-labor relations, which include trade unions, employers' associations, and public authorities.

It is important to note that the activities of tripartite commissions can address social and environmental issues through the conclusion of agreements and the establishment of specific commissions on environmental matters in the regions. Moreover, it is necessary to emphasize that in the context of regionalization, specialized commissions on environmental issues will

need to turn to higher education institutions in the context of the "third mission of the university."

To begin with, it is important to note that the "third mission" is a specific interaction between universities and regions to promote social development as a whole. Acting as an academic community, higher education institutions can become experts in various regional issues and also fulfill state and municipal orders.

Contemporary regional management methods are based on the use of current scientific research from various fields of scientific knowledge. This is particularly important for the development of a green economy. This method contributes to improving the quality of management decisions made and enhances the interaction between the expert community and commissions in environmental and social areas.

However, up to this point, such intellectual and human potential has not been actively utilized in the regions. This is due, on the one hand, to the institutionalization of this social phenomenon and, on the other hand, to the changes occurring in higher education. More specifically, with the orientation and establishment of academic leadership in higher education within the implemented program "Priority-2030." Academic leadership, as a new state of Russian universities, based on a return to the tradition of fundamentalism in the training of students and scientific research in the field of nature and society, implements the first two "missions of the university" (Vodenko, 2022).

The consumer-value character of student training determines the property of their labor power as a future economy of social labor. In other words, highly qualified workers can save not only time but also natural resources in the process of their work and create products with high consumer properties. We believe that saving labor can directly impact the preservation of the environment.

The transfer of environmentally friendly technologies into material production is the moment that directly affects the development of the green economy in the region. Universities can conduct applied scientific research, search for promising students, and integrate the results of non-productive activities into the regional economy.

Therefore, the necessary condition for developing the green economy is the interaction between universities and material production, in fact, a return to the Soviet tradition where higher education institutions were an extension of production. It is important to revive in Russian practice the close interaction of these areas based on basic departments. At the same time, scientific and technical developments must meet the consumer-value criterion; namely, the savings in future labor should exceed the costs of past labor.

In the end, overcoming environmental problems and developing a green economy depends on transitioning to a qualitatively different paradigm of social development, as well as the active involvement of regional stakeholders.

Discussion

Compared to other approaches to developing the green economy, which focus on using state regulation and taxation methods for economic entities, the author's approach, utilizing the

consumer-value method, demonstrates that the natural environment and its components are essential elements of the production process. They need to be reproduced not only for further use but also to serve as objects of labor; they can save the consumer's social labor. Furthermore, the development of tripartite commissions for regulating socio-labor relations with the involvement of the academic community from regional universities can significantly contribute to the development of the green economy and environmental safety.

Conclusion

Therefore, based on a historical analysis of the environmental issue, it is evident that the deterioration of the natural environment in Russia emerged in the 20th century. Attempts to address this problem were made at various times through environmental development strategies for regions, often involving government participation. Currently, this issue remains relevant, and the prospects for its positive resolution lie in developing the green economy. This approach should utilize the consumer-value method and expand the involvement of workers in the management of environmentally polluting industries through the empowerment of the social institution of tripartite commissions.

Simultaneously, it is important to emphasize that the academic leadership of higher education in the Russian regional context is becoming a factor in developing the green economy. This is achieved through the participation of the academic community in the social life of regions, the development of the student workforce, and the transfer of environmentally clean technologies.

Acknowledgments

The article was prepared within the framework of the implementation of the grant from the President of the Russian Federation for the state support of leading scientific schools of the Russian Federation (NSH-239.2022.2) "Academic Leadership in the Space of Developing Transprofessional Identity and Forming the New Economy Market in the Conditions of Digitalization and Regionalization of Higher Education."

References

[1] Dolgov, V. G. (1988). *Management of scientific and technological progress: Consumer-cost basis.* Leningrad, USSR: Leningrad University Publishing House.

[2] Dulal, H. B., Dulal, R., & Yadav, P. K. (2015). Delivering green economy in Asia: The role of fiscal instruments. *Futures*, *73*, 61-77. DOI: 10.1016/j.futures.2015.08.002

[3] Elmeev, V. Ya. (2007). *Social economy of labor: General principles of political economy.* St. Petersburg, Russia: Publishing House of the St. Petersburg University.

[4] Fridman, V. S. (2017). *Global environmental crisis: Based on the course of lectures "Nature conservation: Biological foundations, simulation models, social applications."* Moscow, Russia: URSS.

[5] Ivanchenko, O. S. (2020). Transprofessionalism in the system of professional training and adaptation of young scientists in a mobile world. *Bulletin of the South-Russian State Technical University (NPI) Series Socio-Economic Sciences*, *13*(6), 54-61. DOI: 10.17213/2075-2067-2020-6-54-61

[6] Khalturina, O. A. (2022). The need for the national project "ecology" and its implementation in pandemic conditions. *Journal of Applied Research*, *5-2*, 118-122. DOI: 10.47576/2712-7516_2022_5_2_118

[7] Lyury, D. I. (2004). Trajectories of development of environmental crises. *Doklady Akademii Nauk* [Reports of the Academy of Sciences], *394*(2), 252-254.

[8] Mazur, O. A. (2009). *Development of workers in modern Russia*. St. Petersburg, Russia: Publishing House of the St. Petersburg University.

[9] Pearce, D. W., Markandya, A., & Barbier, E. (2007). *Blueprint for a green economy*. Retrieved from https://www.academia.edu/12681608/Blueprint_for_a_Green_Economy (Accessed 2 September 2023)

[10] Vodenko, K. V. (2022). Formation of academic leadership in the context of trends in the development of modern Russian higher education. *Alma mater (Higher School Herald)*, *9*, 20-25. DOI: 10.20339/AM.09-22.020